

Program Complot
(Version 2018-1)

by

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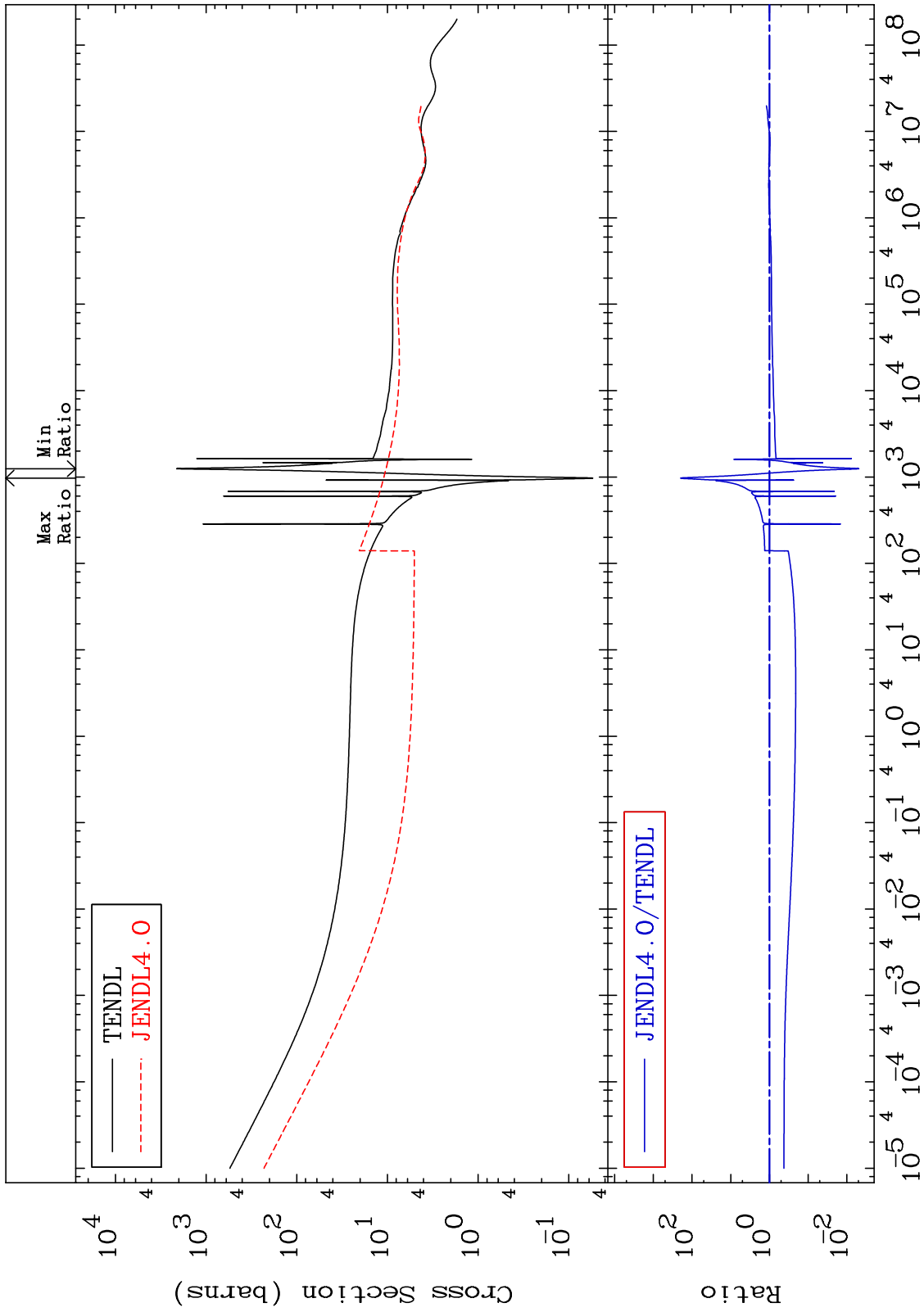
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 4431

Total
Cross Section

44-Ru-98
-99.51 To 9999. %



1

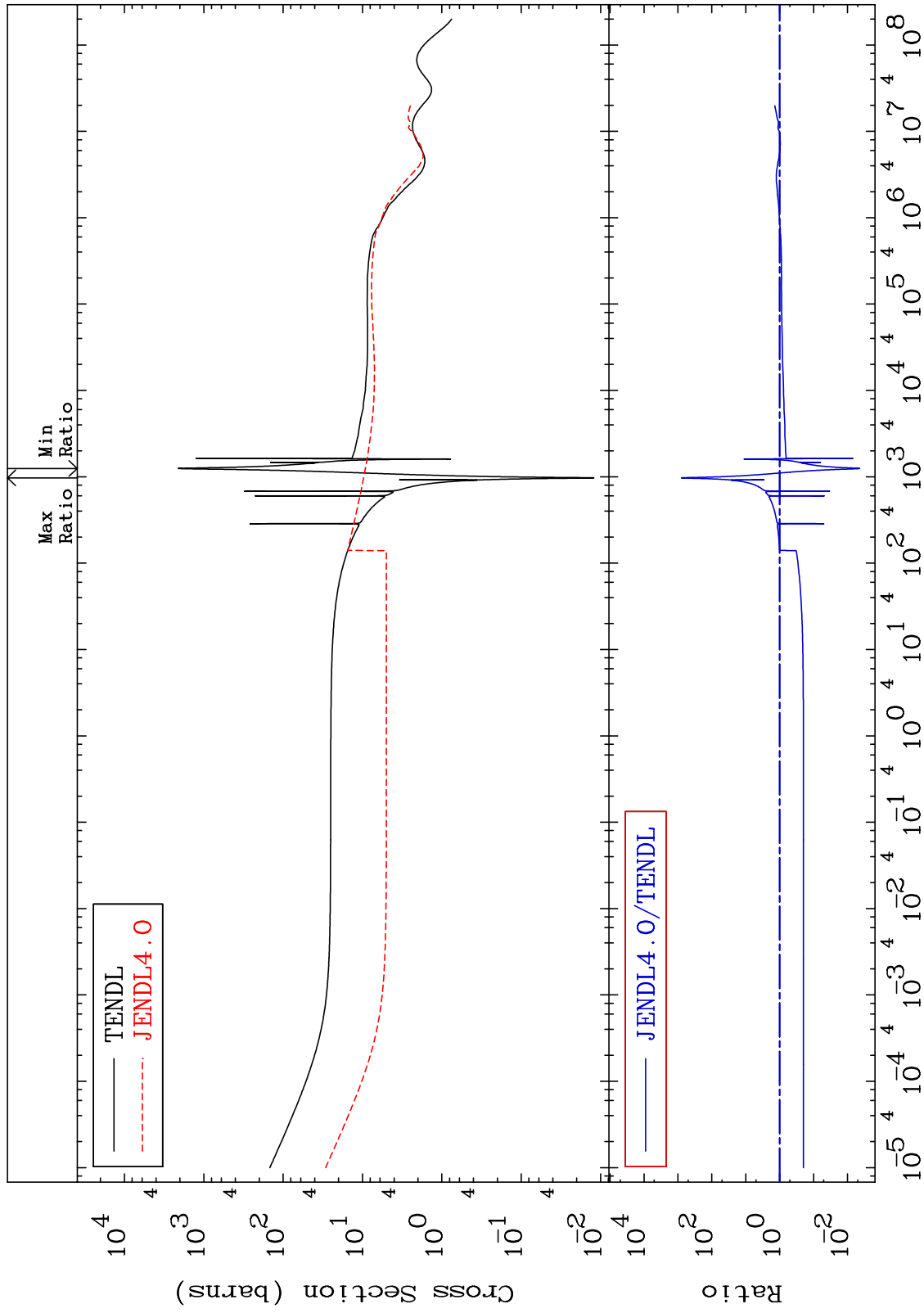
Incident Energy (eV)

44-Ru-98

MAT 4431

Elastic
Cross Section

44-Ru-98
-99.57 To 9999. %

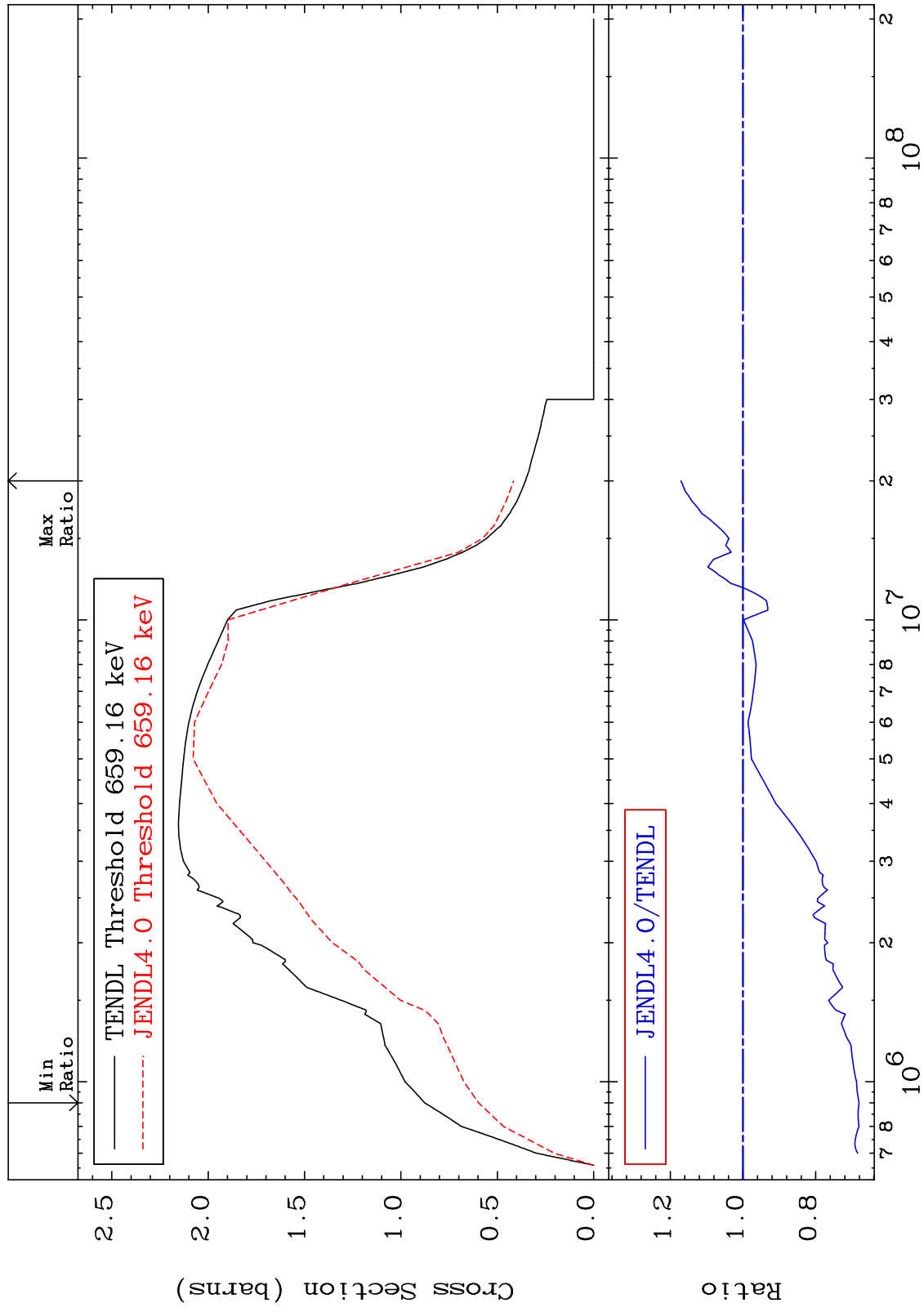


2

Incident Energy (eV)

44-Ru-98

MAT 4431 Inelastic Cross Section 44-Ru-98 -31.92 To 17.08 %



3 44-Ru-98

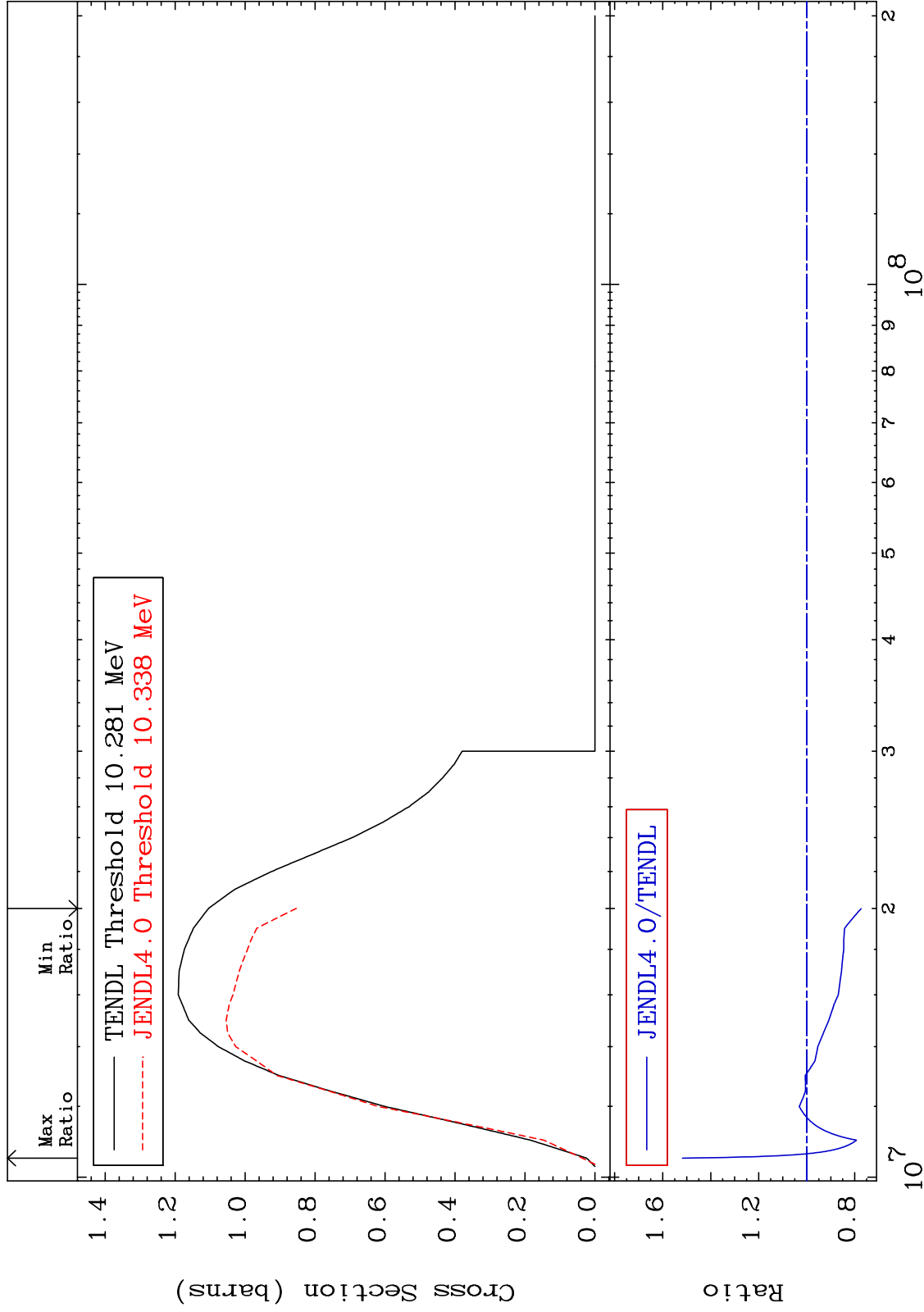
MAT 4431

(n,2n)

44-Ru-98

Cross Section

-22.72 To 51.77 %



44-Ru-98

44-Ru-98

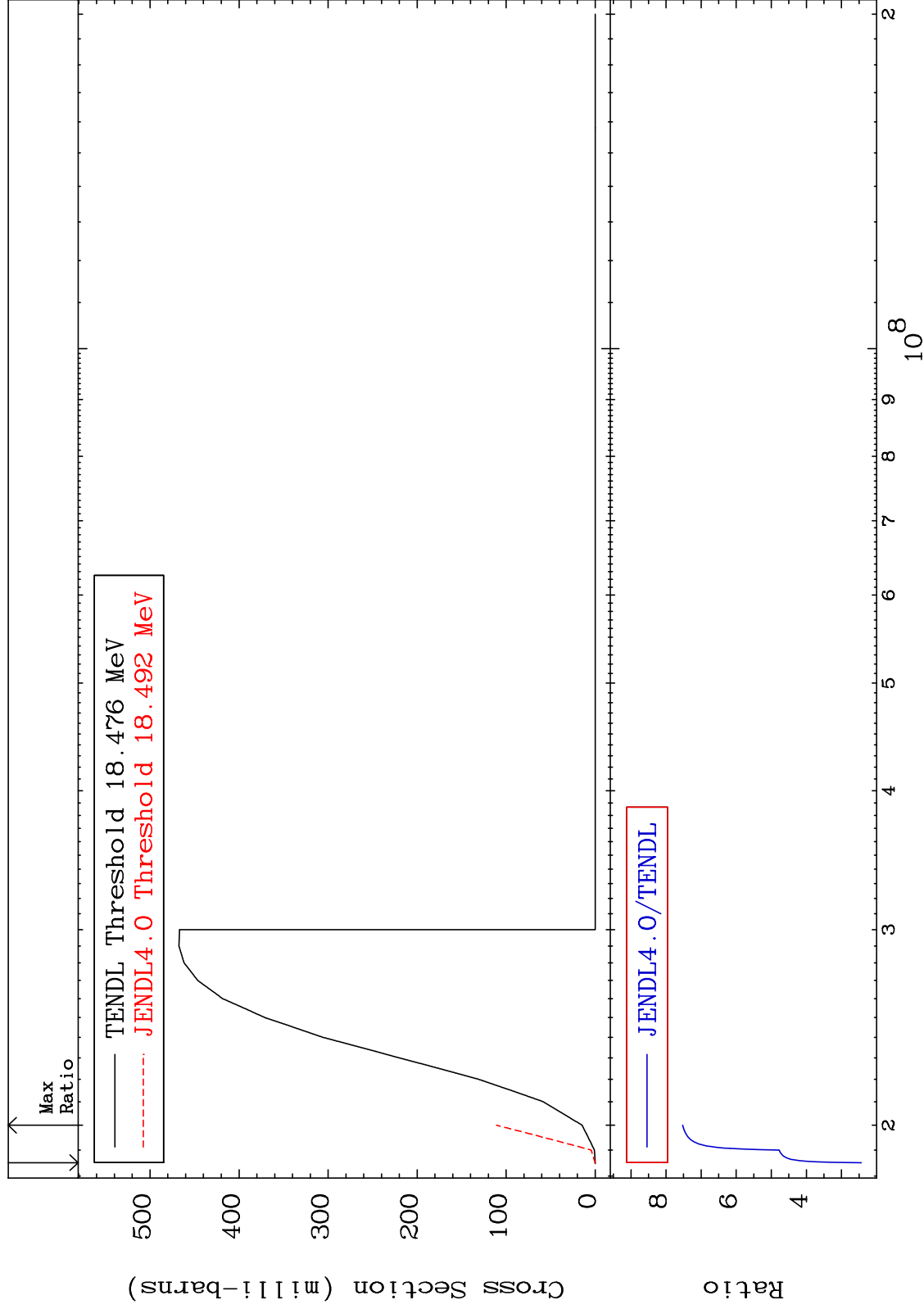
MAT 4431

(n,3n)

44-Ru-98

Cross Section

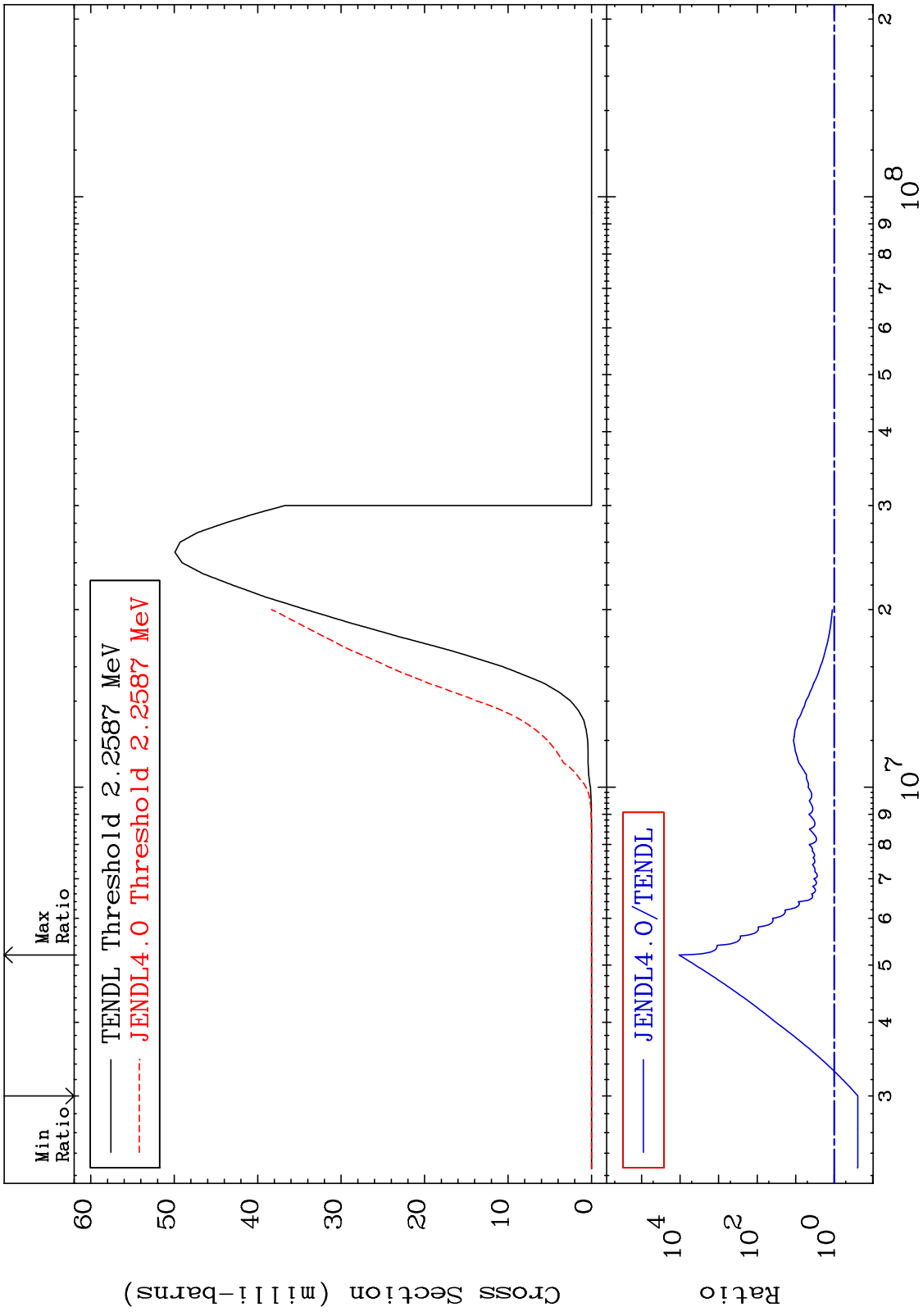
143.4 To 652.6 %



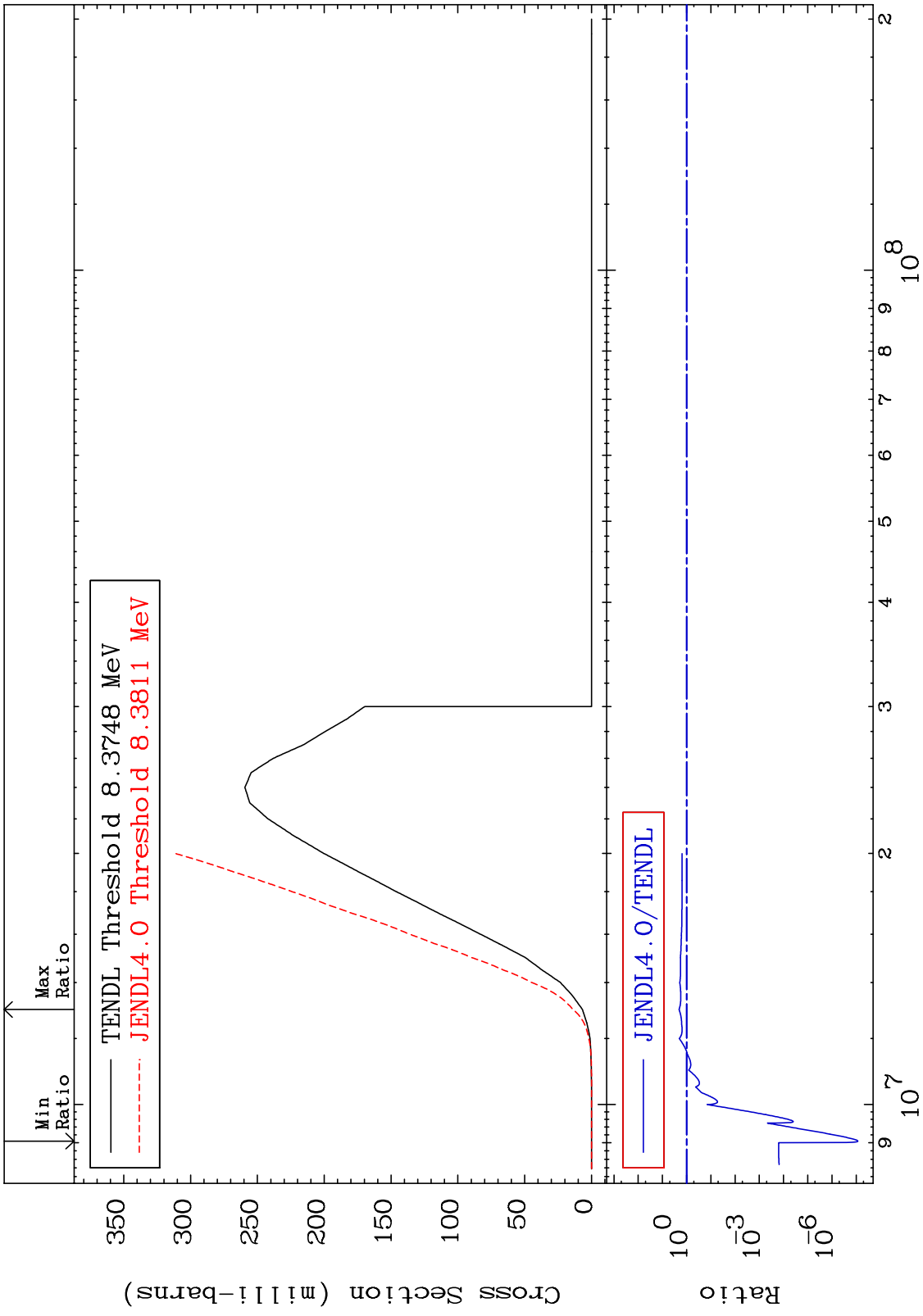
5

Incident Energy (eV)

44-Ru-98



MAT 4431 (n,n') p 44-Ru-98
 Cross Section -100.0 To 105.4 %



7 Incident Energy (eV) 44-Ru-98

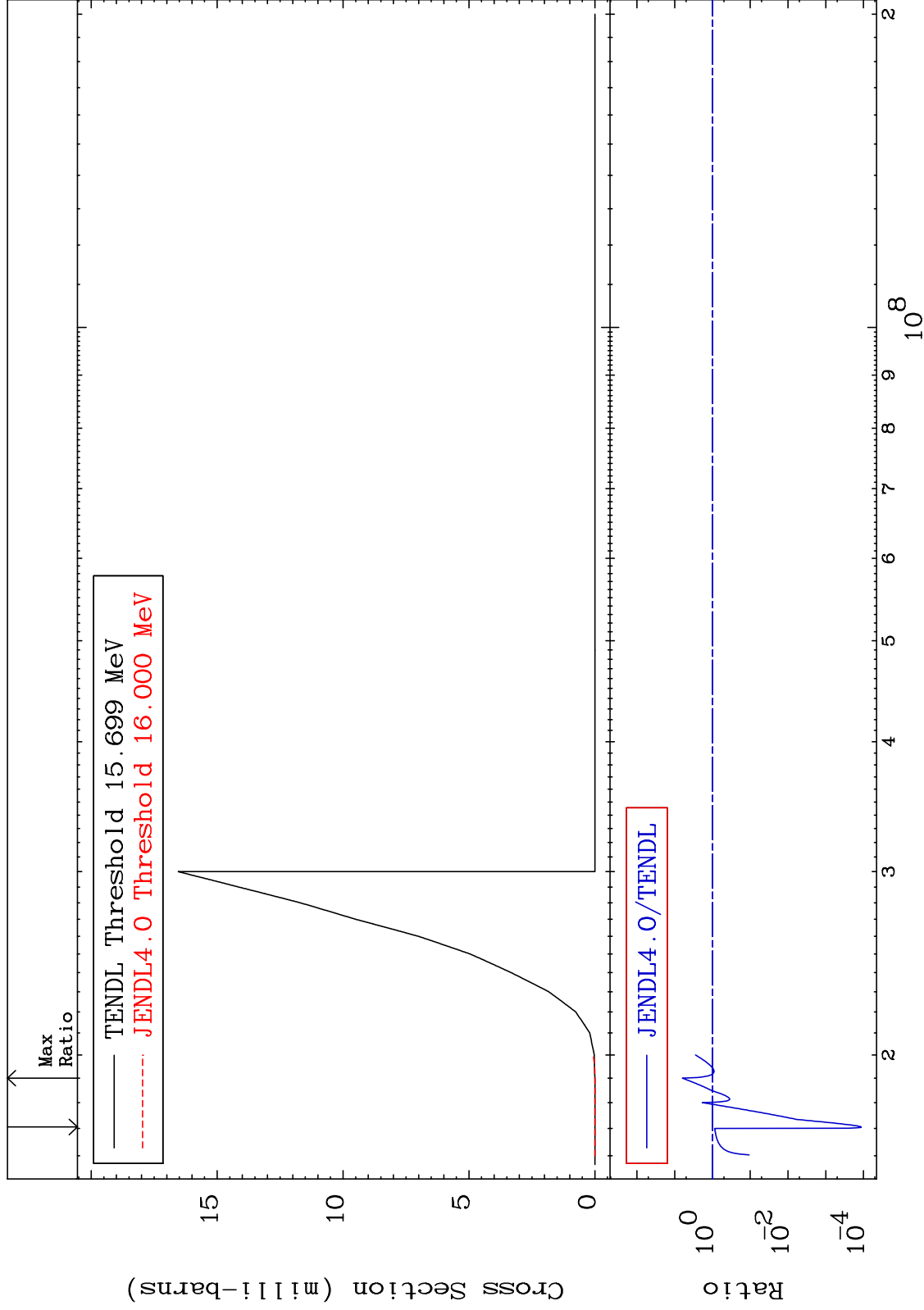
MAT 4431

(n, n') d

44-Ru-98

Cross Section

-99.99 To 524.1 %

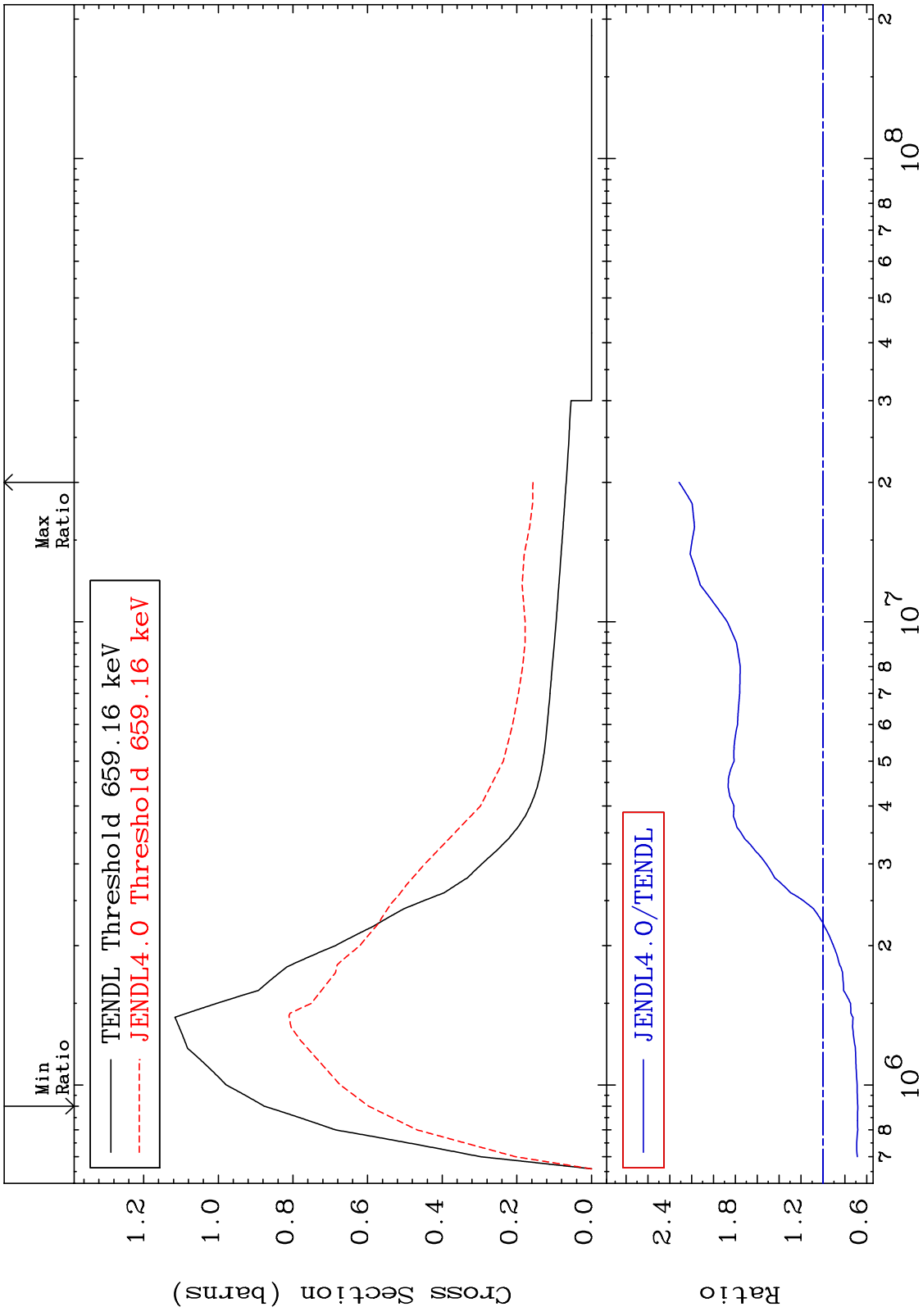


8

Incident Energy (eV)

44-Ru-98

MAT 4431 MT= 51 (n,n') Level Cross Section 44-Ru-98
-31.92 To 131.6 %

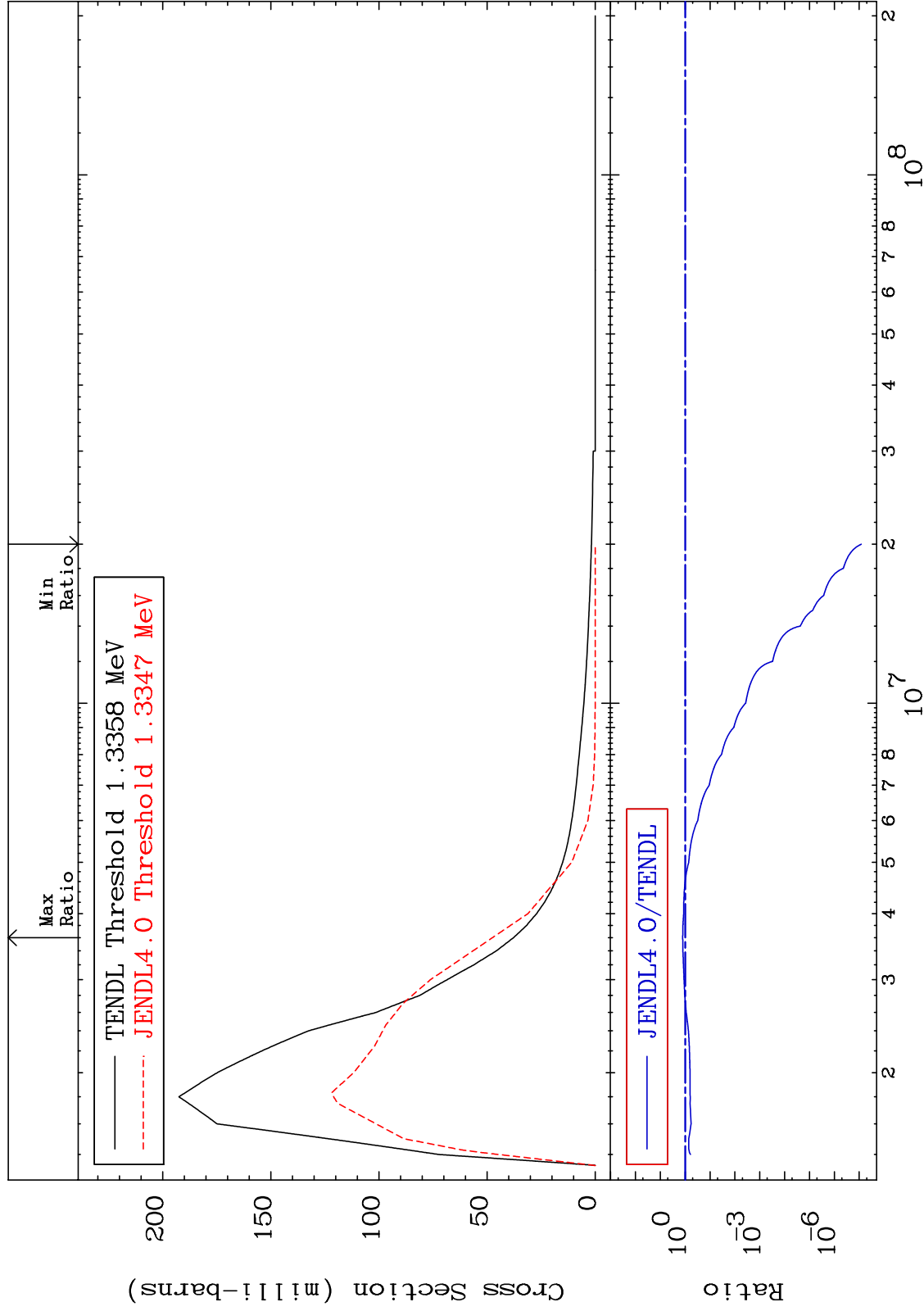


9 Incident Energy (eV) 44-Ru-98

MAT 4431

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

44-Ru-98
-100.0 To 26.00 %

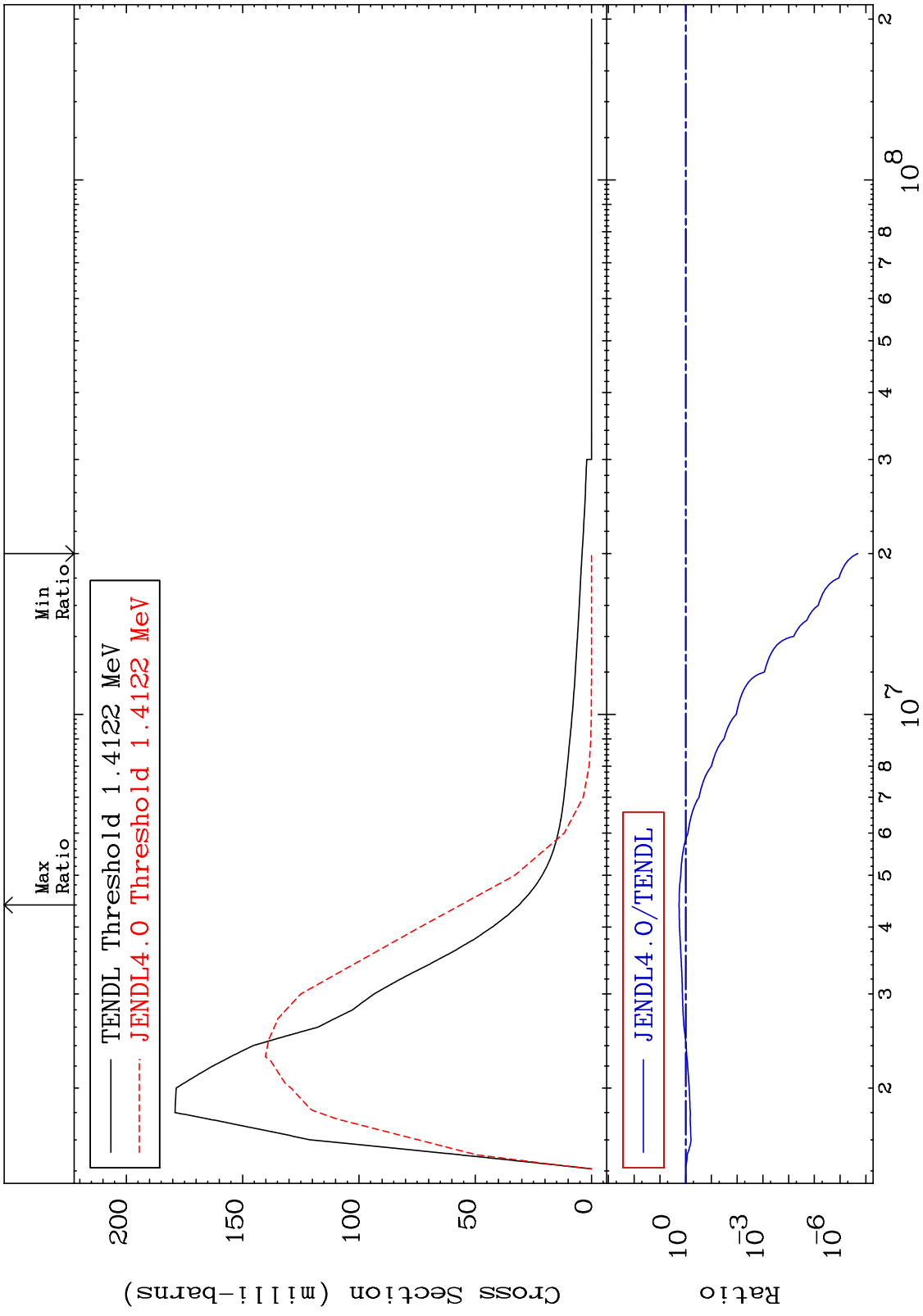


10

Incident Energy (eV)

44-Ru-98

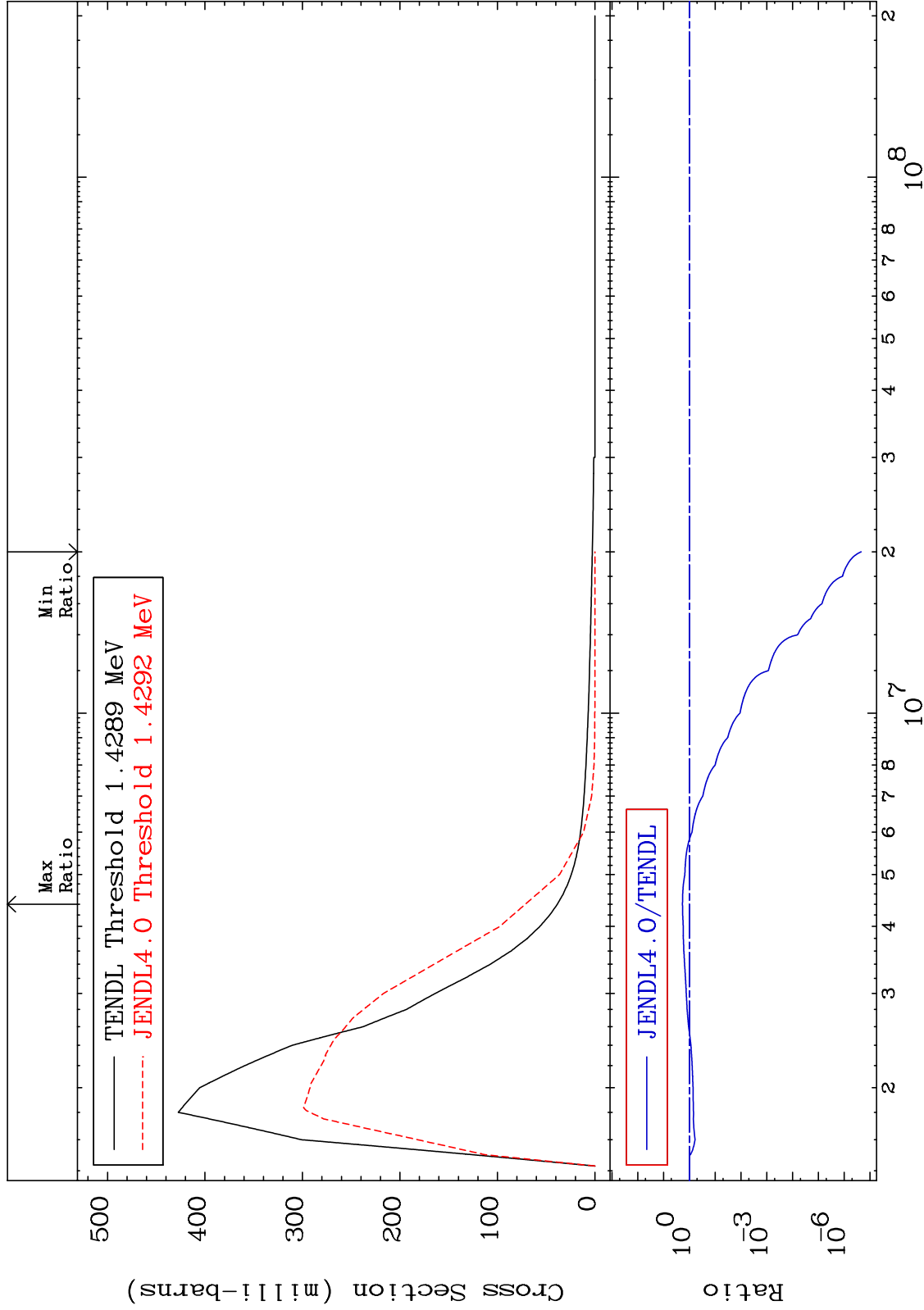
MAT 4431 MT= 53 (n,n') Level Cross Section 44-Ru-98
 -100.0 To 80.51 %



MAT 4431

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

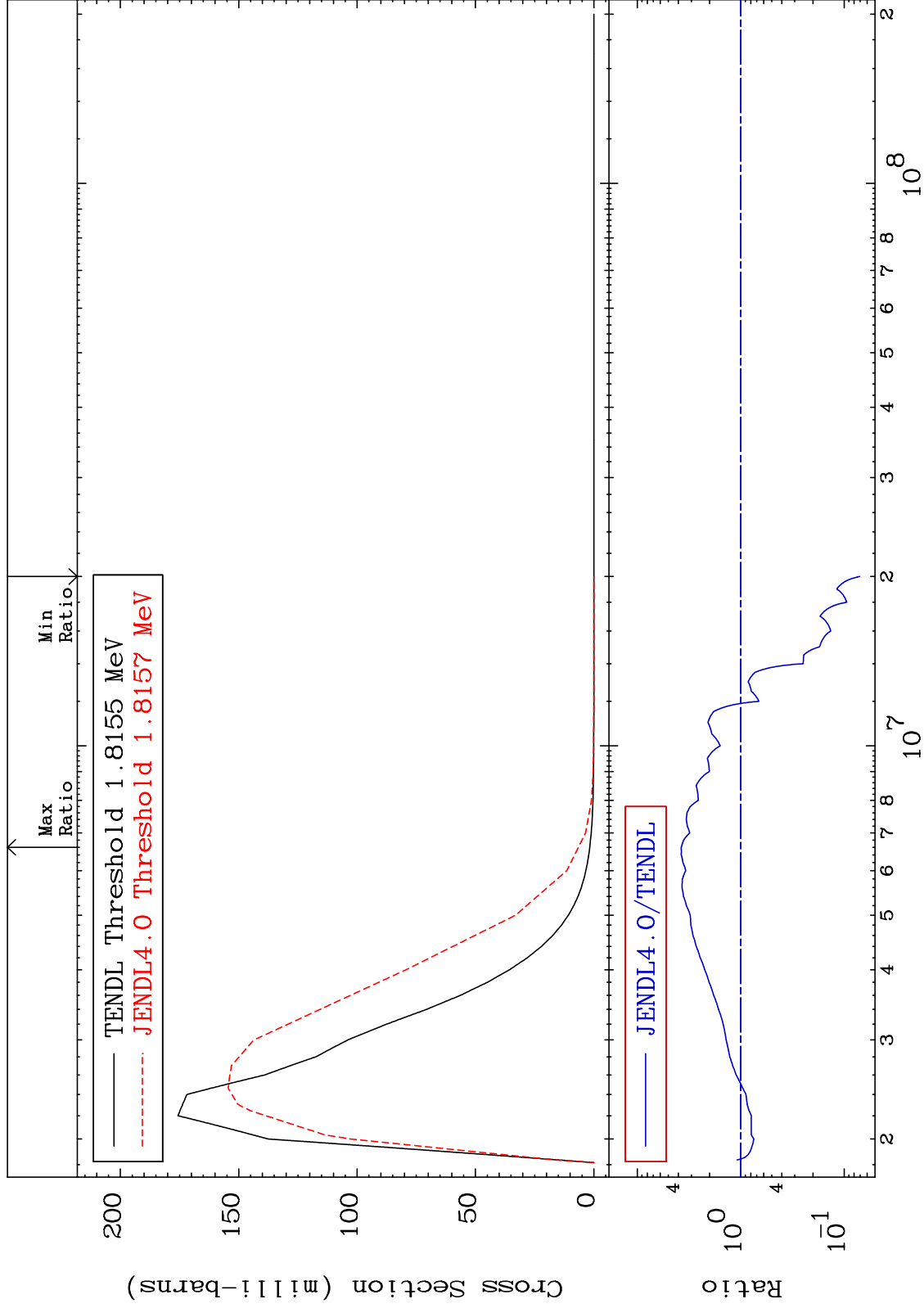
44-Ru-98
-100.0 To 85.36 %



MAT 4431

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

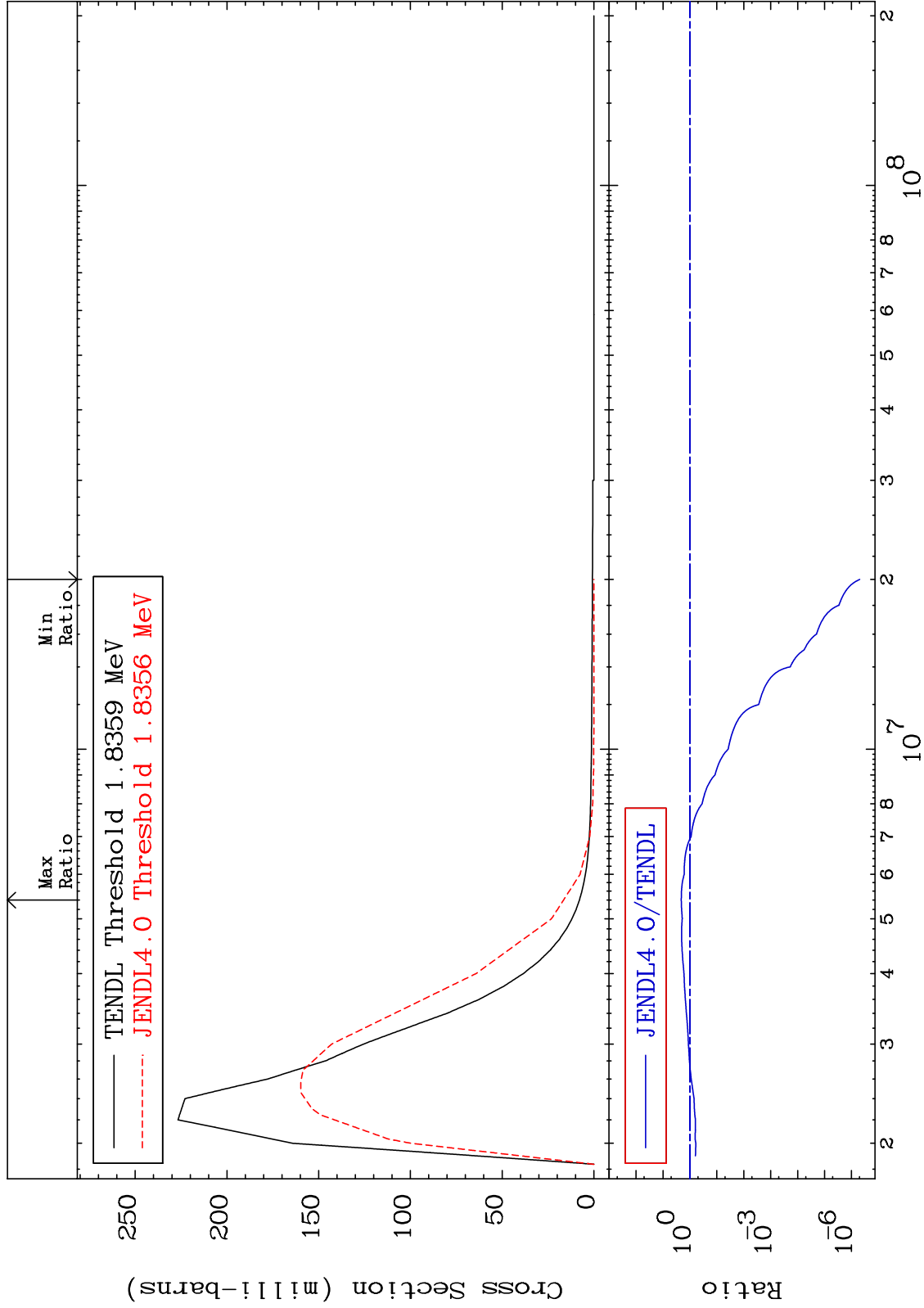
44-Ru-98
-92.94 To 275.5 %



MAT 4431

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

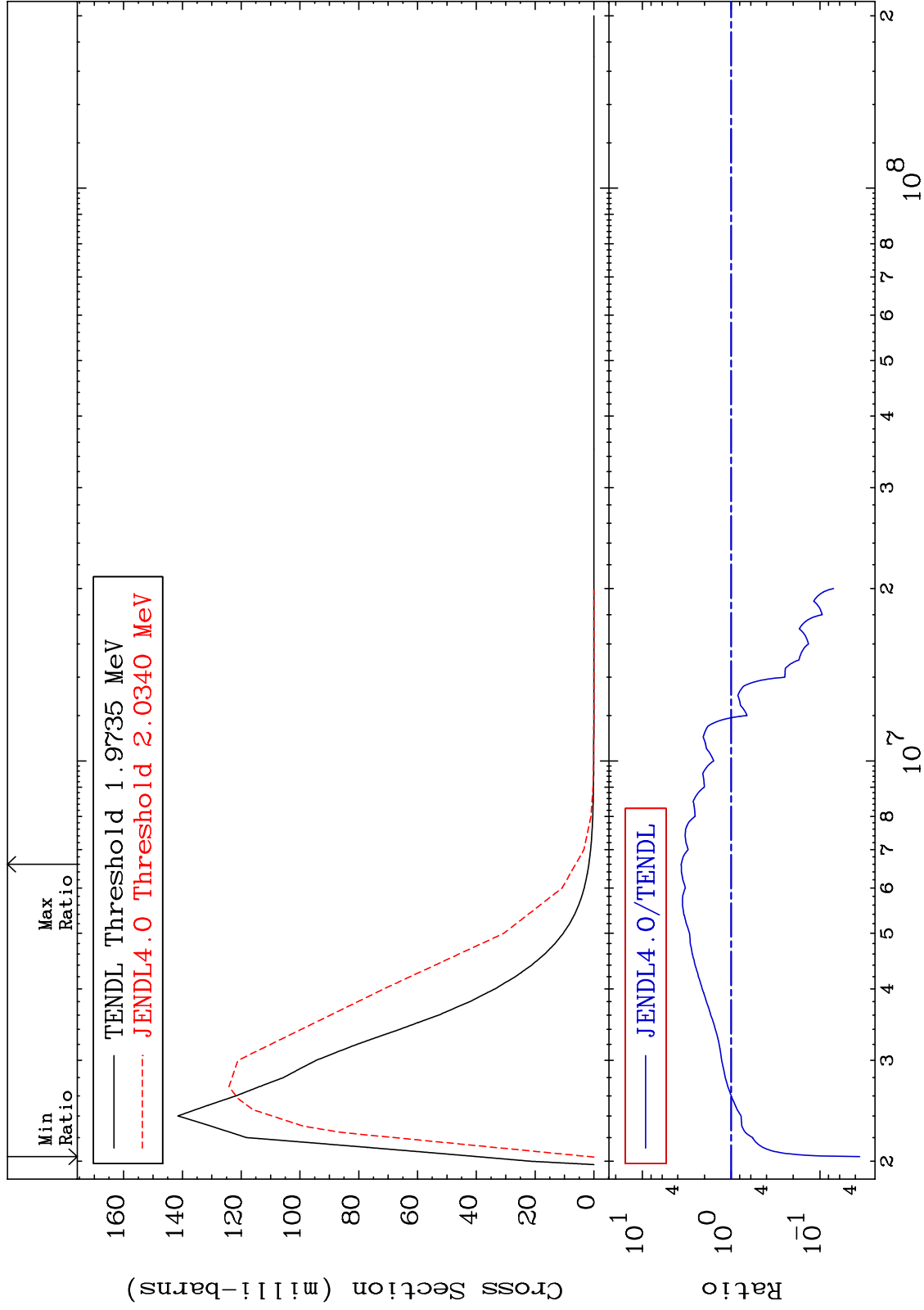
44-Ru-98
-100.0 To 110.1 %



MAT 4431

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

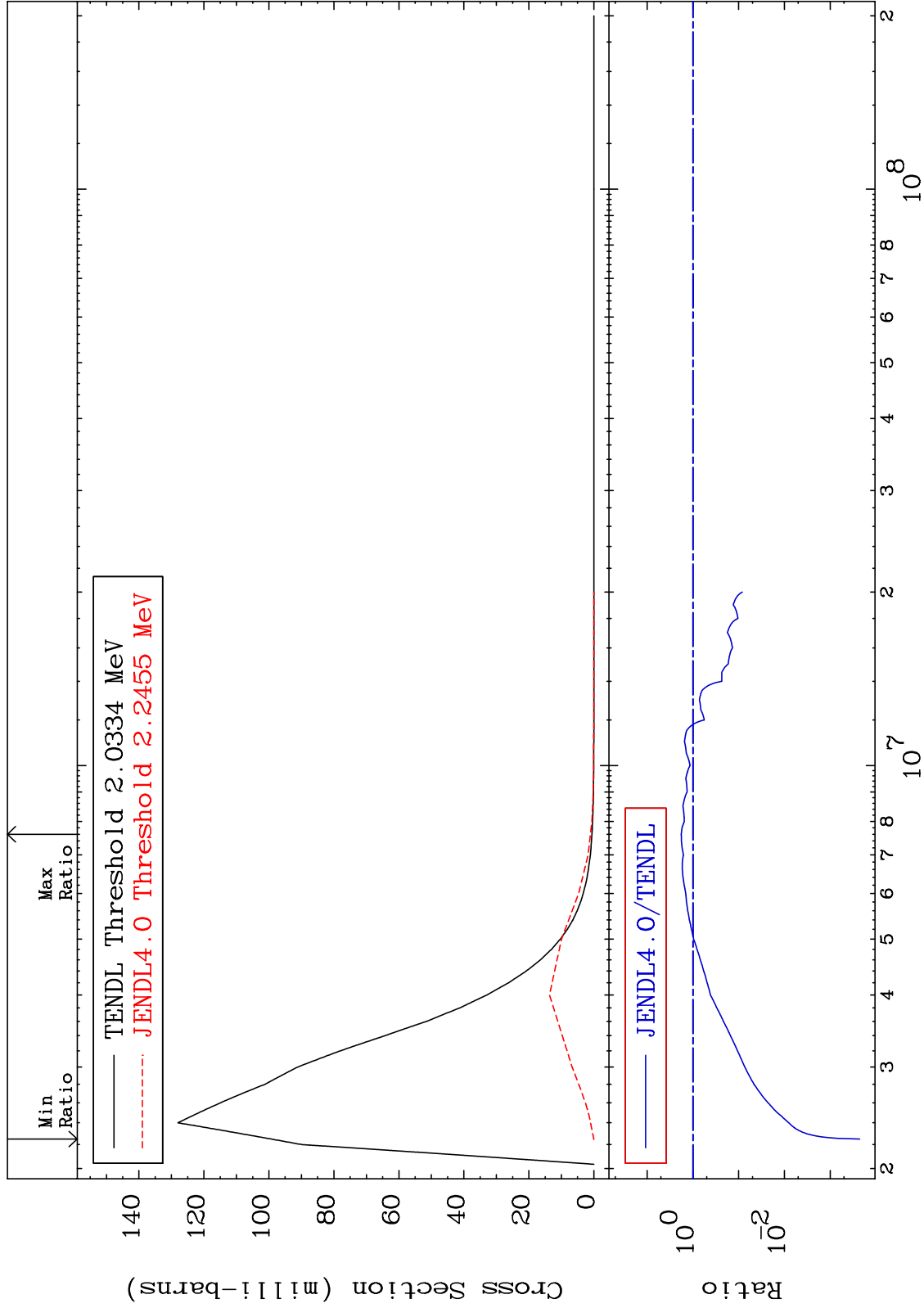
44-Ru-98
-96.44 To 265.0 %



MAT 4431

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

44-Ru-98
-99.98 To 79.98 %



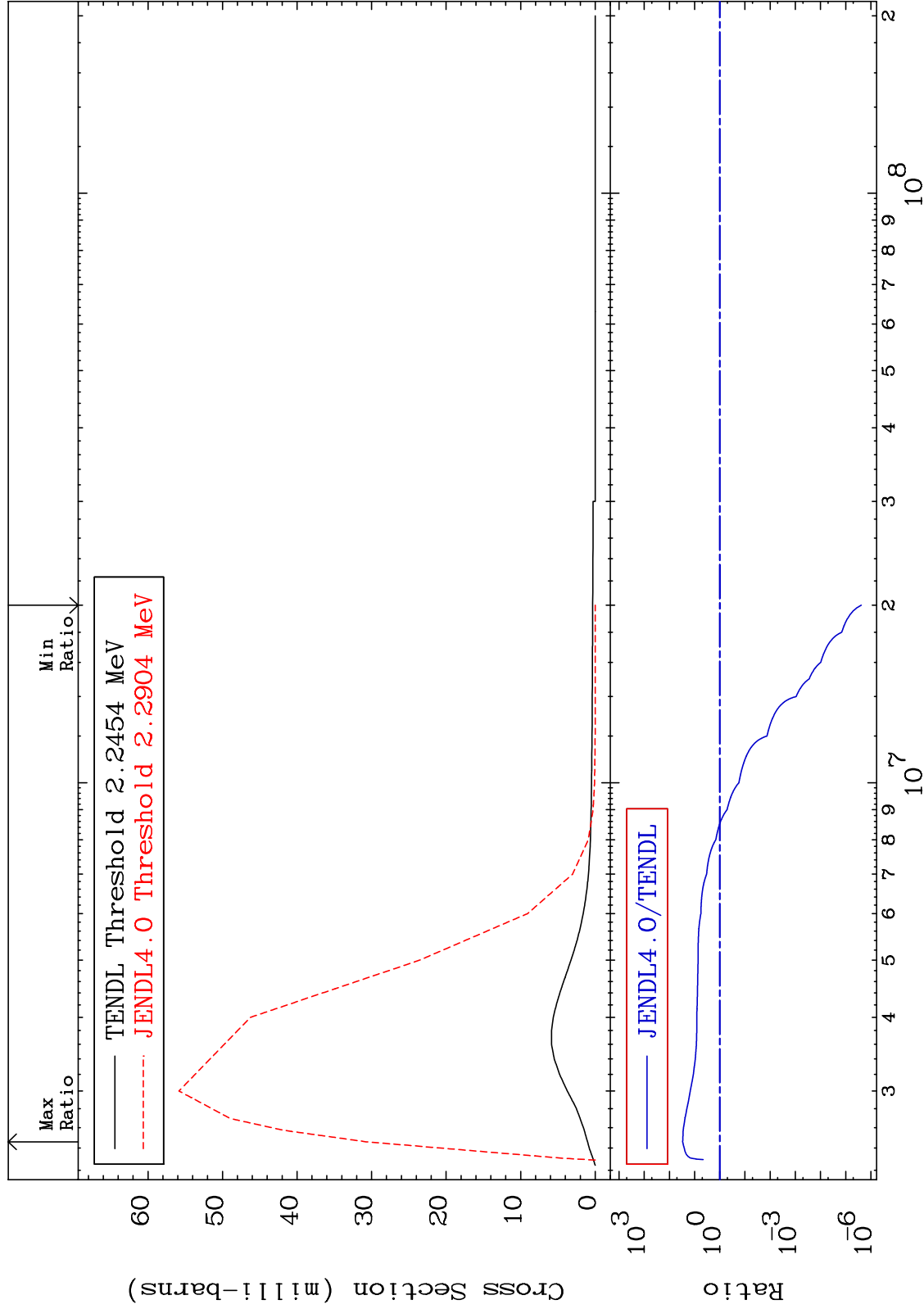
16

44-Ru-98

MAT 4431

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

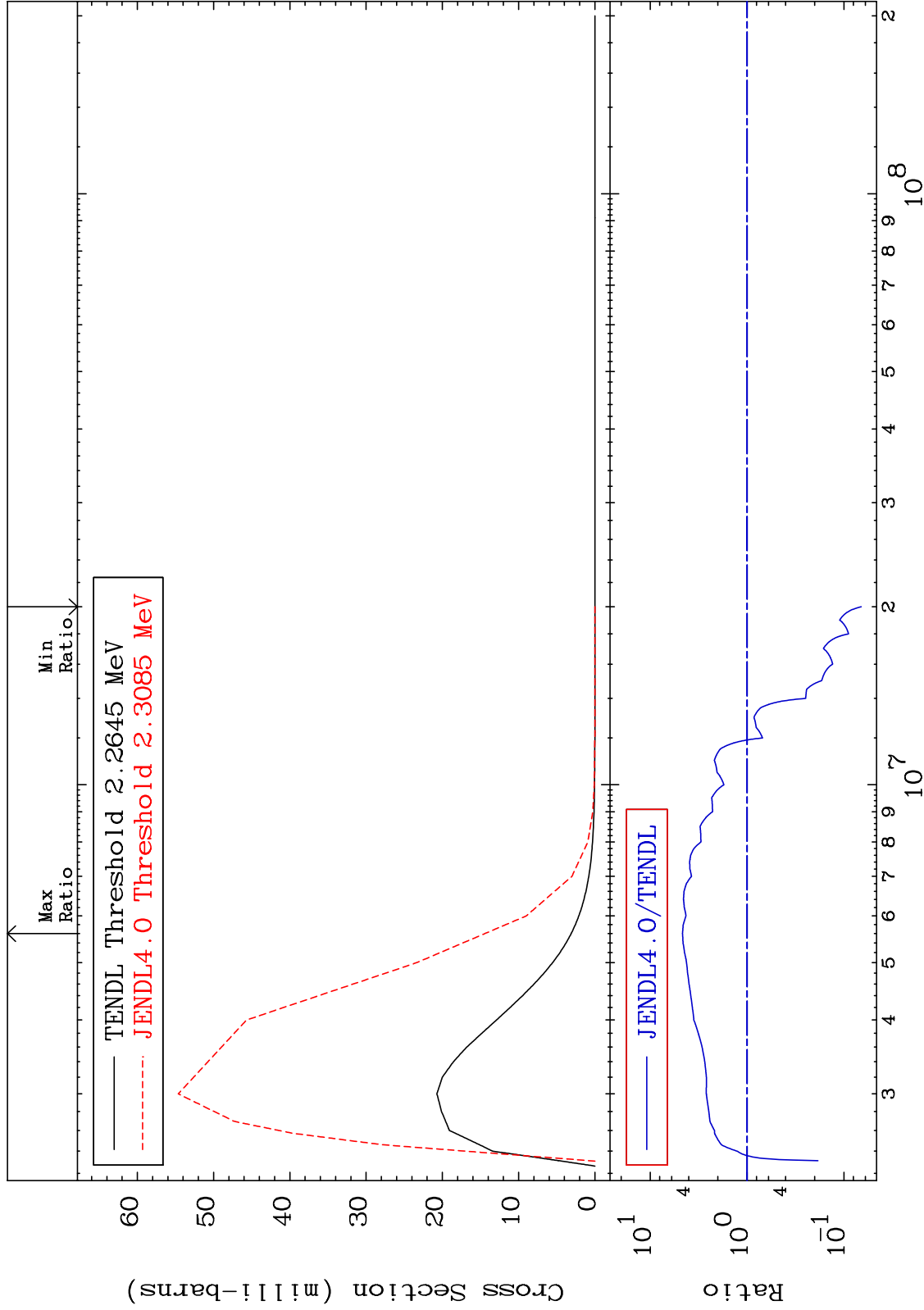
44-Ru-98
-100.0 To 2874. %



MAT 4431

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

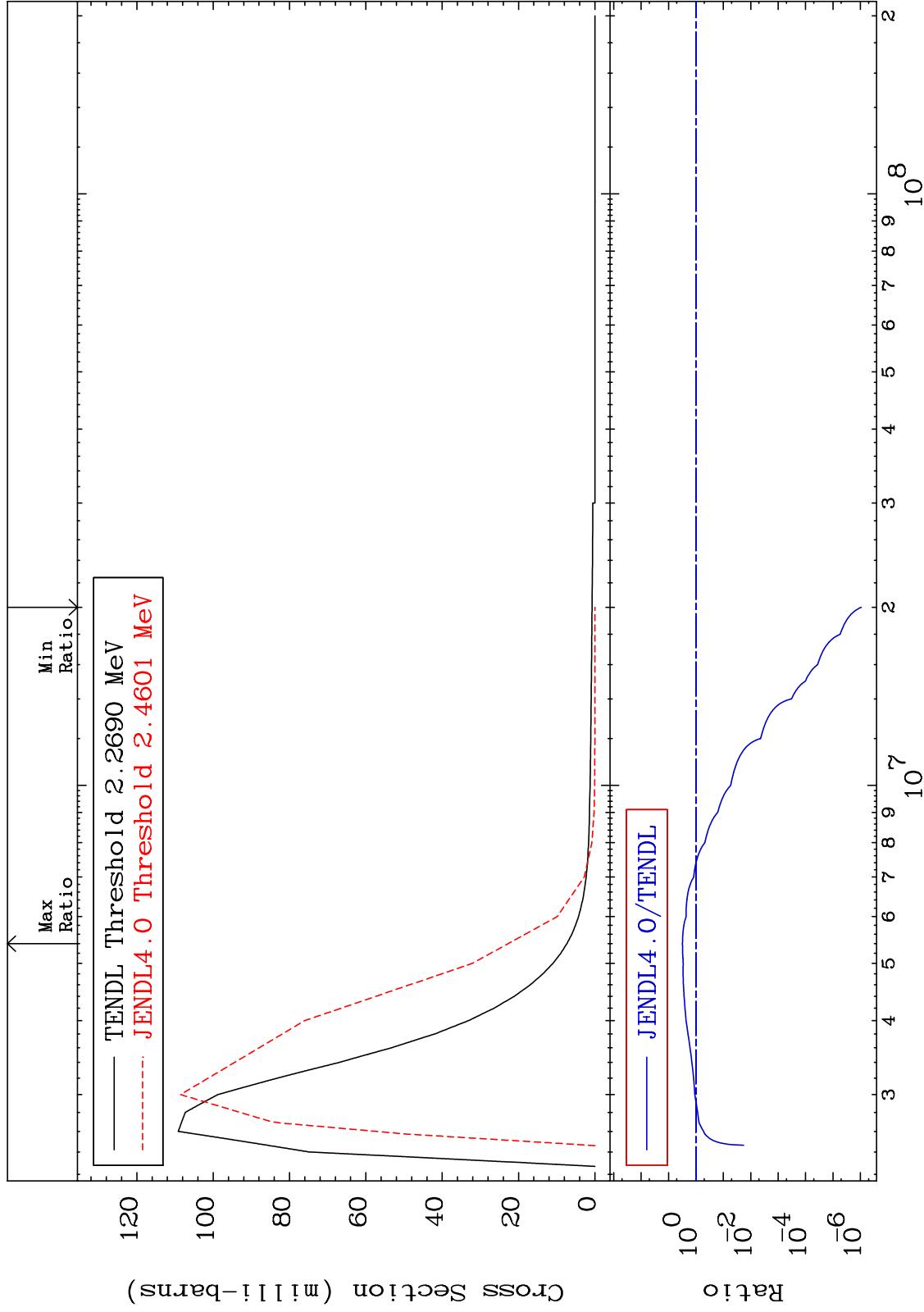
44-Ru-98
-93.39 To 364.6 %



MAT 4431

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

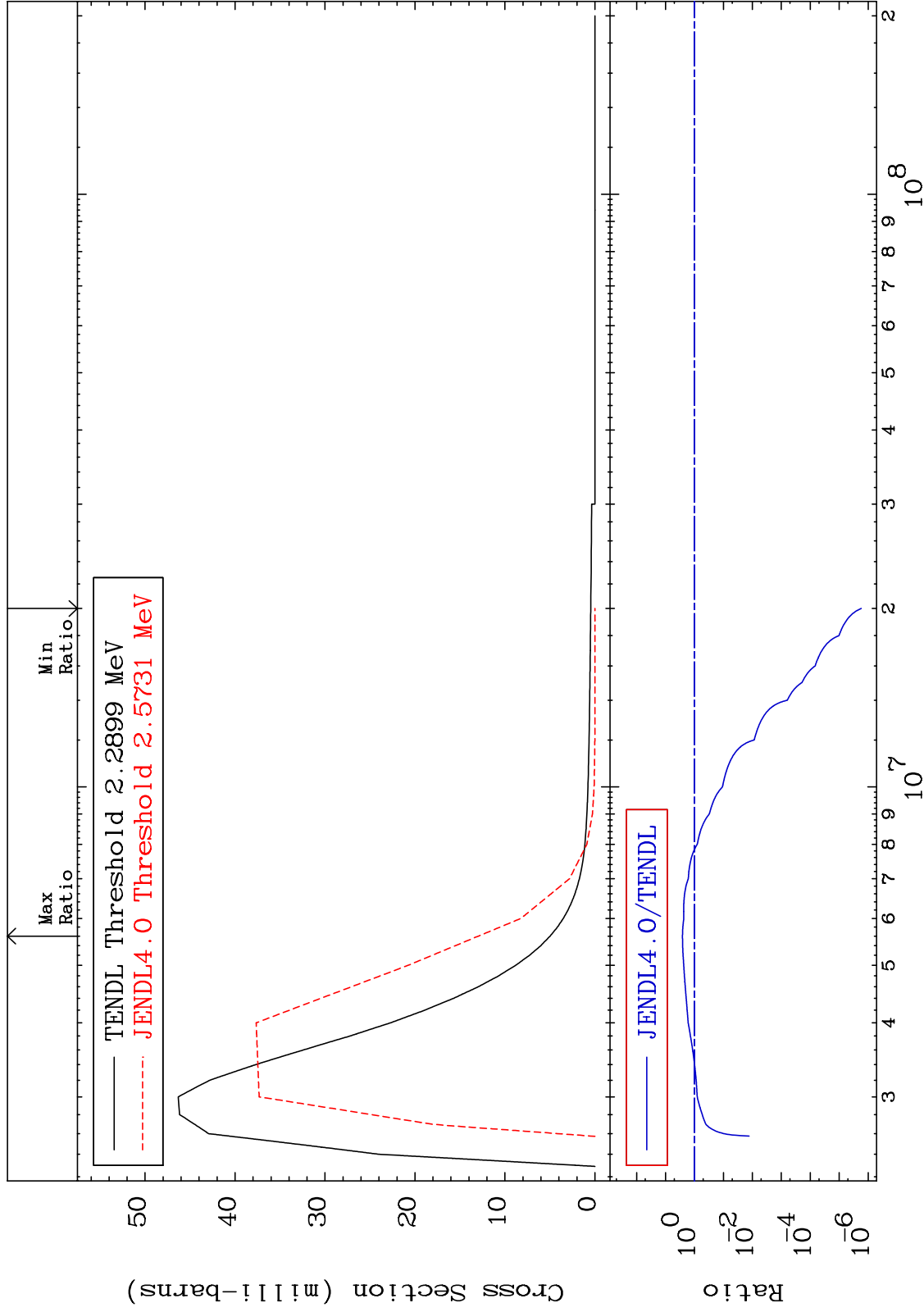
44-Ru-98
-100.0 To 210.0 %



MAT 4431

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

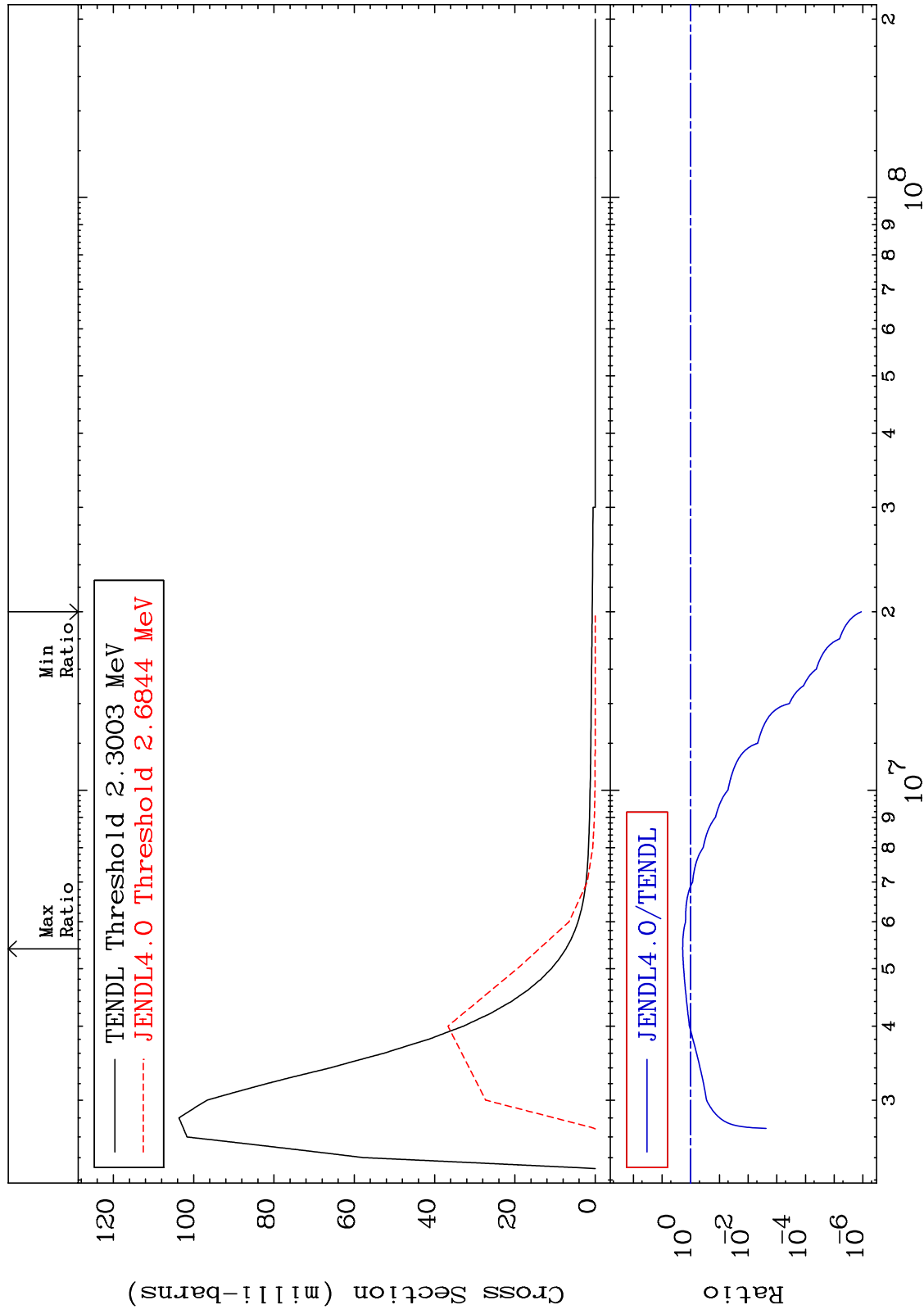
44-Ru-98
-100.0 To 160.2 %



MAT 4431

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

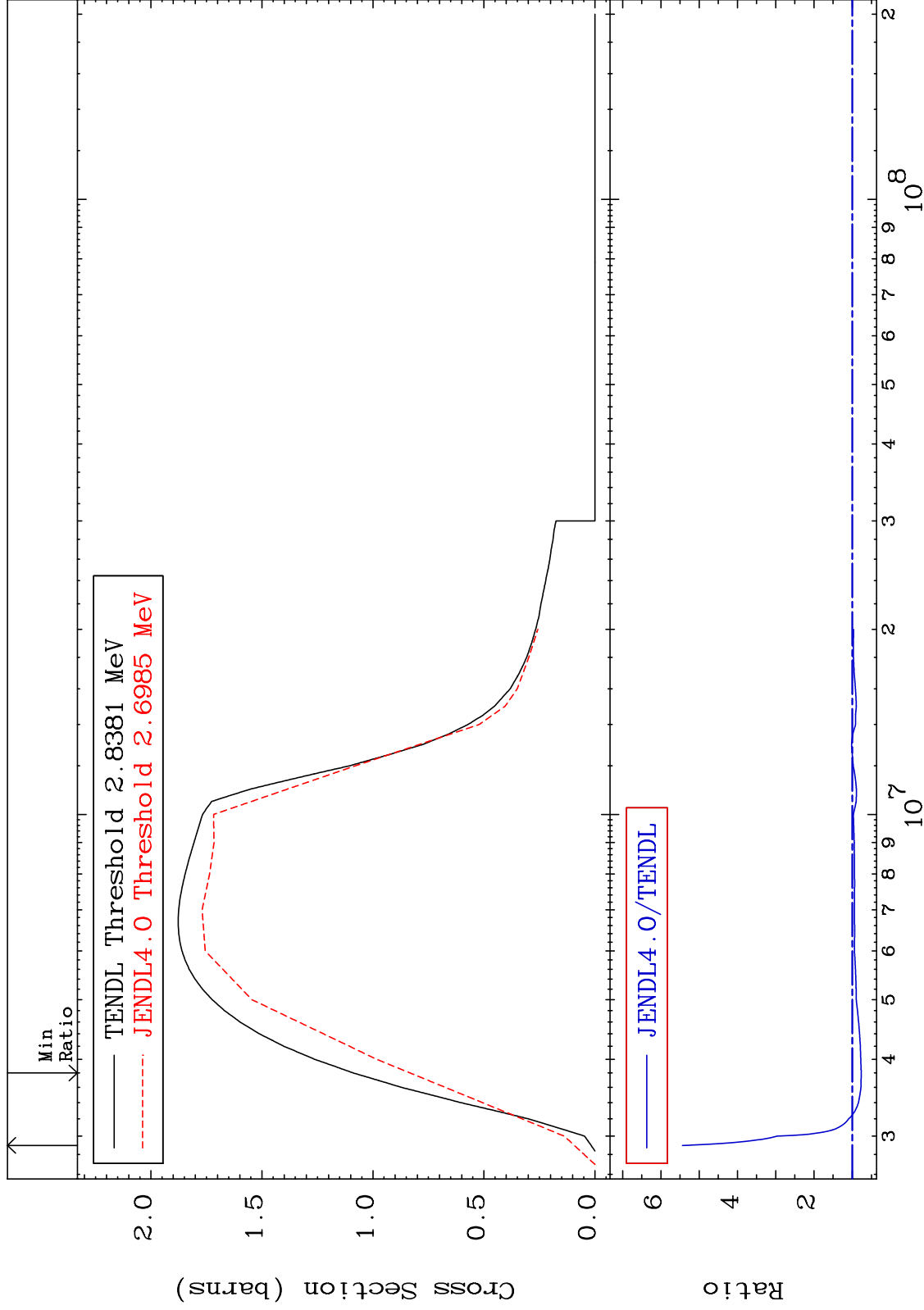
44-Ru-98
-100.0 To 91.47 %



MAT 4431

(n, n') Continuum
Cross Section

44-Ru-98
-23.54 To 443.7 %



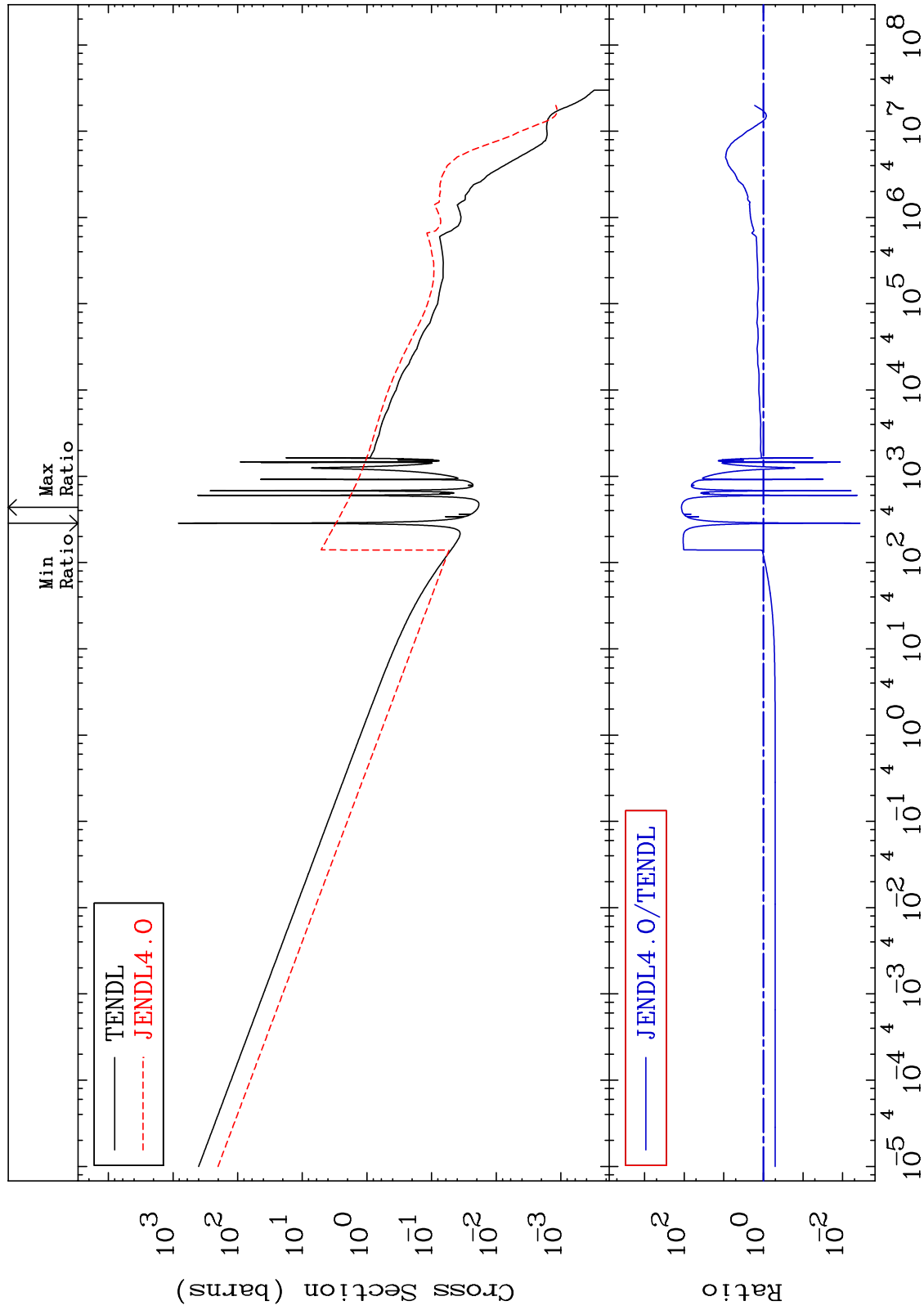
22

44-Ru-98

MAT 4431

(n, γ)
Cross Section

44-Ru-98
-99.63 To 9999. %



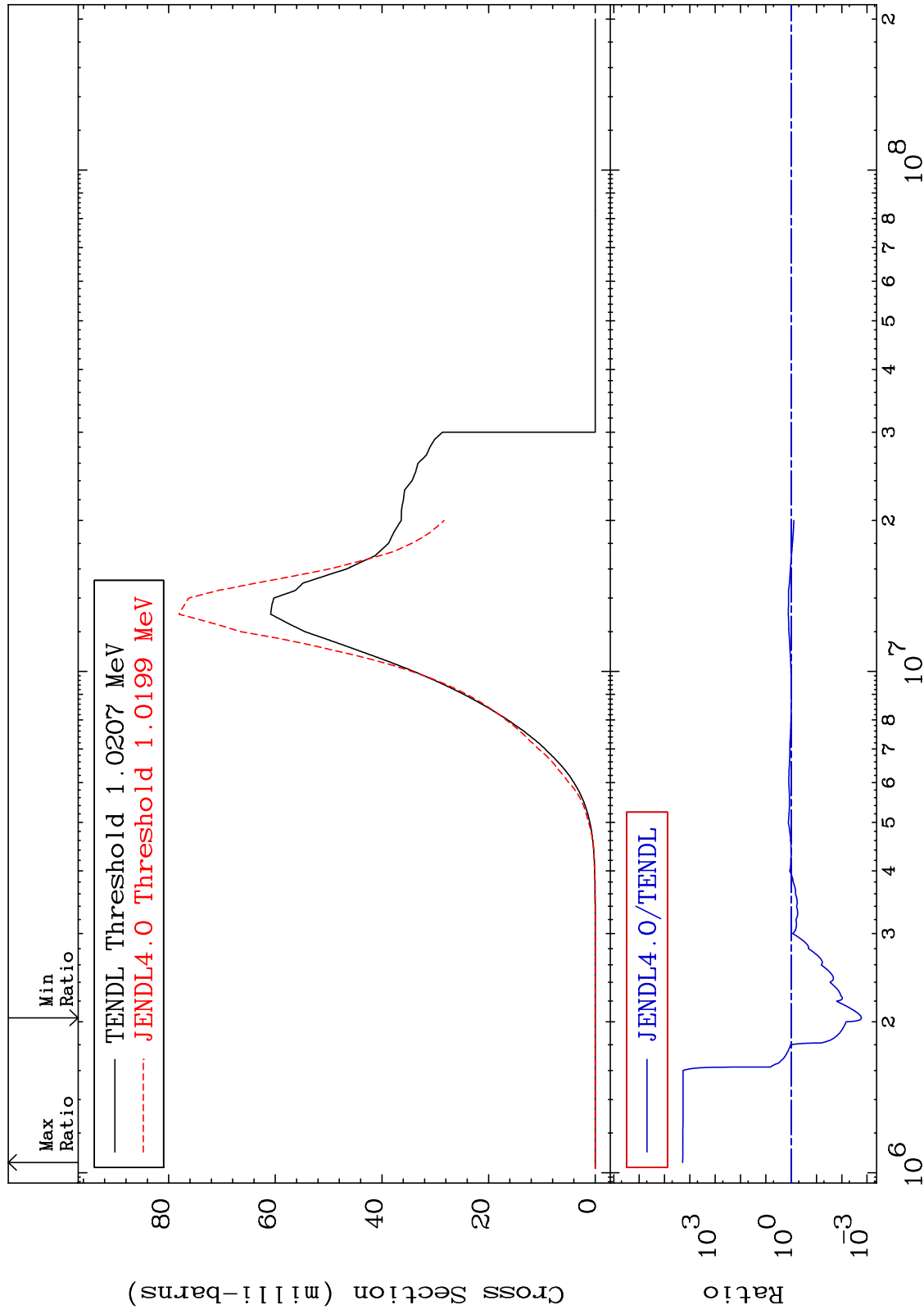
MAT 4431

(n,p)

44-Ru-98

Cross Section

-99.83 To 9999. %



24

Incident Energy (eV)

44-Ru-98

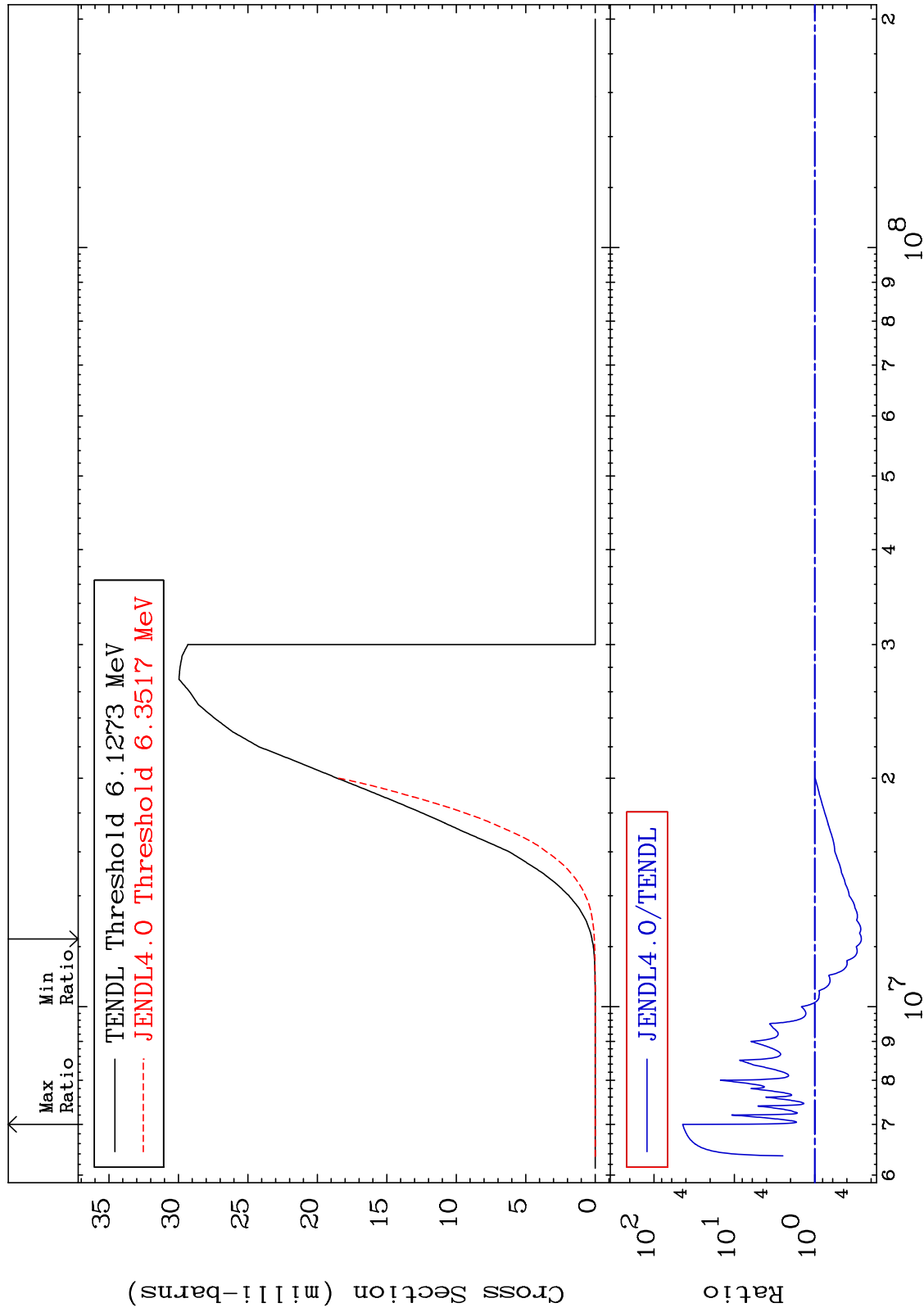
MAT 4431

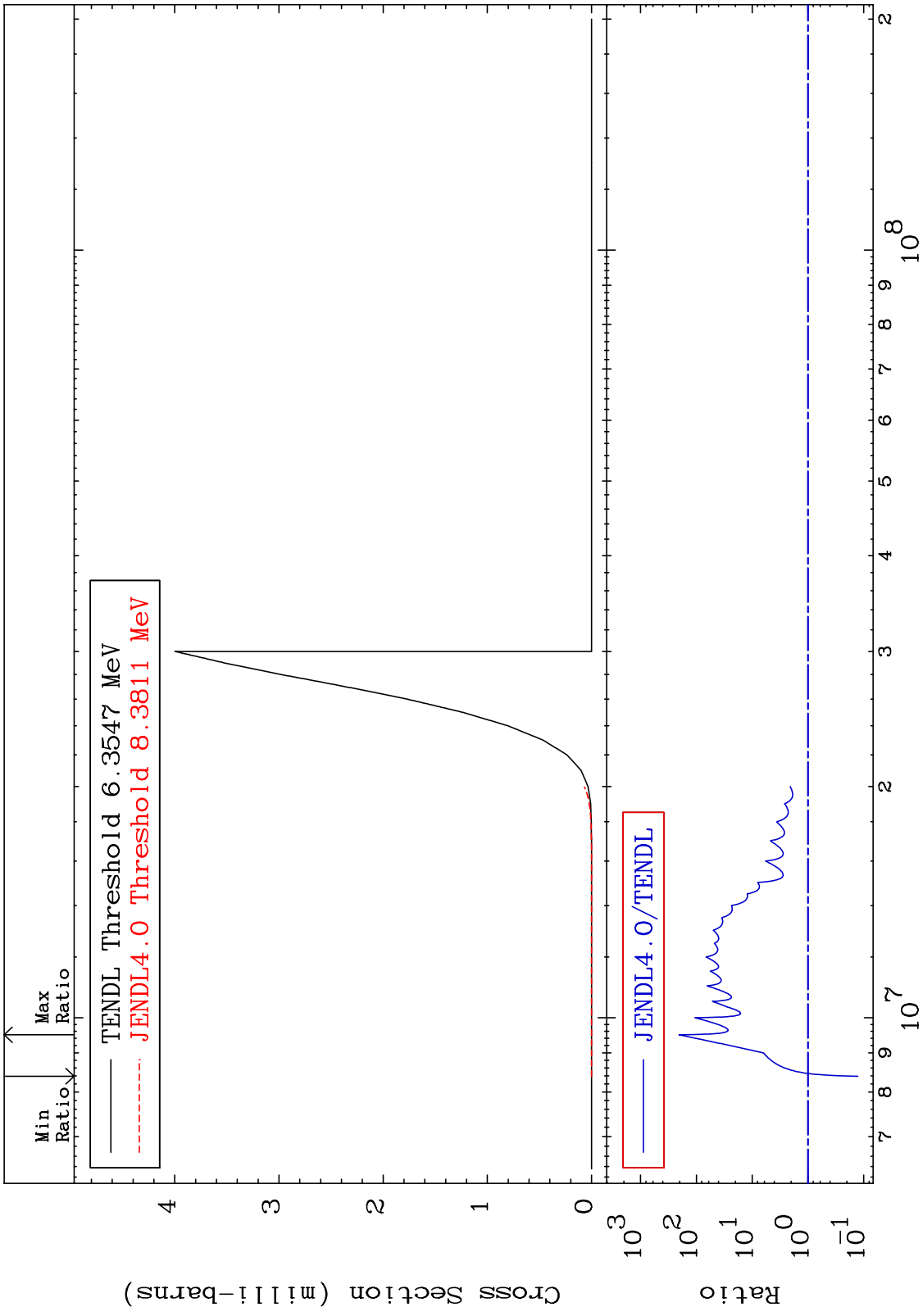
(n,d)

44-Ru-98

Cross Section

-73.56 To 4291. %





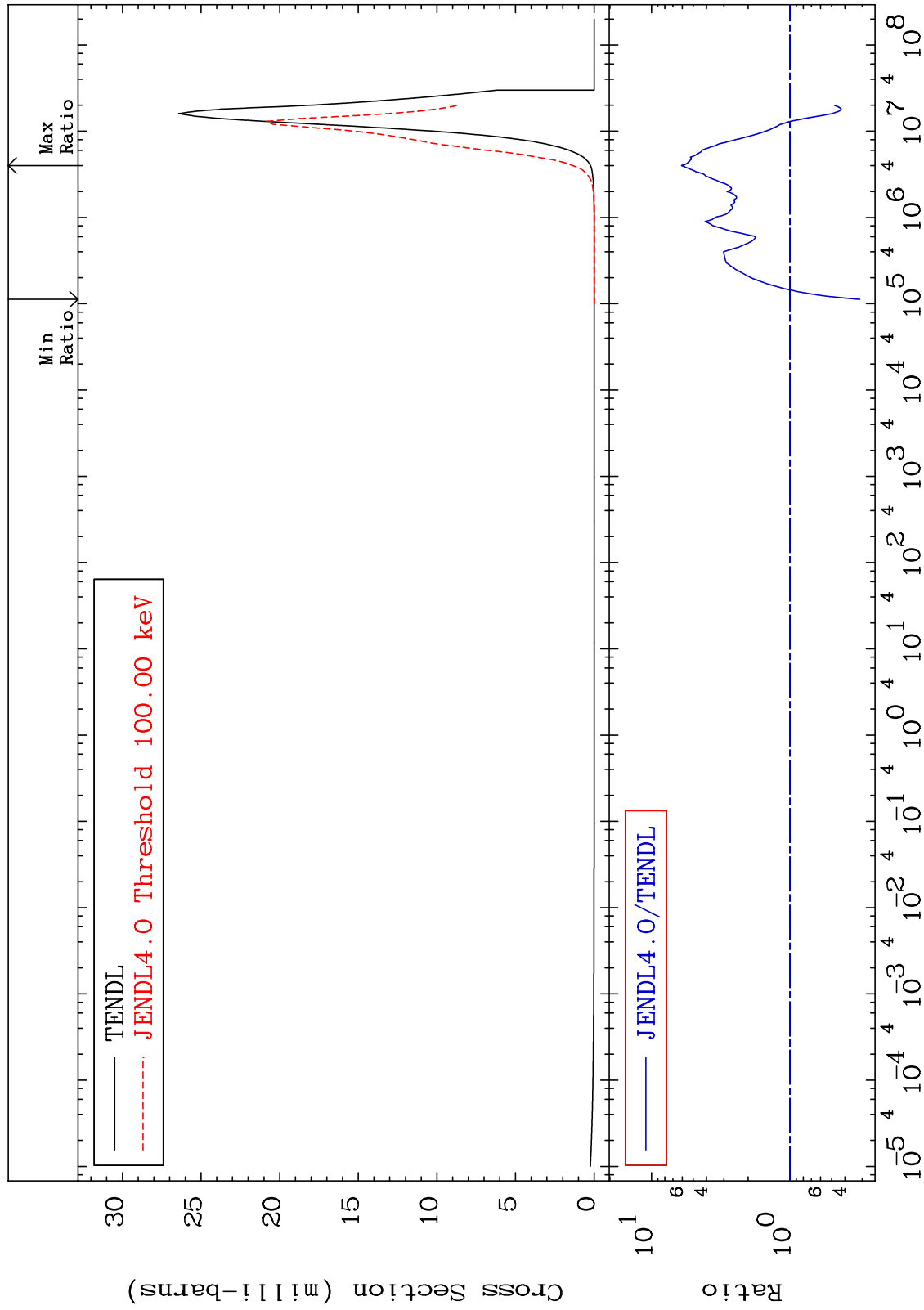
MAT 4431

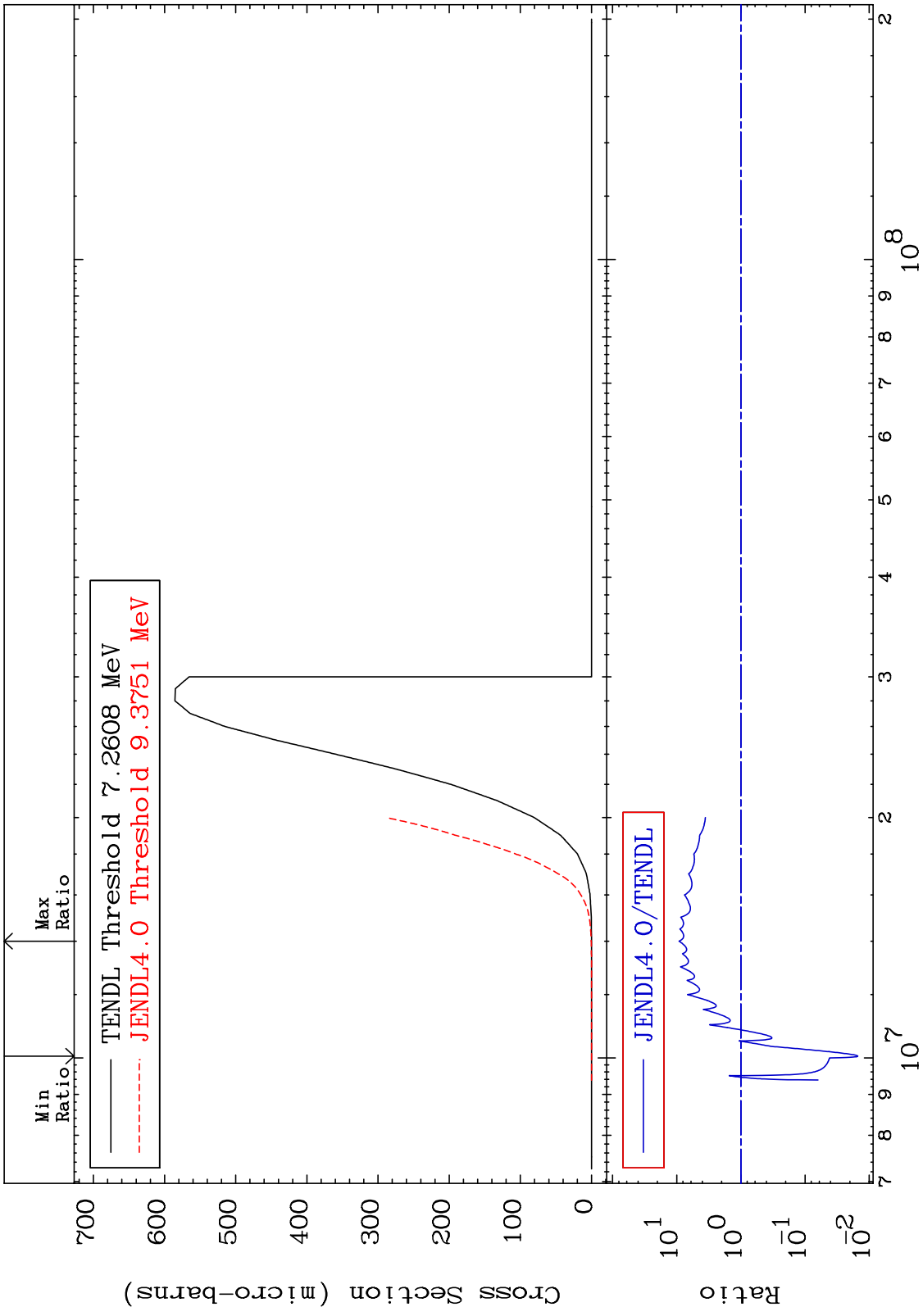
(n, α)

44-Ru-98

Cross Section

-68.77 To 507.3 %

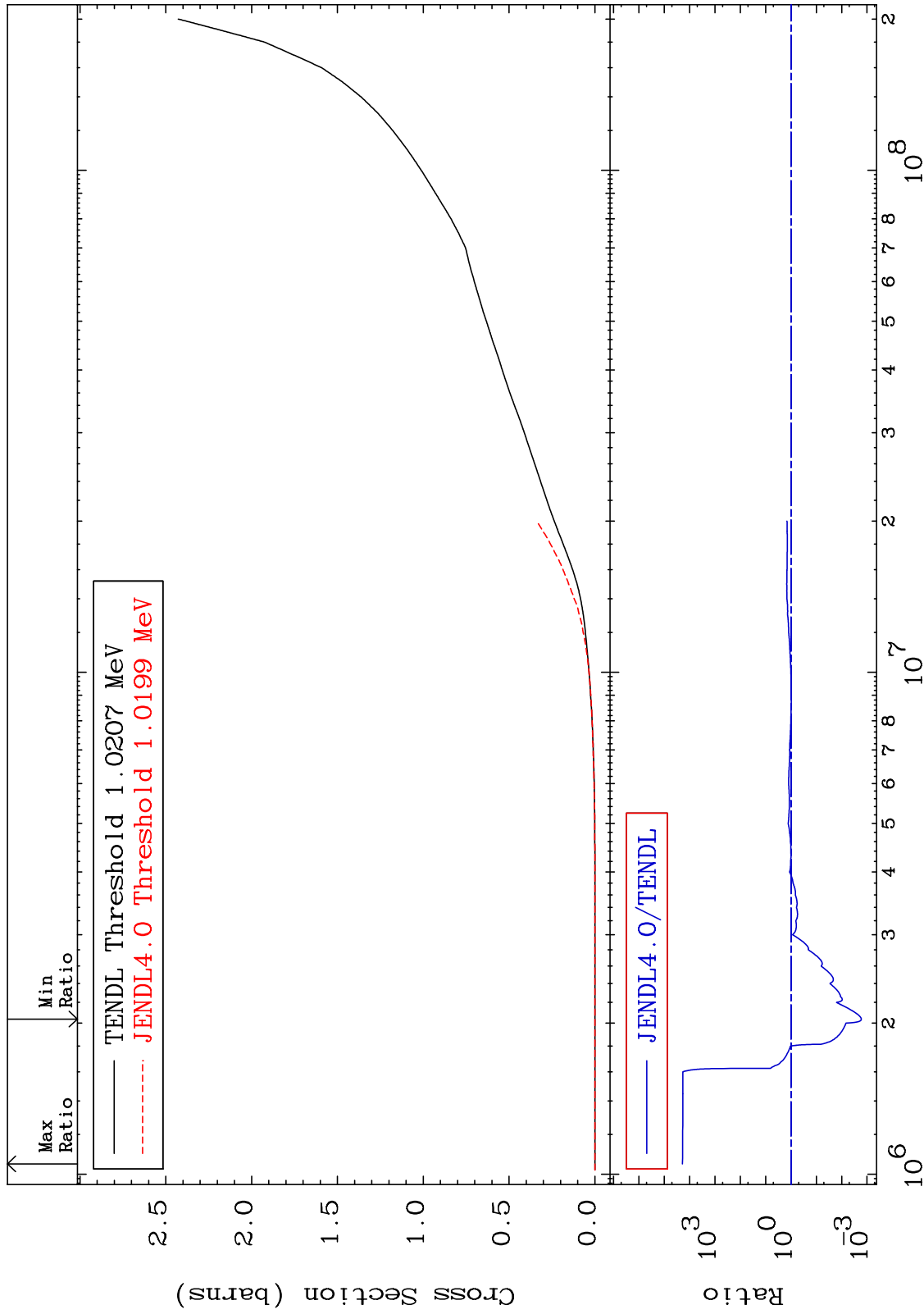




MAT 4431

Hydrogen Production
Cross Section

44-Ru-98
-99.83 To 9999. %



30

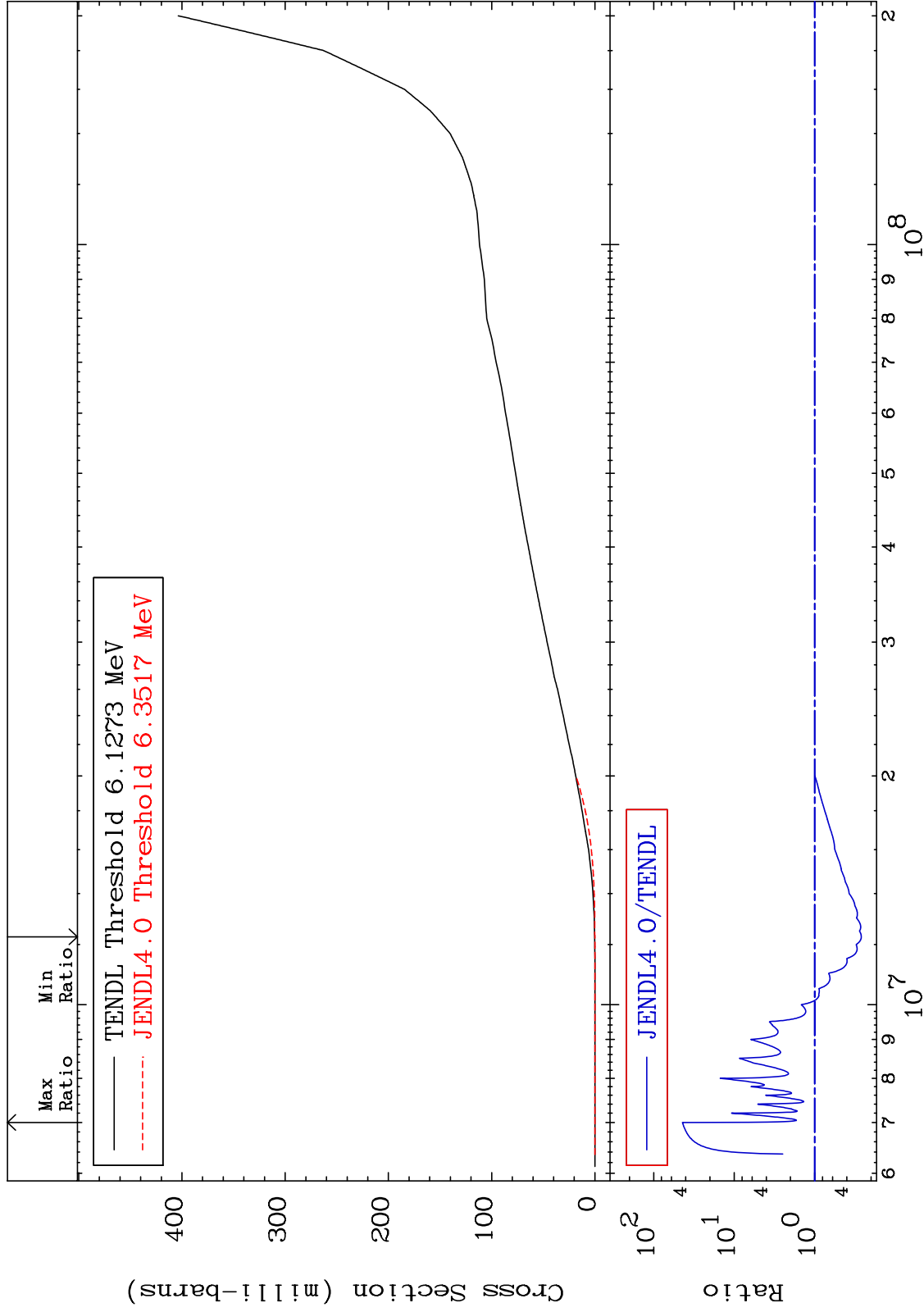
Incident Energy (eV)

44-Ru-98

MAT 4431

Deuterium Production
Cross Section

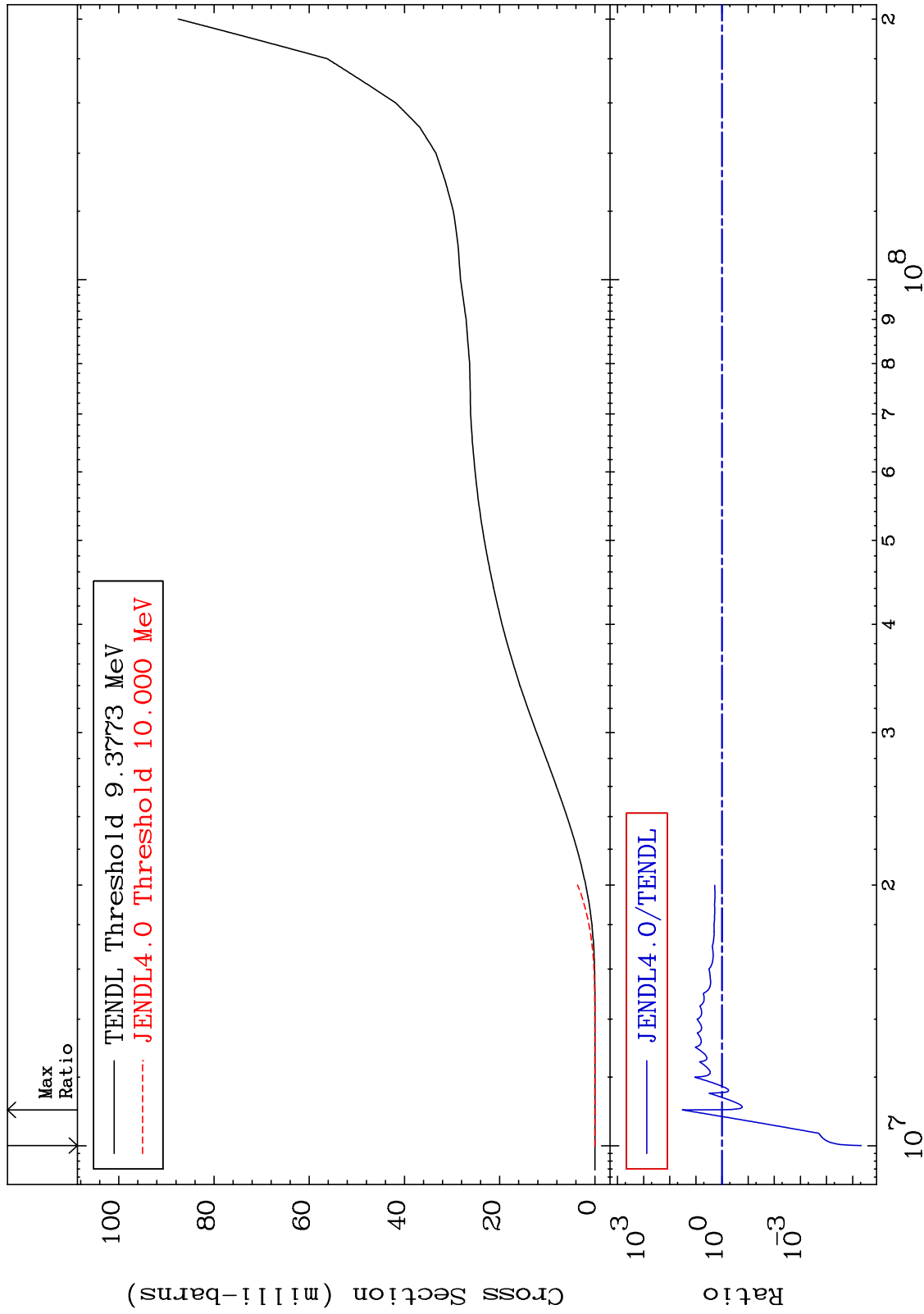
44-Ru-98
-73.56 To 4291. %



MAT 4431

Tritium Production
Cross Section

44-Ru-98
-100.0 To 3159. %



32

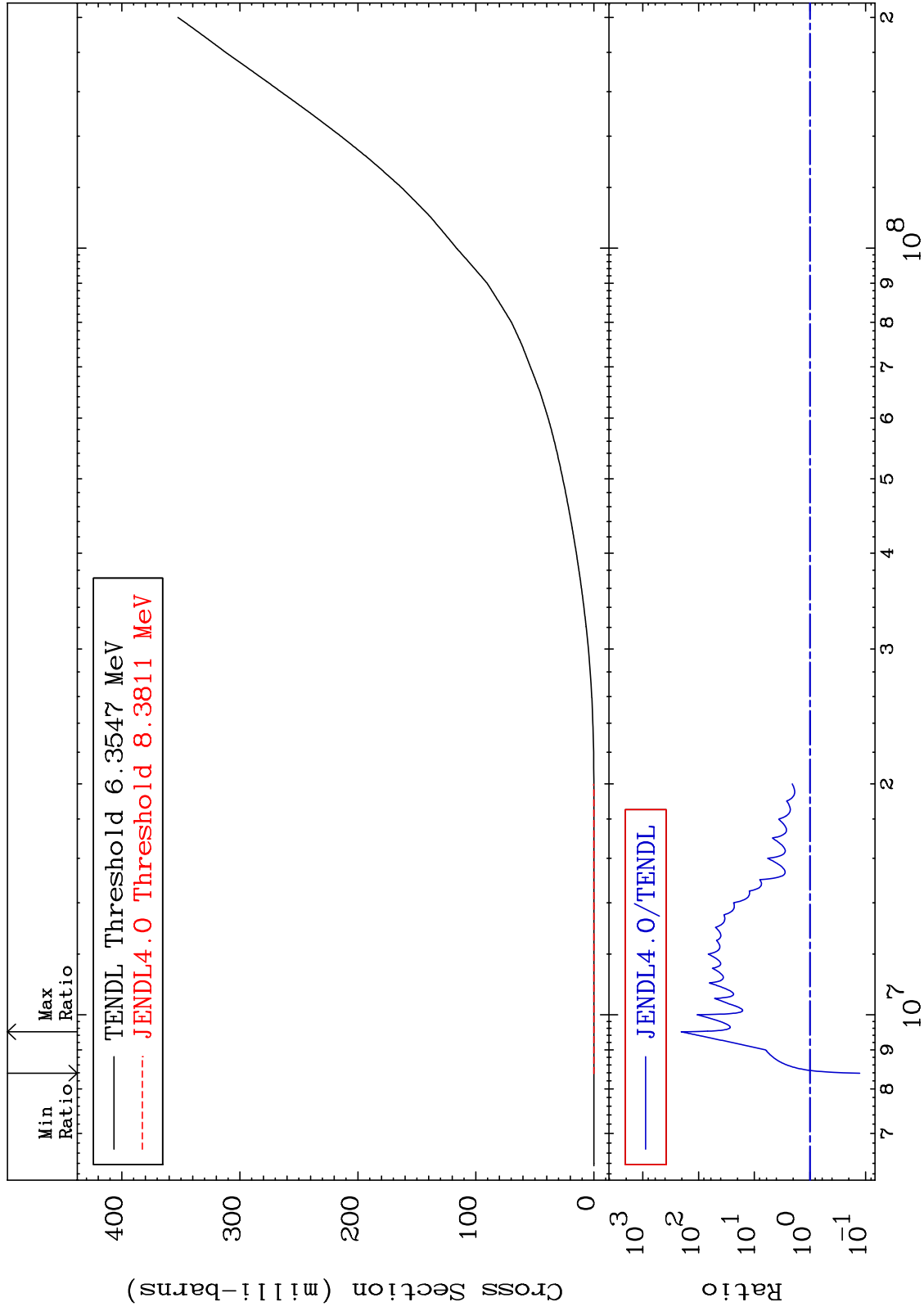
Incident Energy (eV)

44-Ru-98

MAT 4431

He-3 Production
Cross Section

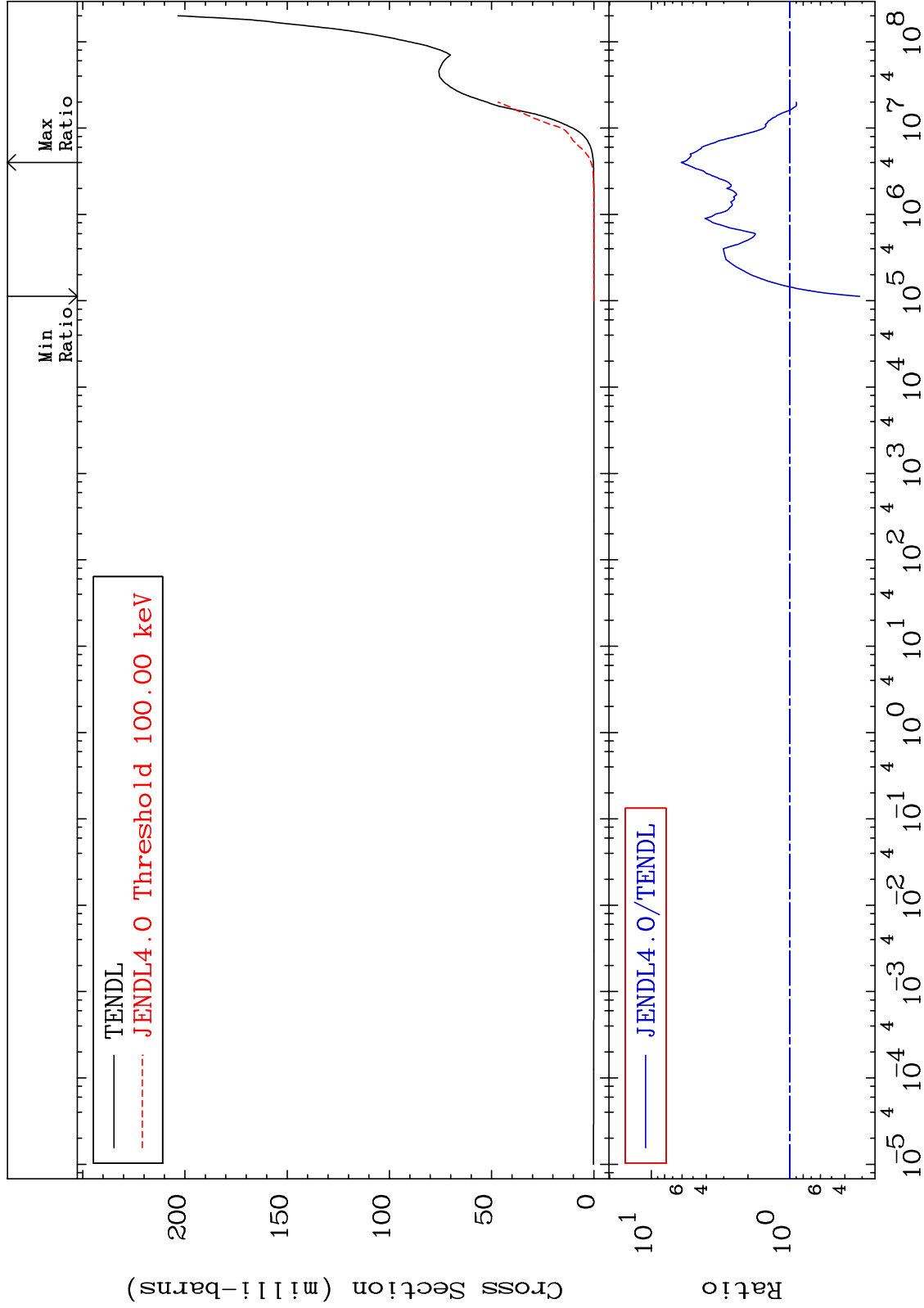
44-Ru-98
-87.29 To 9999. %



MAT 4431

He-4 Production
Cross Section

44-Ru-98
-68.77 To 507.3 %



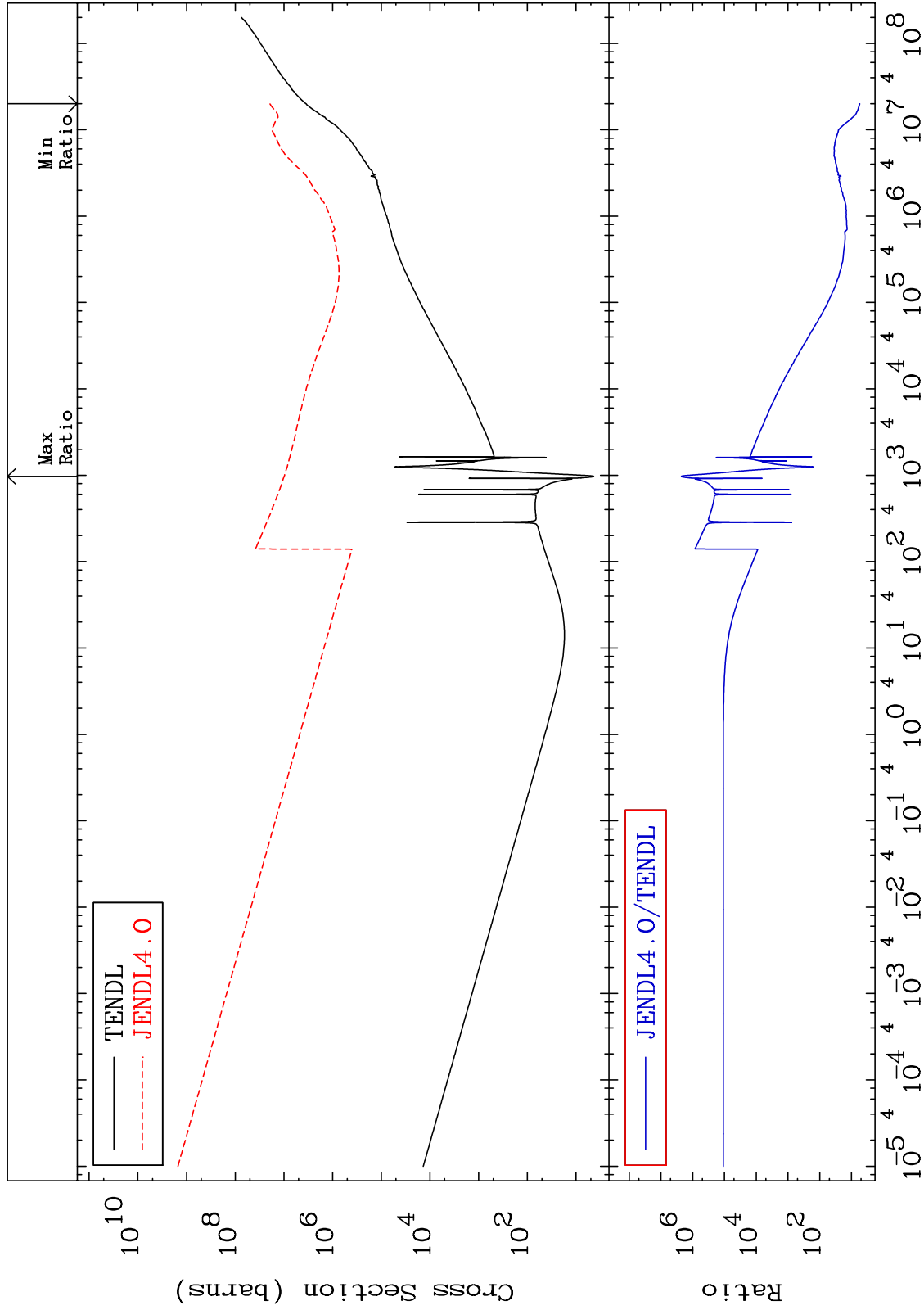
34

44-Ru-98

MAT 4431

Kerma total (eV-barns)
Cross Section

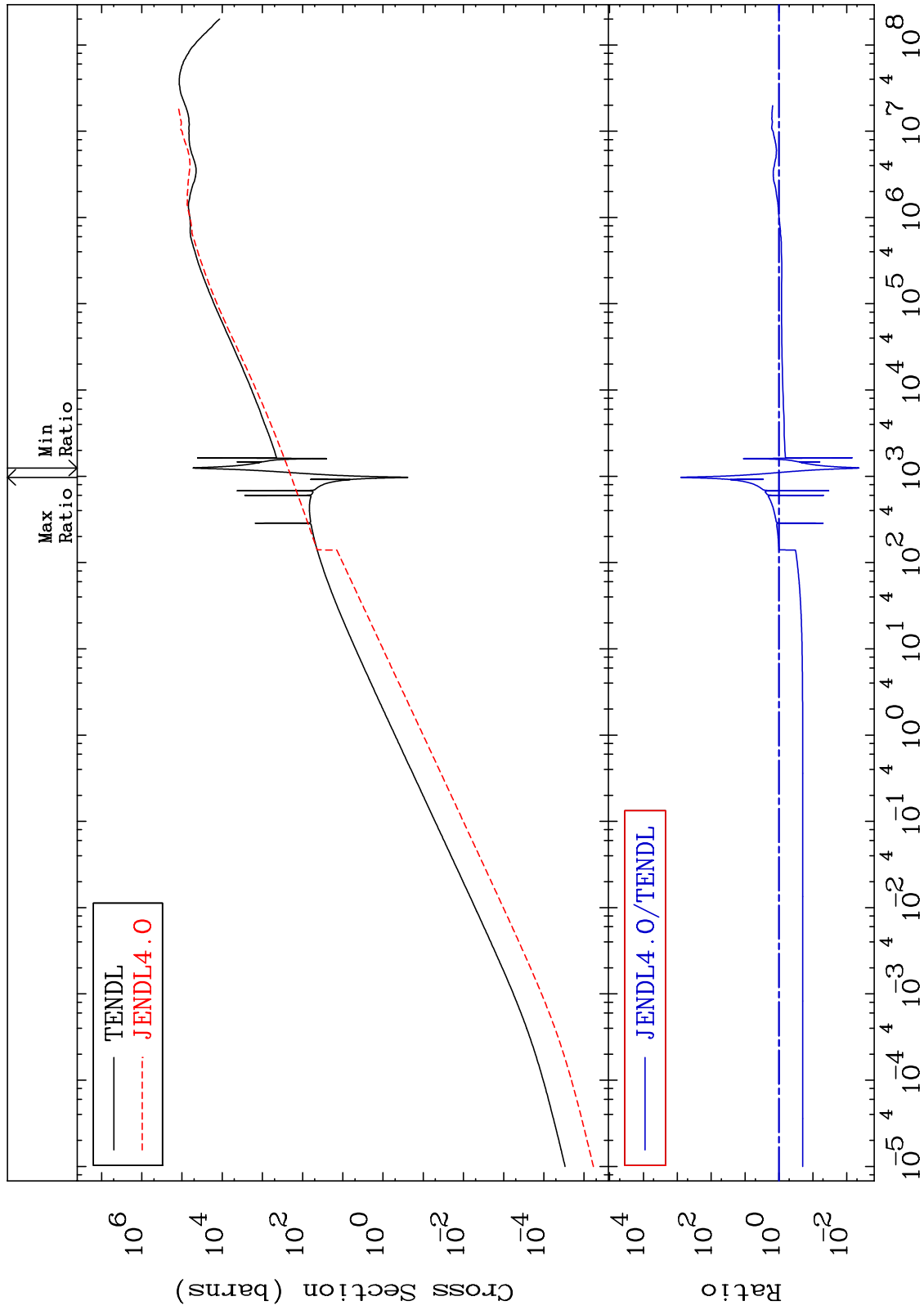
44-Ru-98
449.6 To 9999. %



MAT 4431

Kerma elastic
Cross Section

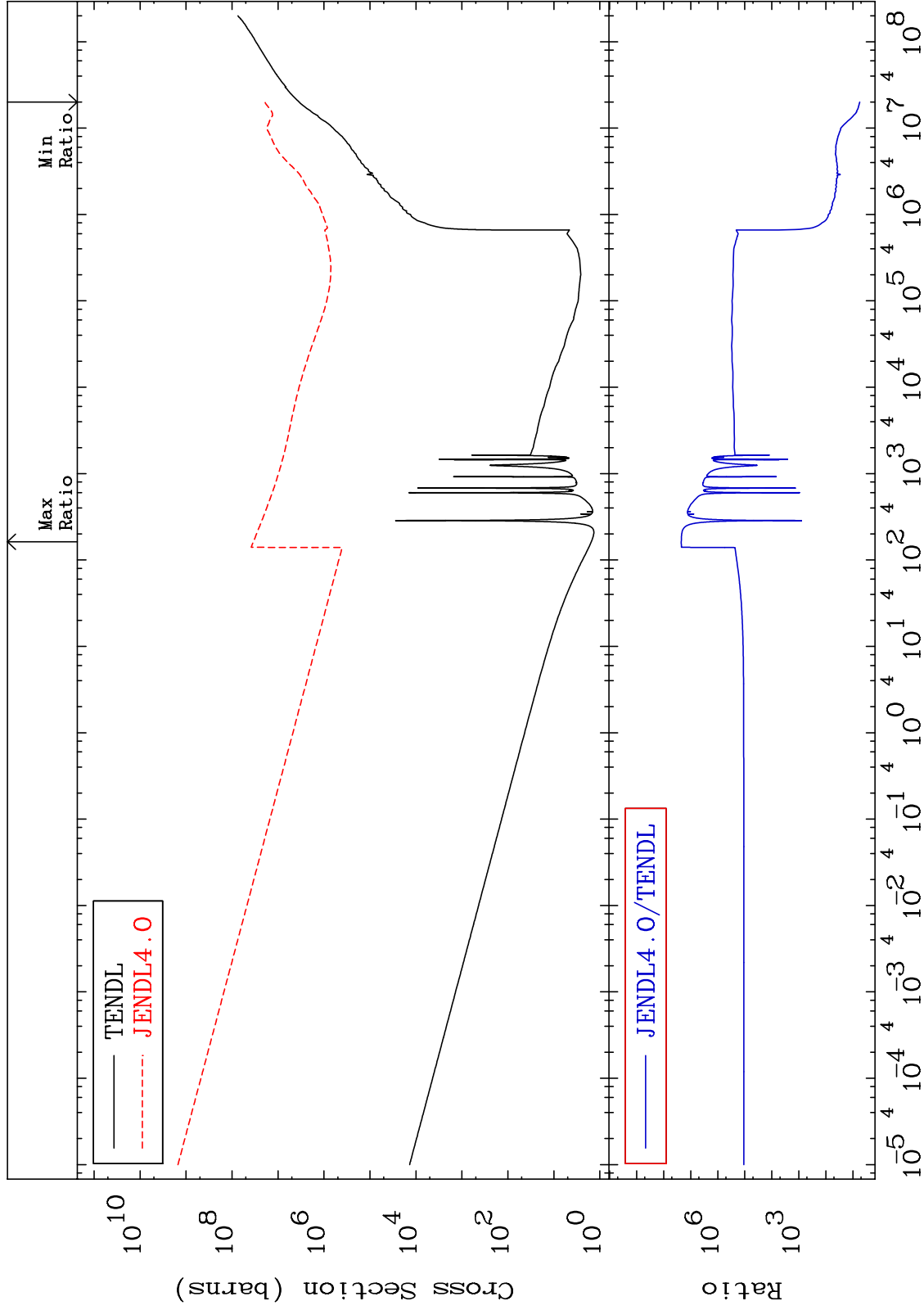
44-Ru-98
-99.57 To 9999. %

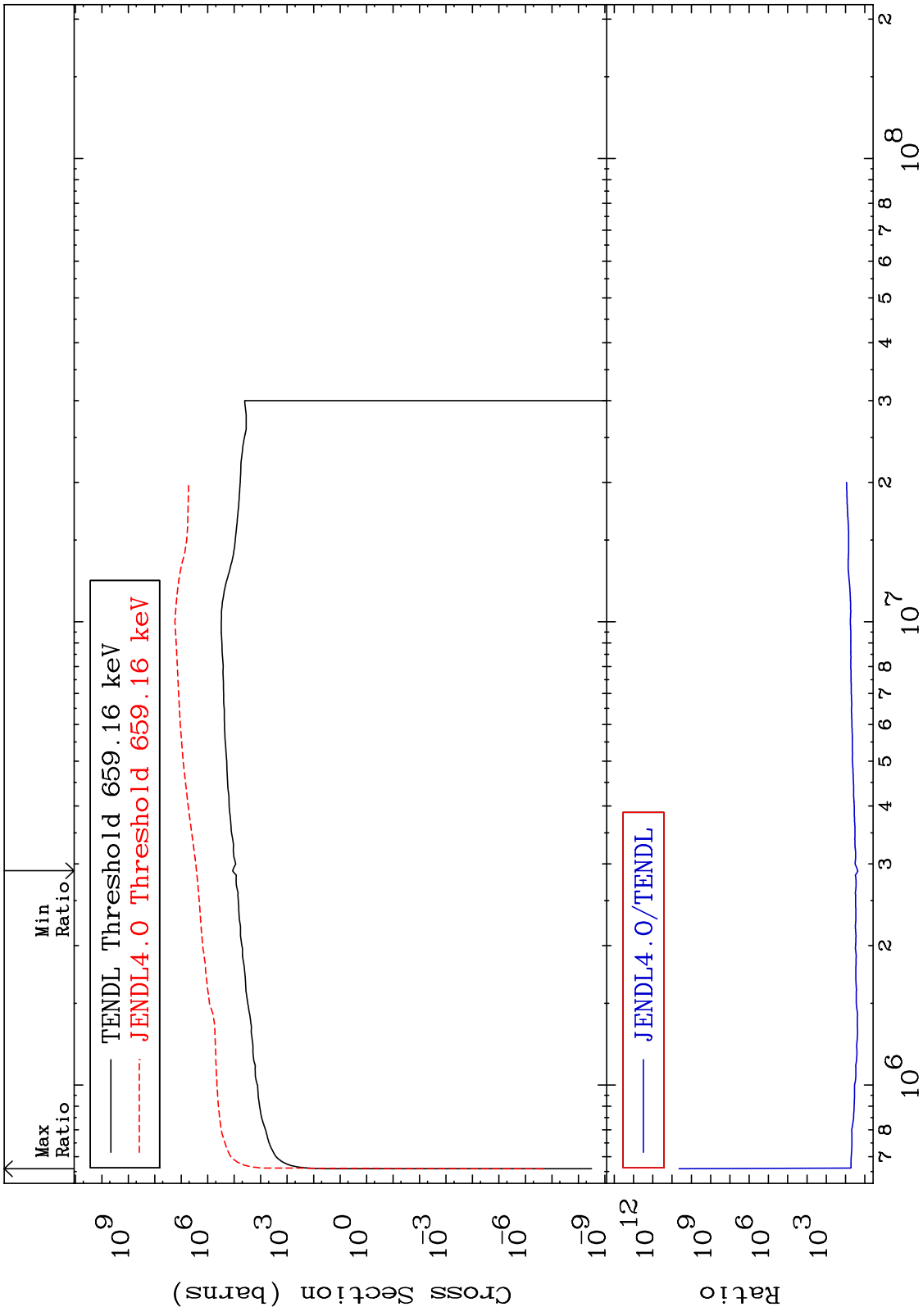


MAT 4431

Kerma non-elastic (all but mt2)
Cross Section

44-Ru-98
459.2 To 9999. %

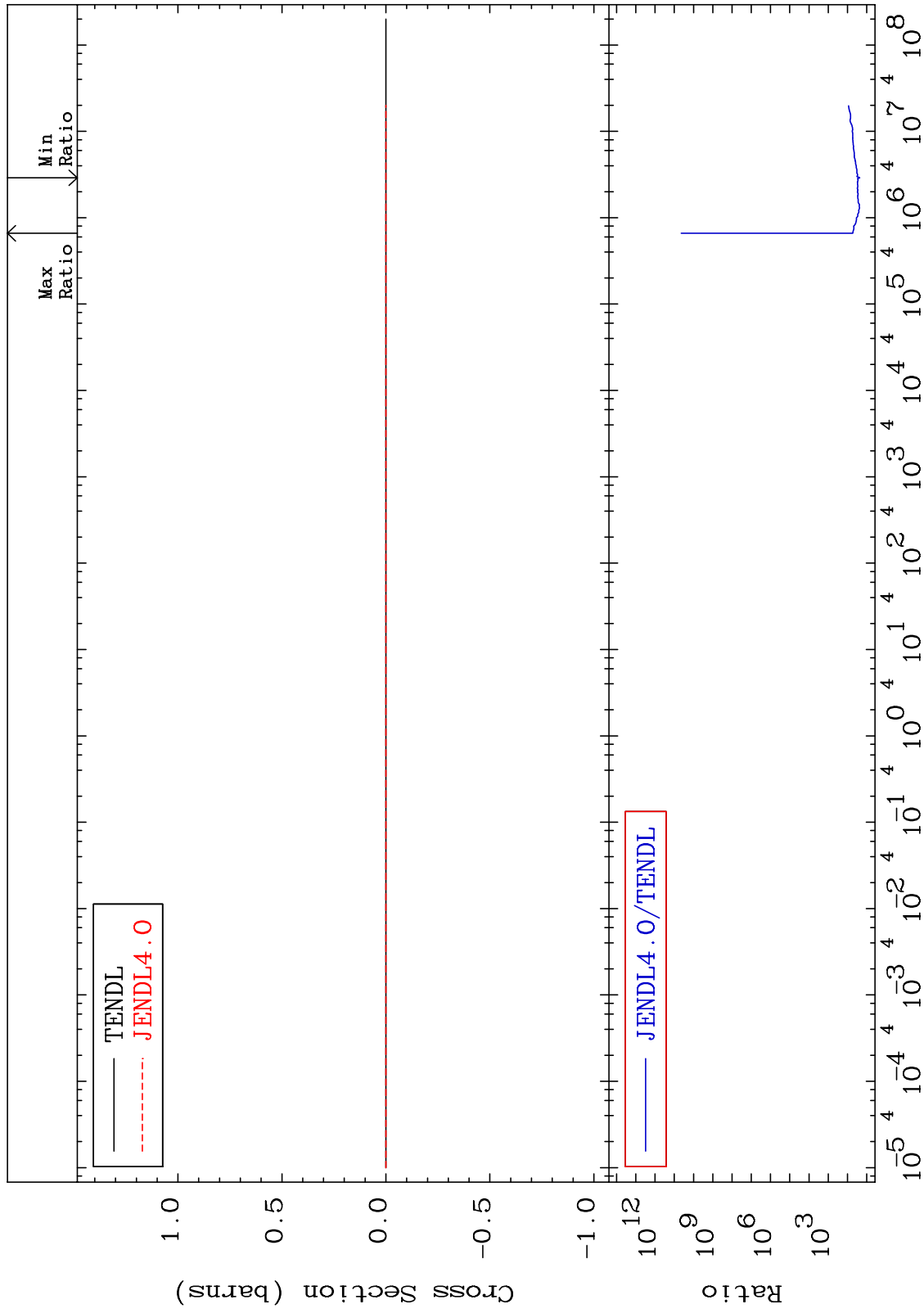




MAT 4431

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

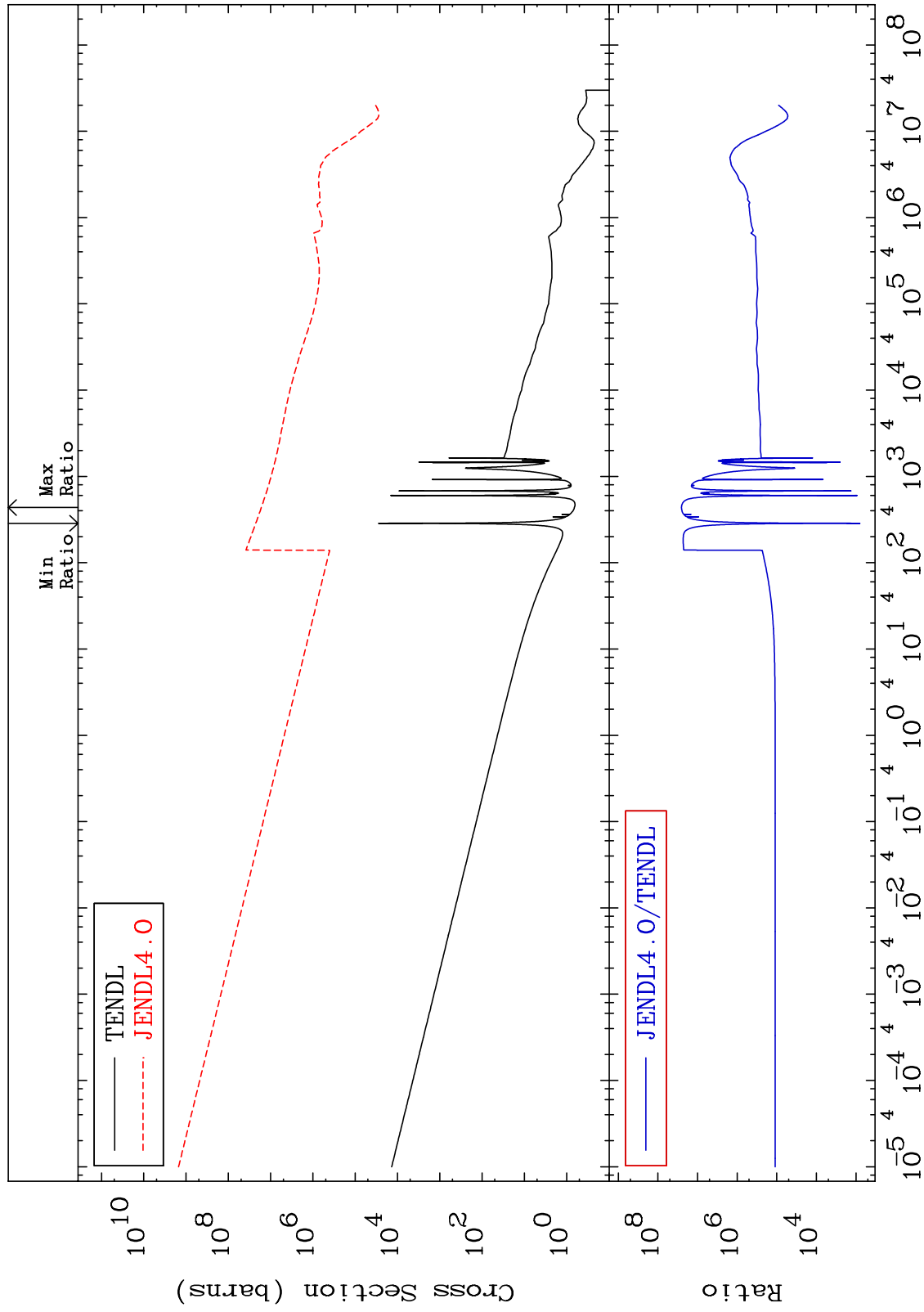
44-Ru-98
2204. To 9999. %



MAT 4431

Kerma capture (mt102)
Cross Section

44-Ru-98
9999. To 9999. %

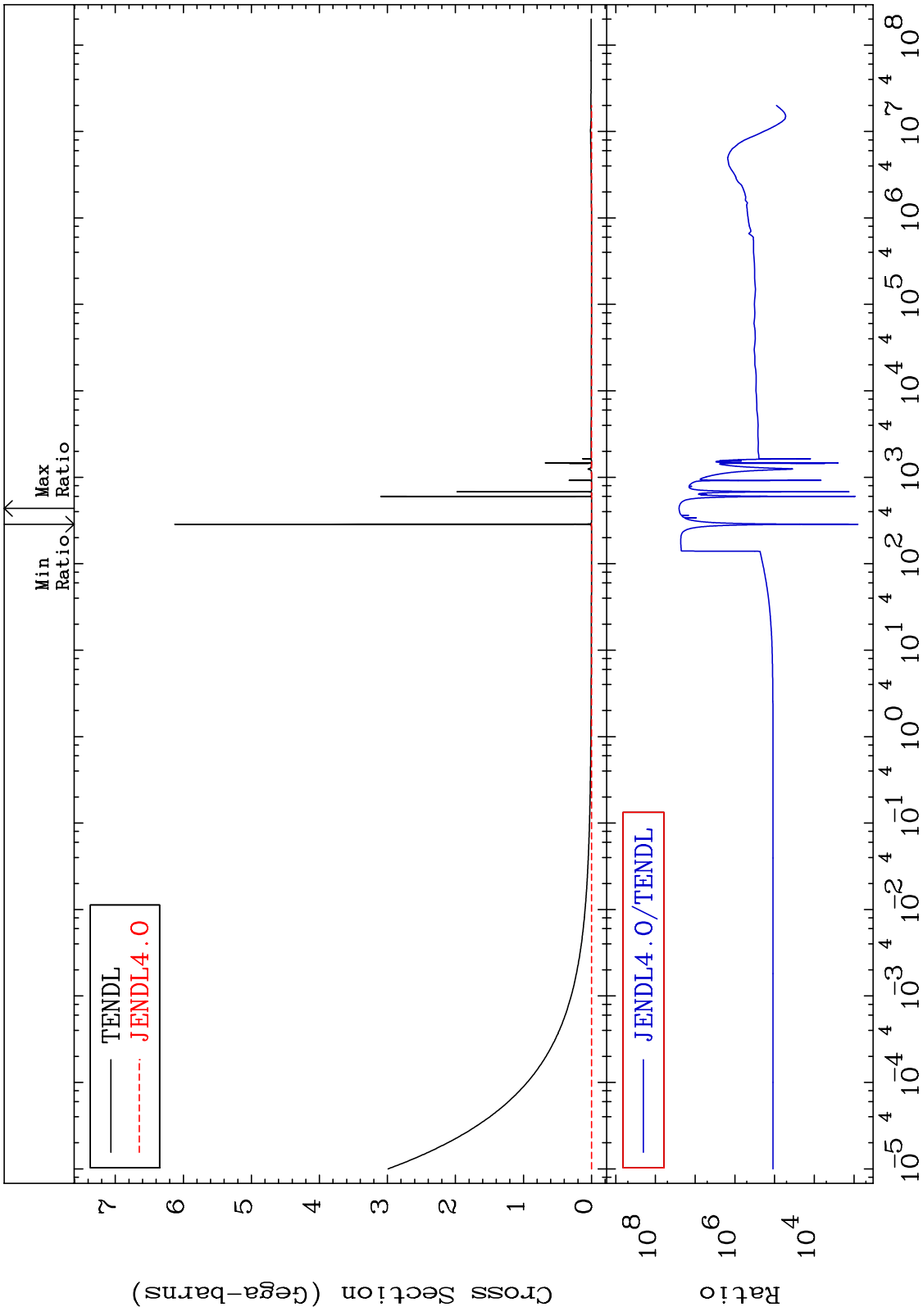


40

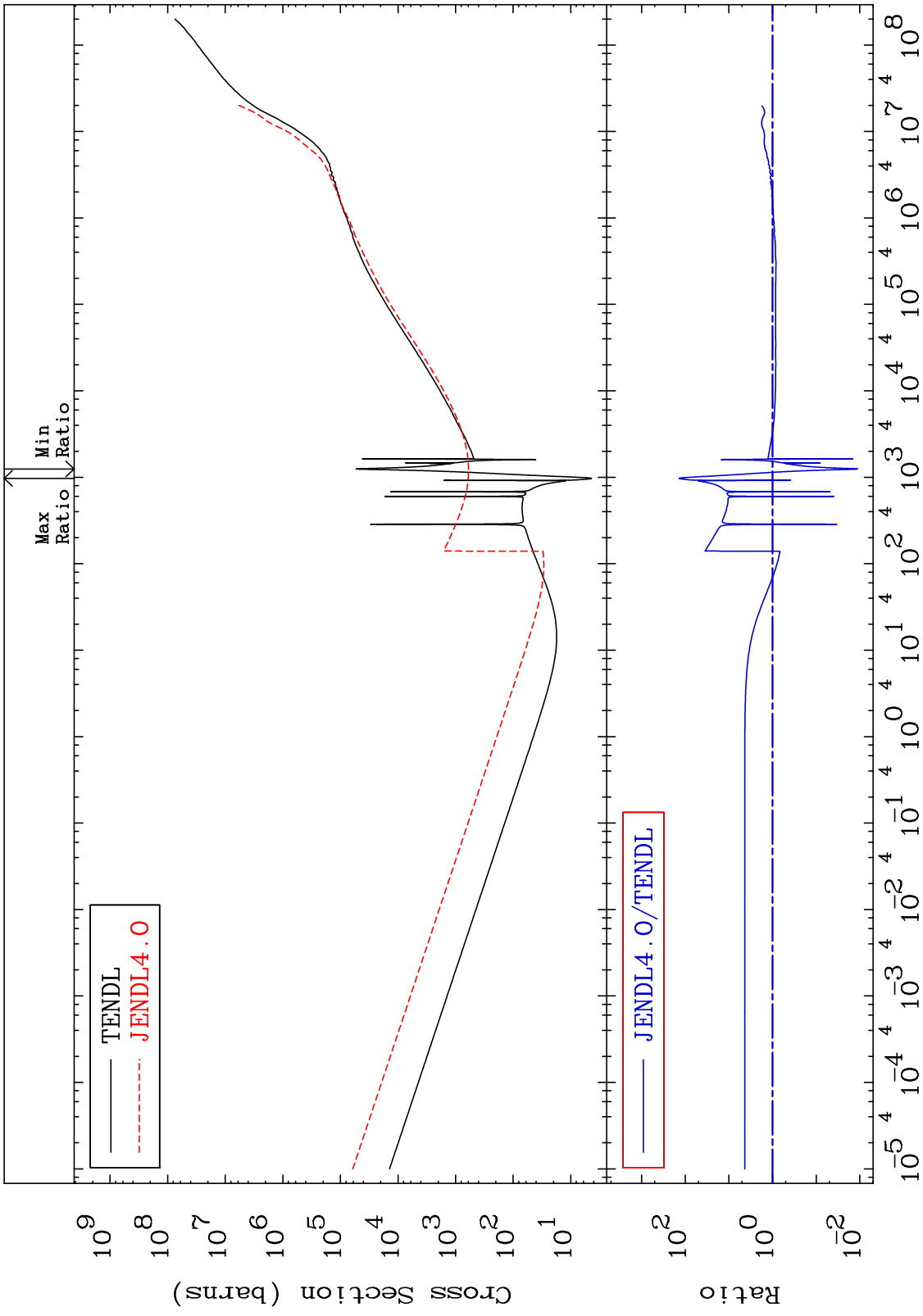
Incident Energy (eV)

44-Ru-98

MAT 4431 Total photon (eV-barns) 44-Ru-98
Cross Section 9999. To 9999. %



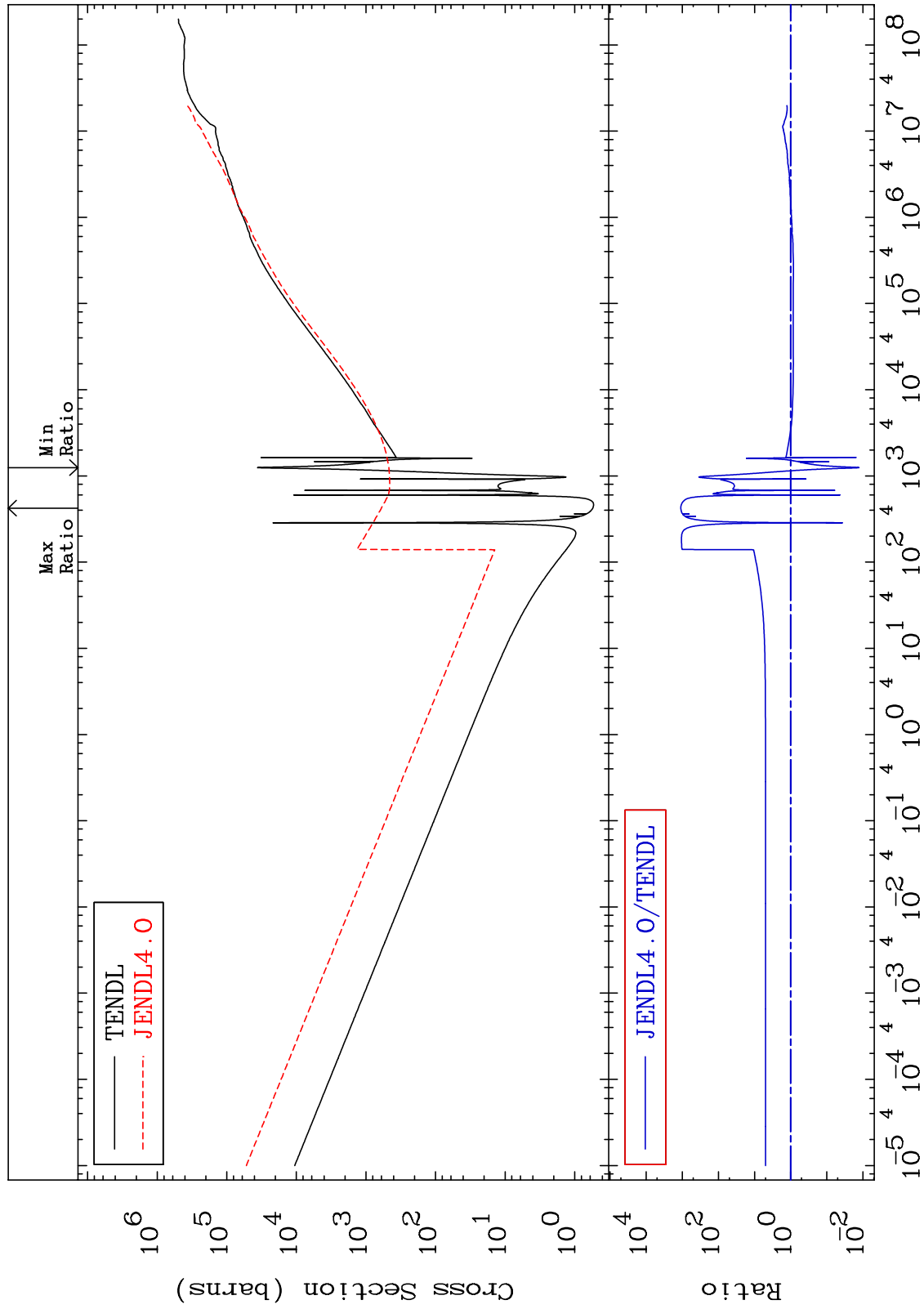
MAT 4431 Total kinematic kerma (high limit) 44-Ru-98
 Cross Section -98.89 To 9999. %



MAT 4431

Dpa total (eV-barns)
Cross Section

44-Ru-98
-98.72 To 9999. %



43

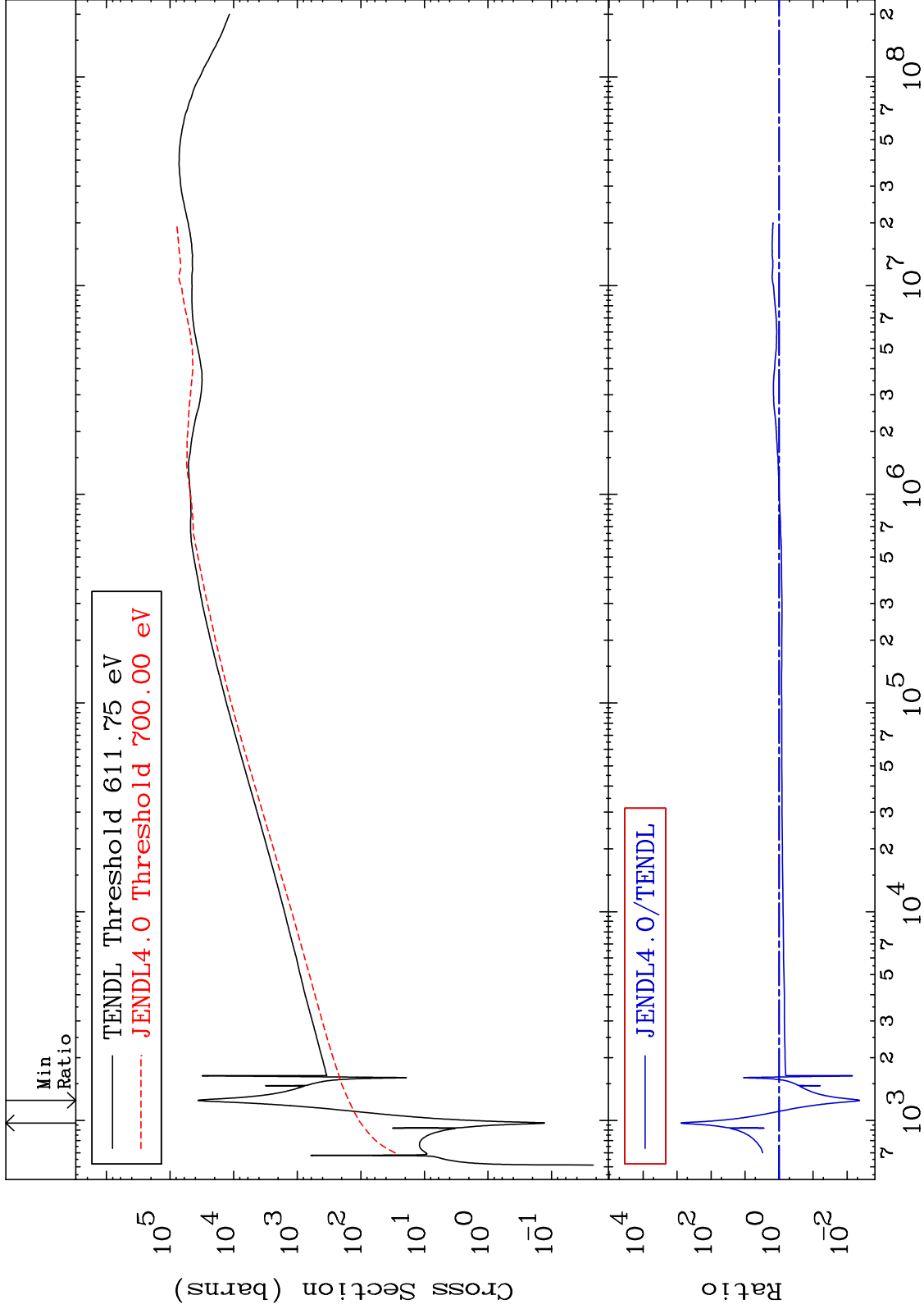
Incident Energy (eV)

44-Ru-98

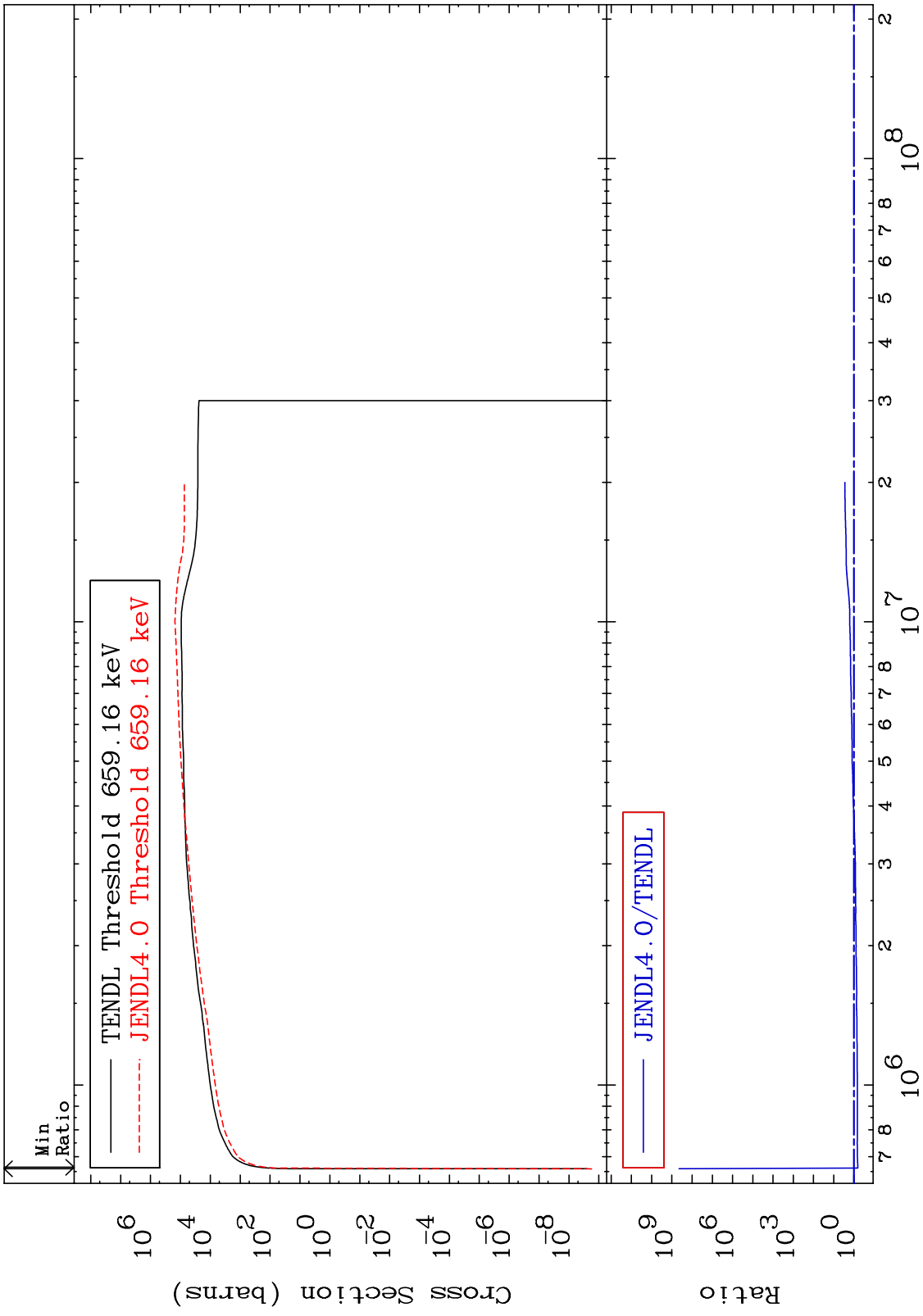
MAT 4431

Dpa elastic (mt2)
Cross Section

44-Ru-98
-99.57 To 9999. %



MAT 4431 Dpa inelastic (mt51-91) 44-Ru-98
 Cross Section -35.70 To 9999. %

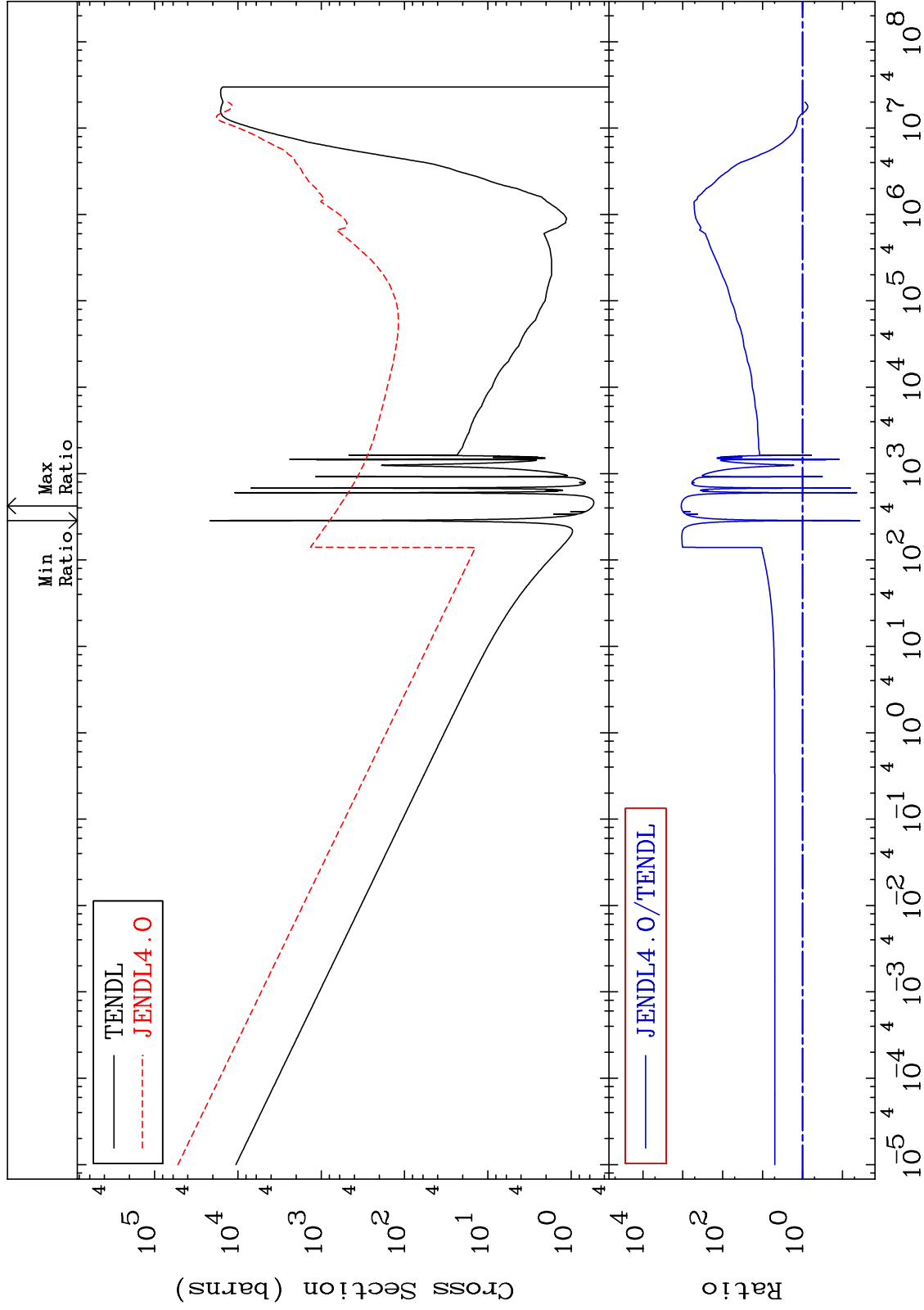


45 44-Ru-98

MAT 4431

Dpa disappearance (mt102 -120)
Cross Section

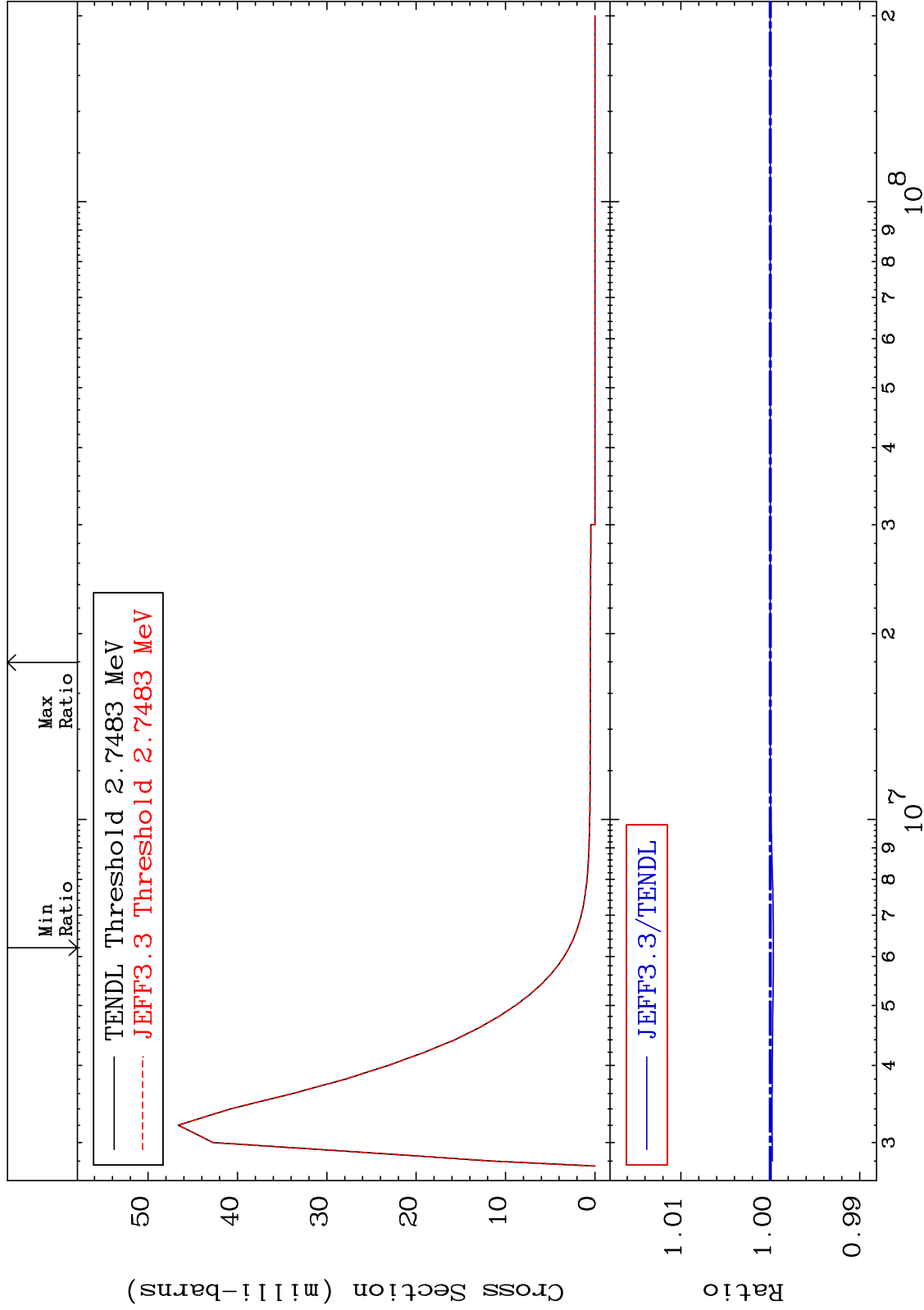
44-Ru-98
-96.33 To 9999. %



MAT 4431

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

44-Ru-98
-0.035 To 0.000 %



47

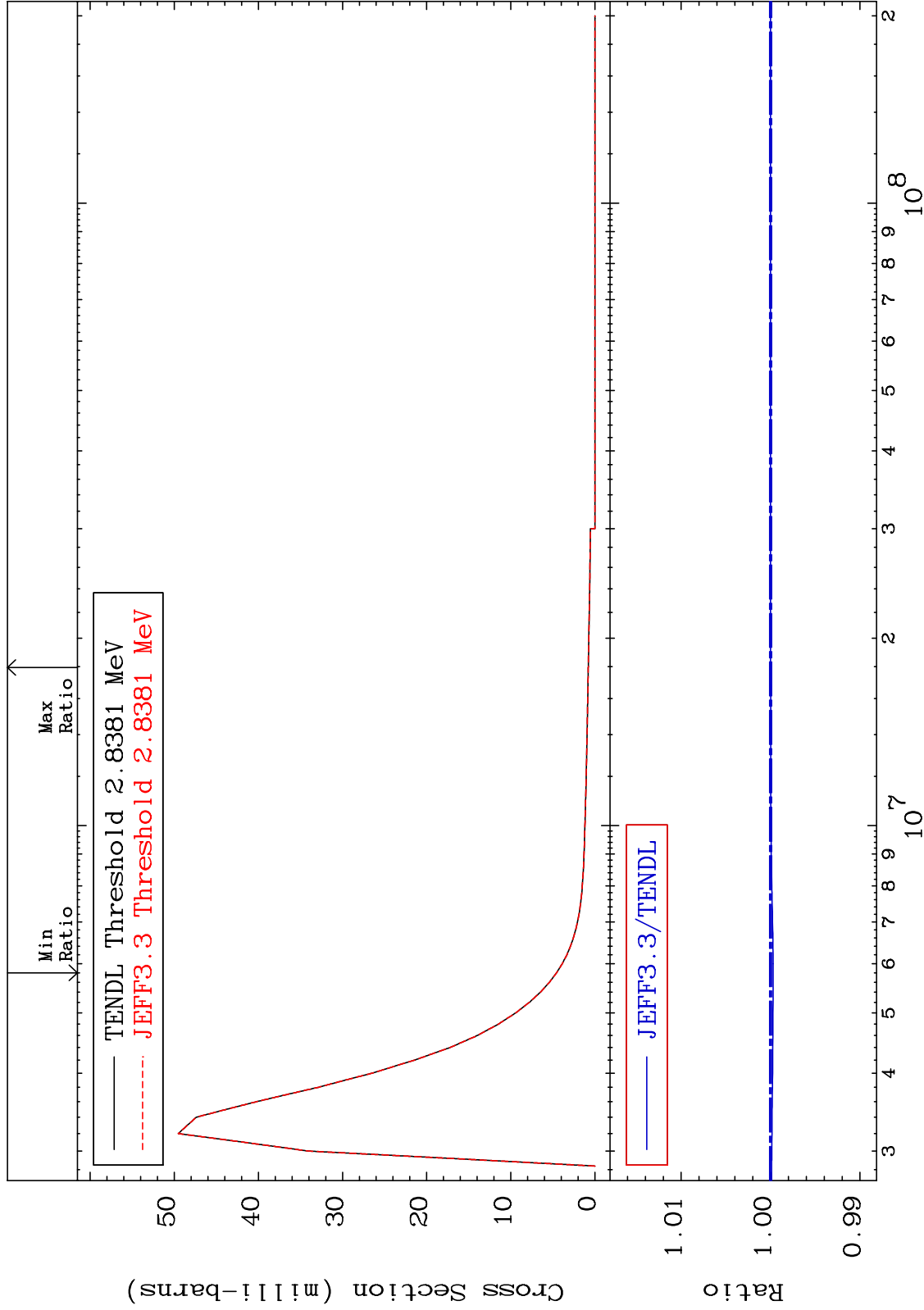
Incident Energy (eV)

44-Ru-98

MAT 4431

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

44-Ru-98
-0.028 To 0.000 %



48

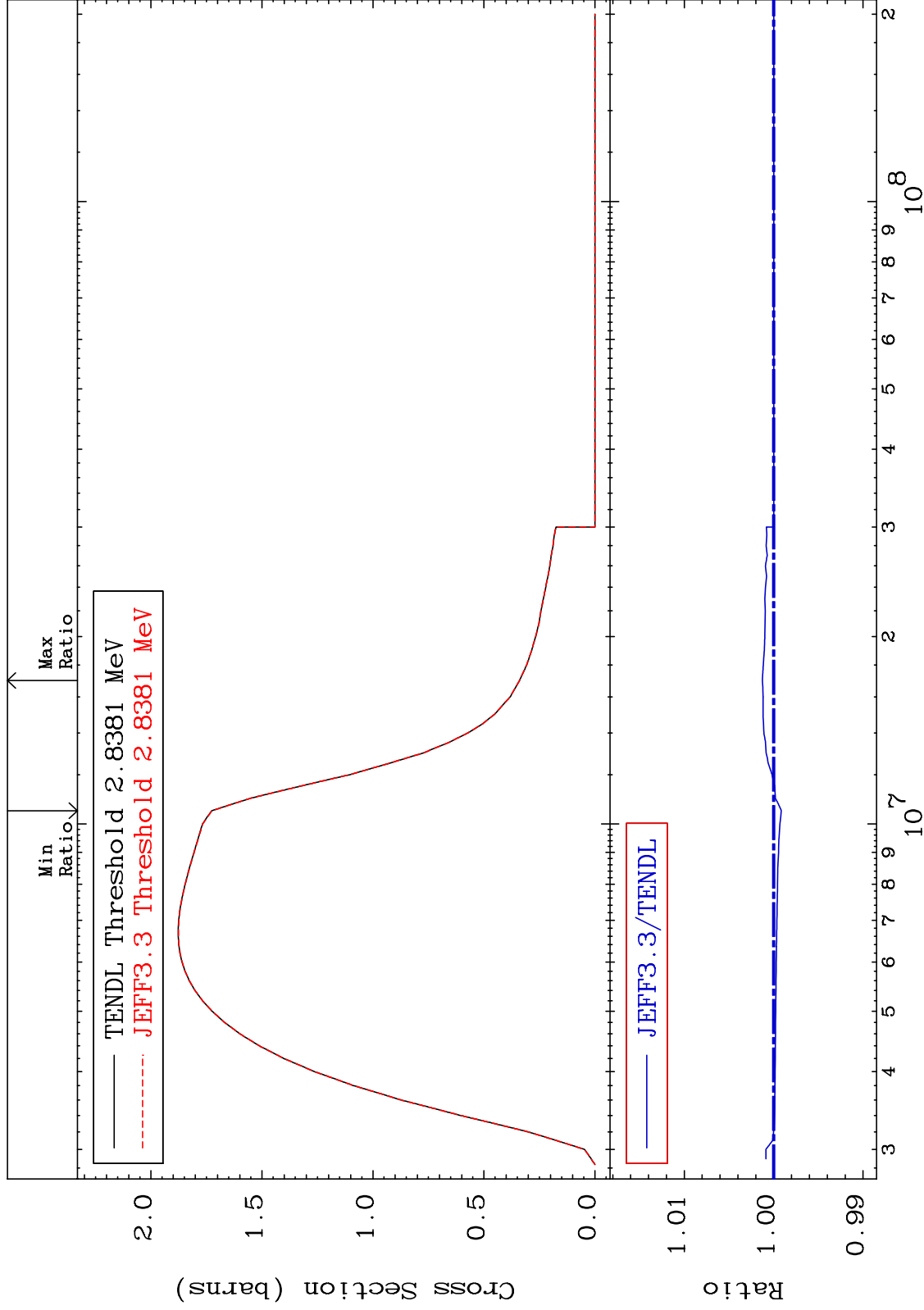
Incident Energy (eV)

44-Ru-98

MAT 4431

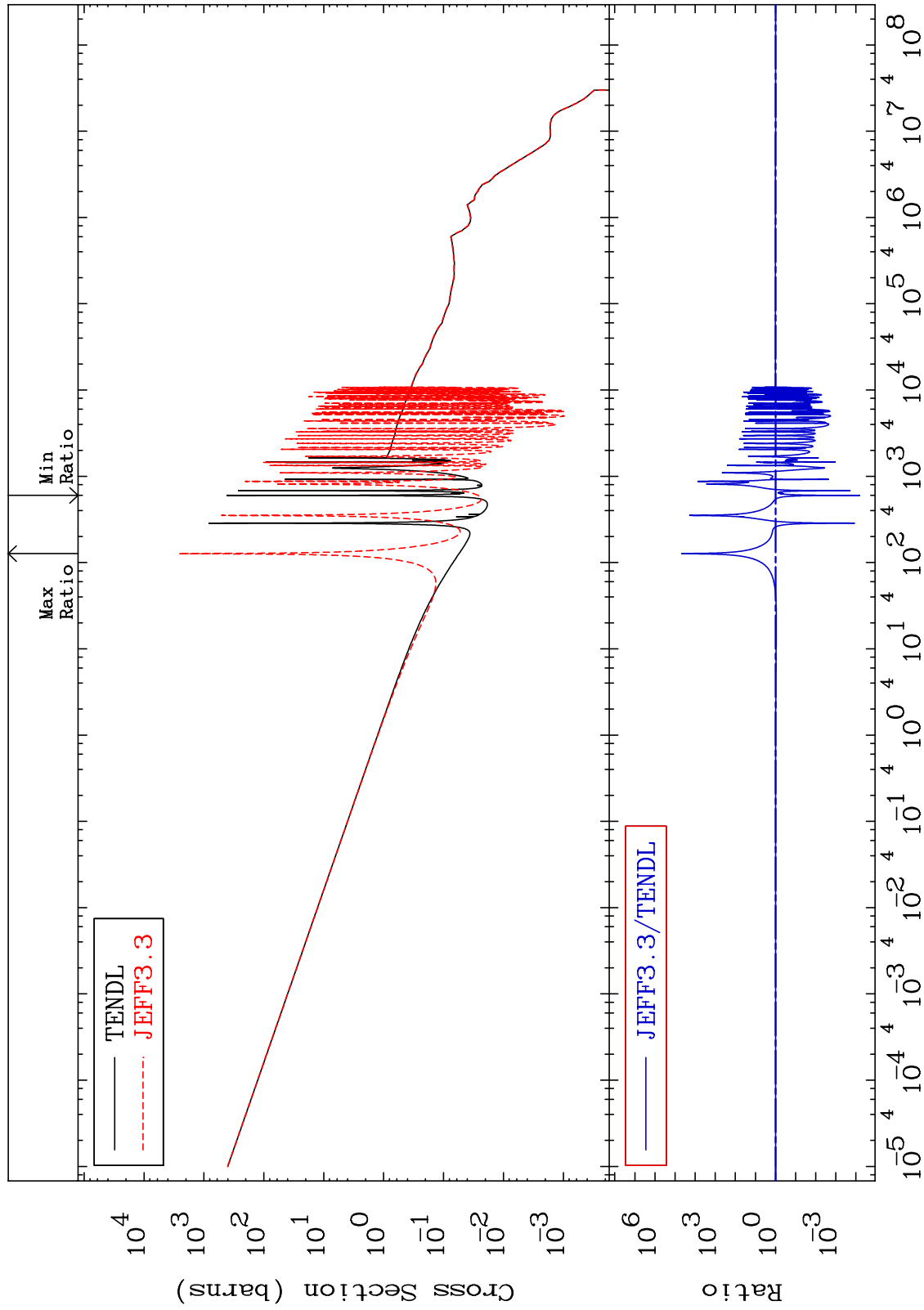
(n, n') Continuum
Cross Section

44-Ru-98
-0.085 To 0.126 %



MAT 4431

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



MAT 4431

(n,p)

44-Ru-98

-6.408 To 0.333 %

Cross Section

Min Ratio

Max Ratio

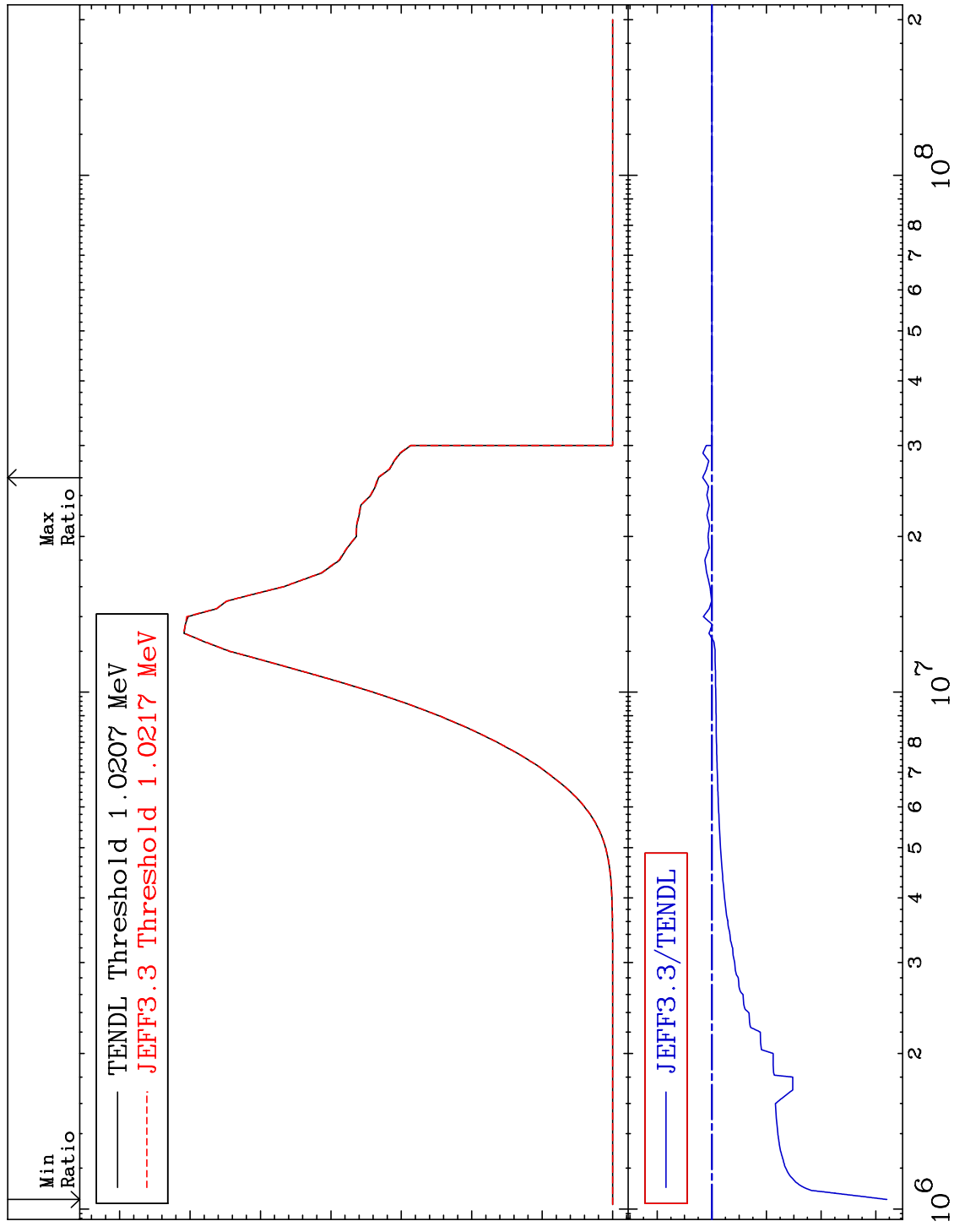
TENDL Threshold 1.0207 MeV
JEFF3.3 Threshold 1.0217 MeV

Cross Section (milli-barns)

JEFF3.3/TENDL

Ratio

51



Incident Energy (eV)

44-Ru-98

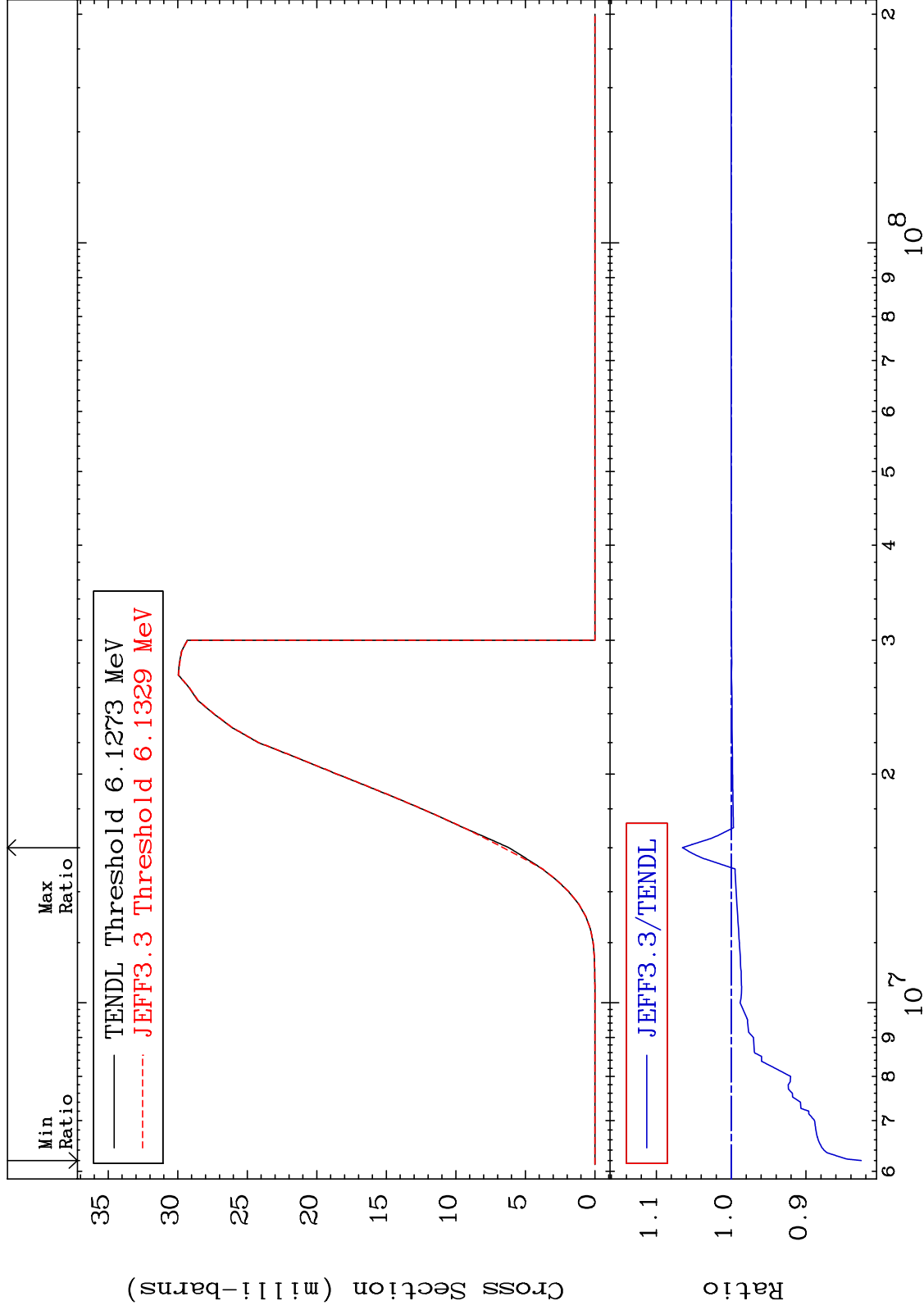
MAT 4431

(n,d)

44-Ru-98

-17.38 To 6.509 %

Cross Section



52

Incident Energy (eV)

44-Ru-98

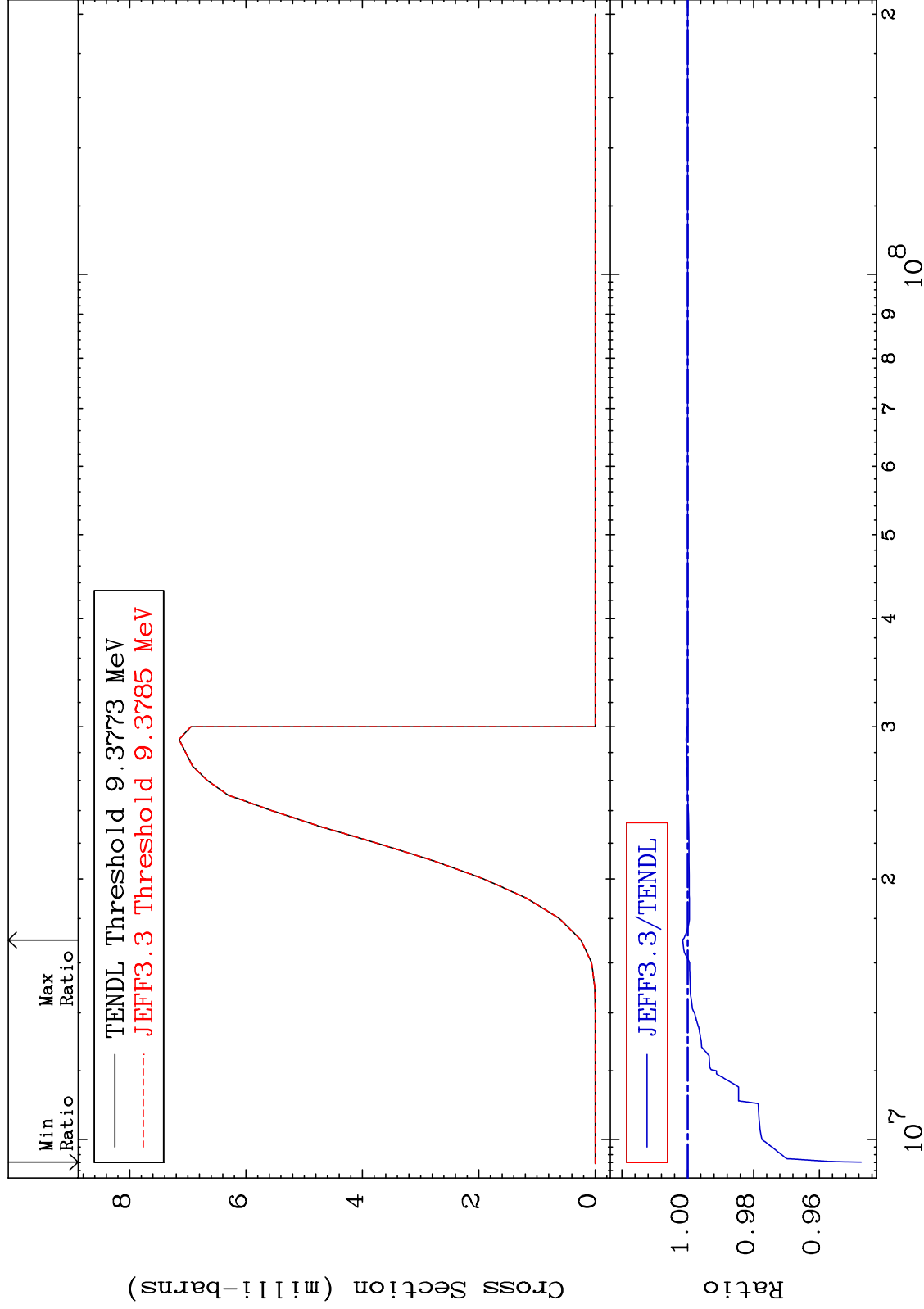
MAT 4431

(n, t)

44-Ru-98

Cross Section

-5.276 To 0.151 %



53

Incident Energy (eV)

44-Ru-98

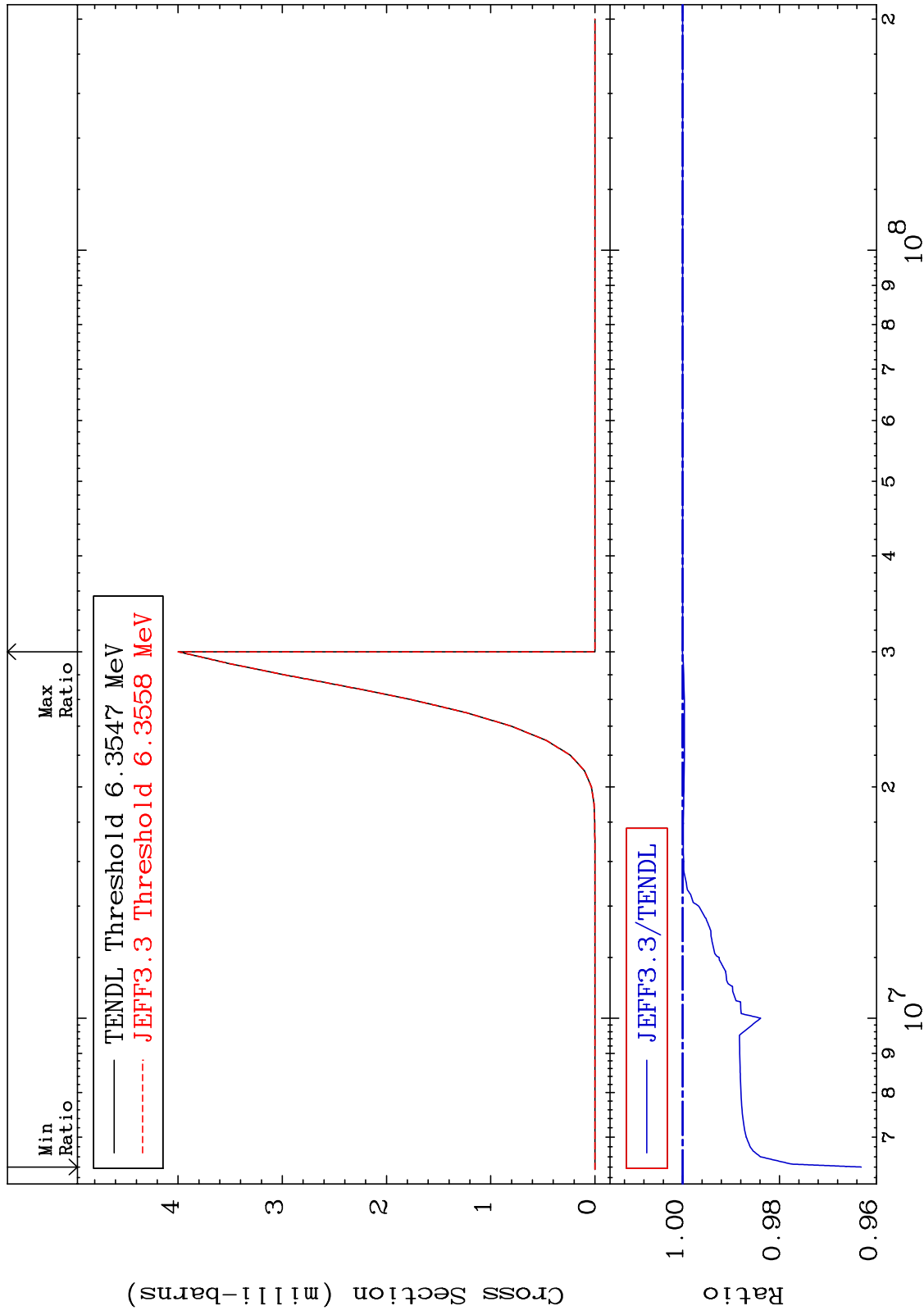
MAT 4431

(n, He-3)

44-Ru-98

-3.690 To 0.004 %

Cross Section



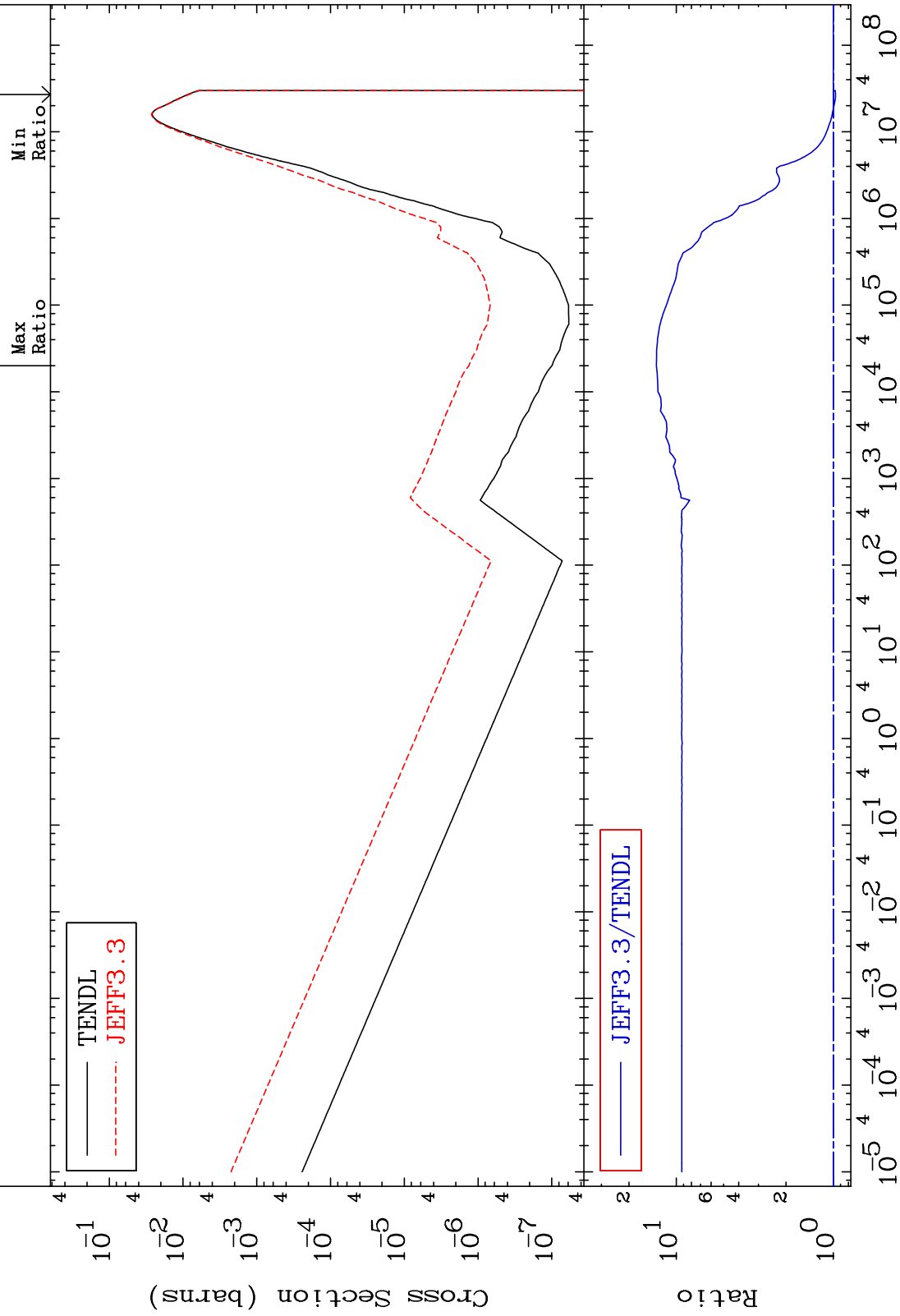
MAT 4431

(n, α)

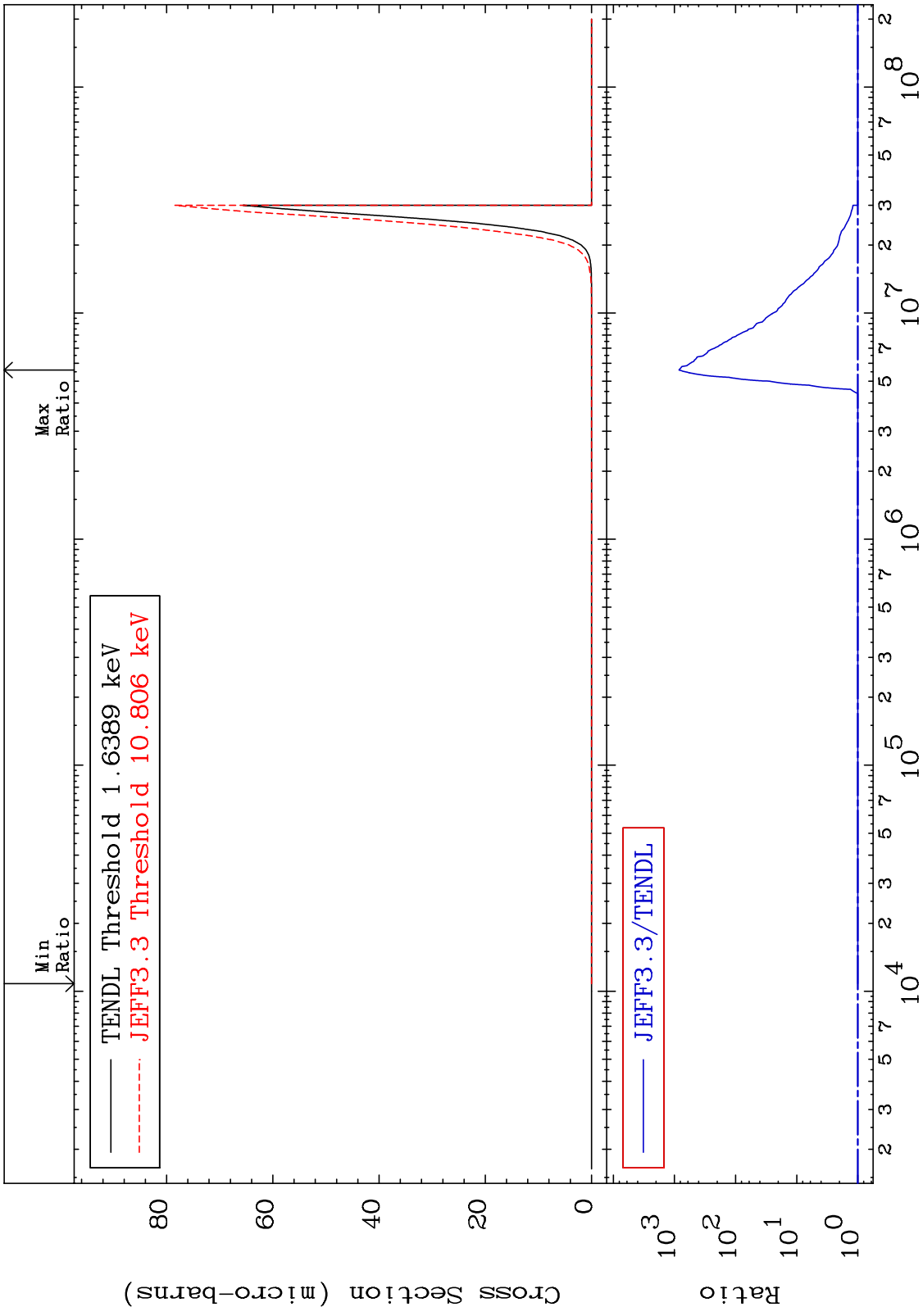
44-Ru-98

Cross Section

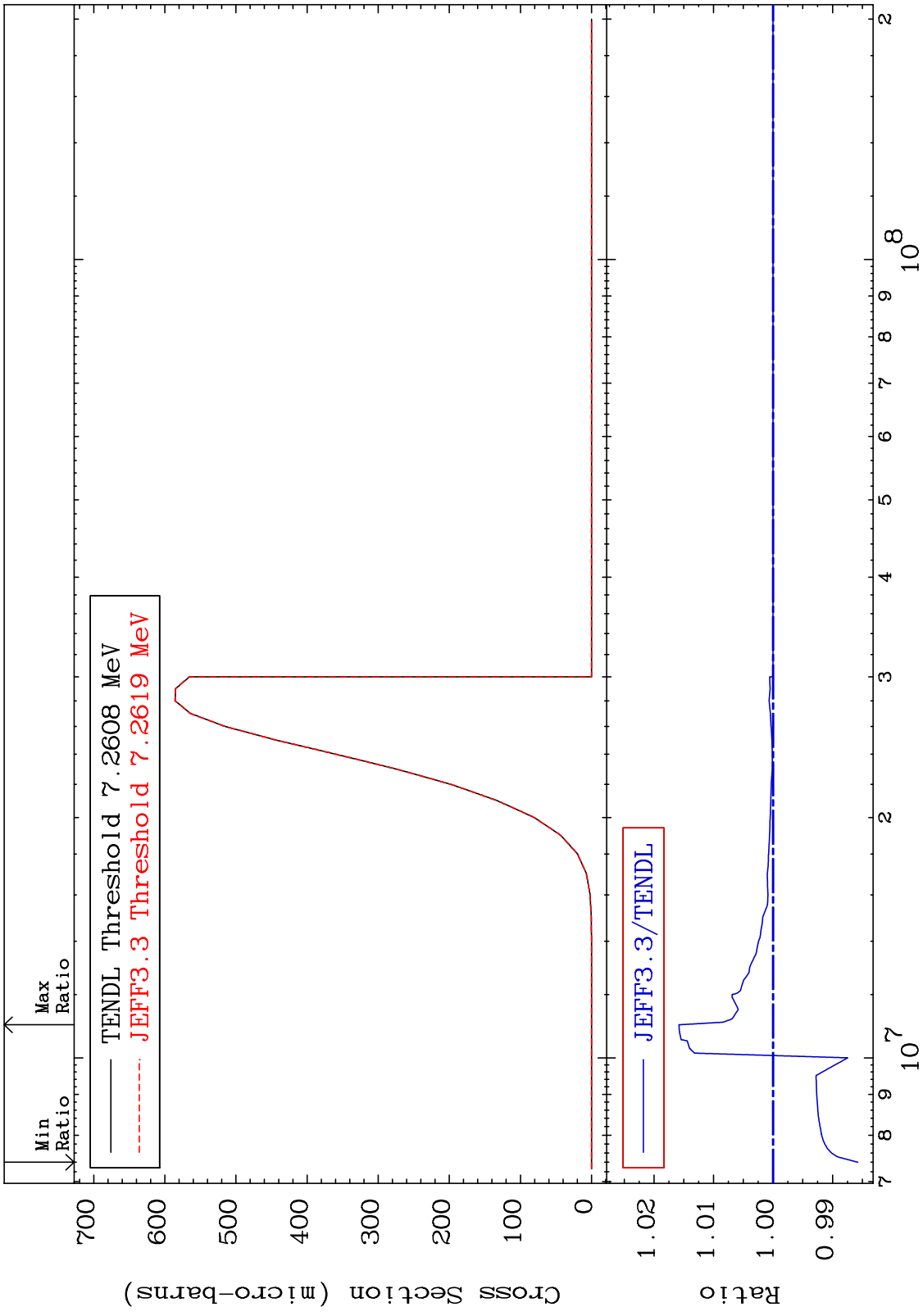
-3.303 To 1237. %



MAT 4431 $(n, 2\alpha)$ Cross Section 44-Ru-98 To 9999. %



MAT 4431 (n,2p) Cross Section 44-Ru-98
 -1.425 To 1.580 %



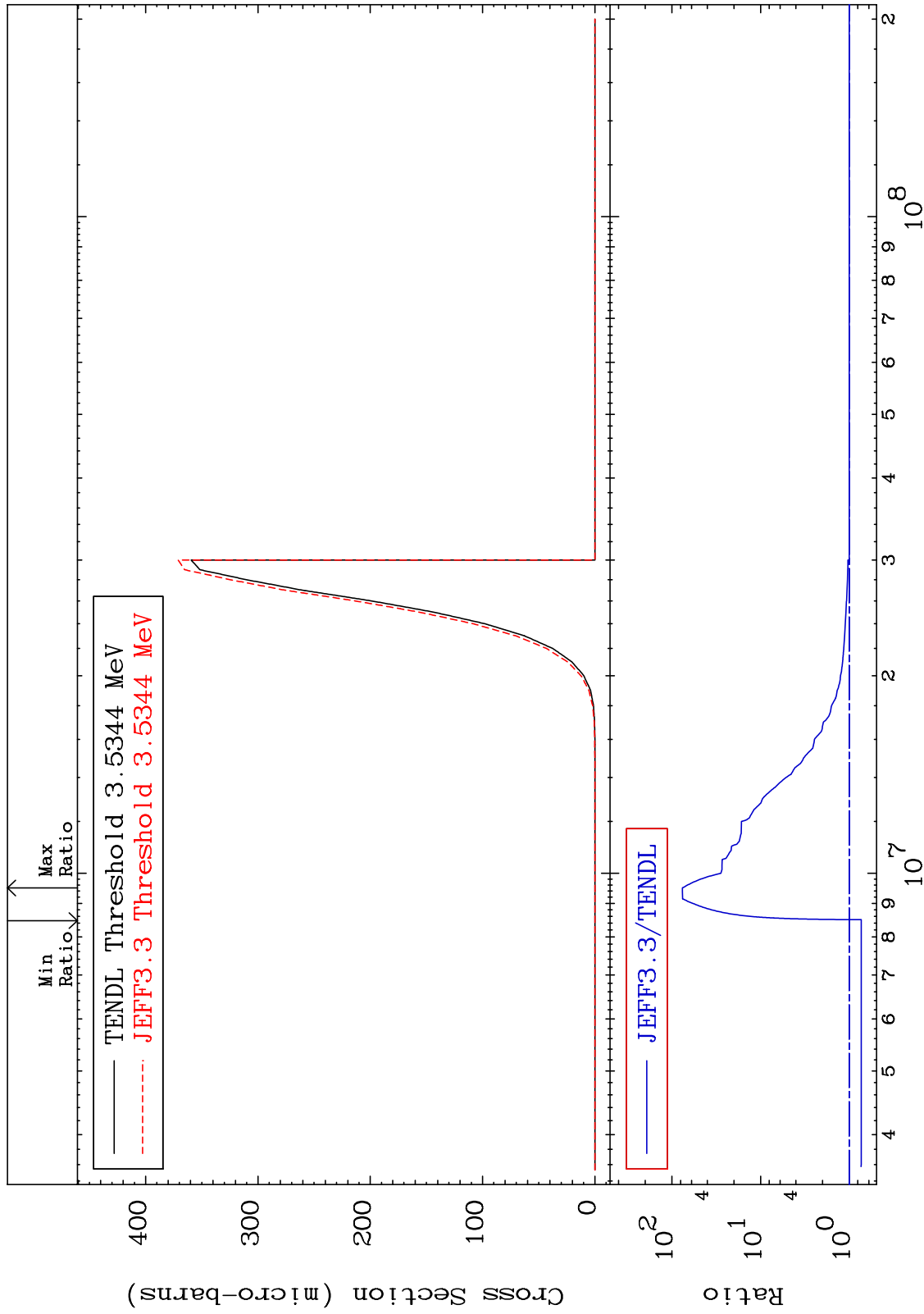
MAT 4431

(n,p) α

44-Ru-98

Cross Section

-26.97 To 7510. %



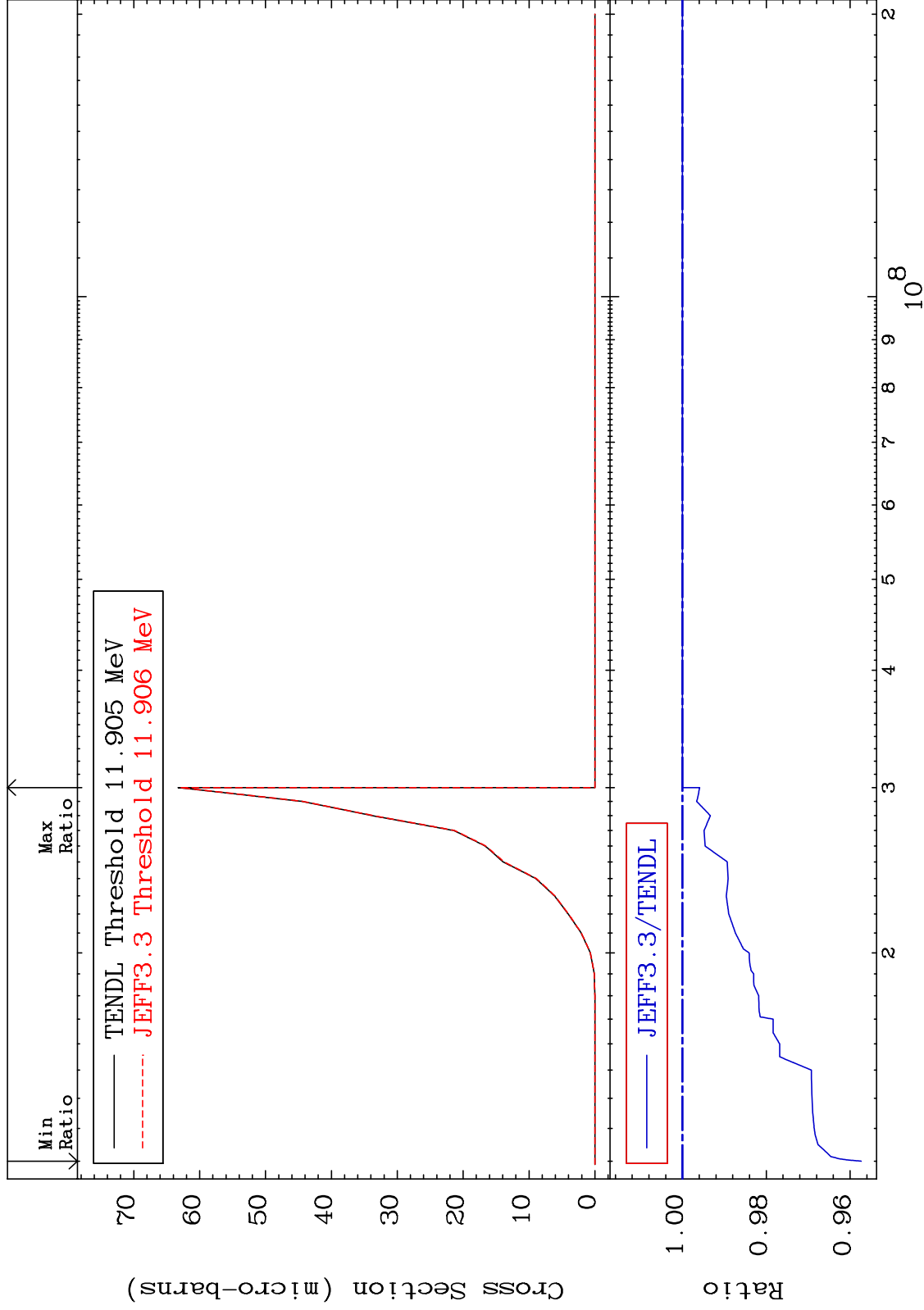
MAT 4431

(n,p) d

44-Ru-98

Cross Section

-4.267 To 0.000 %



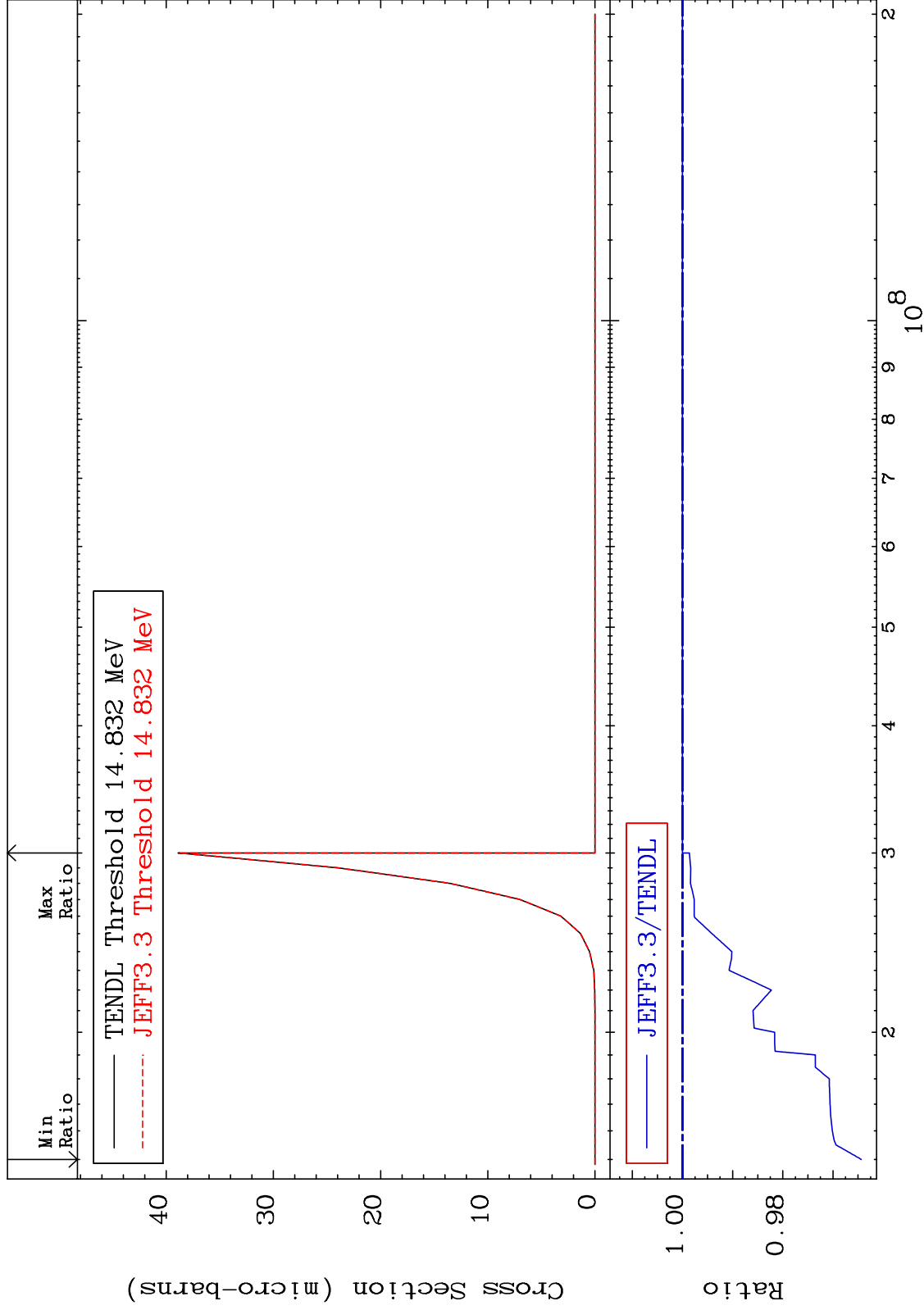
MAT 4431

(n,p) t

44-Ru-98

Cross Section

-3.564 To 0.000 %



60

Incident Energy (eV)

44-Ru-98

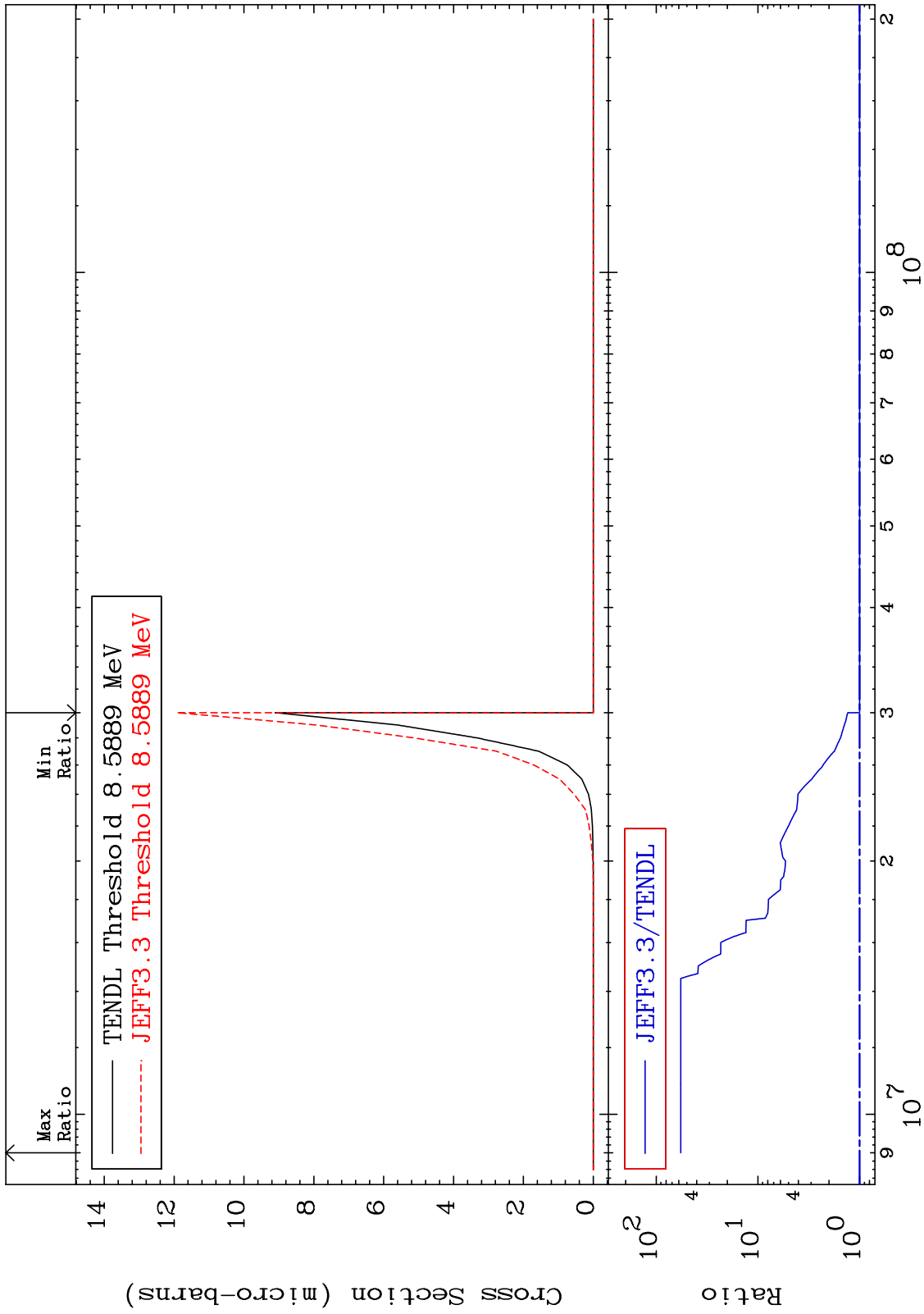
MAT 4431

(n,d) α

44-Ru-98

Cross Section

0.000 To 5628. %



61

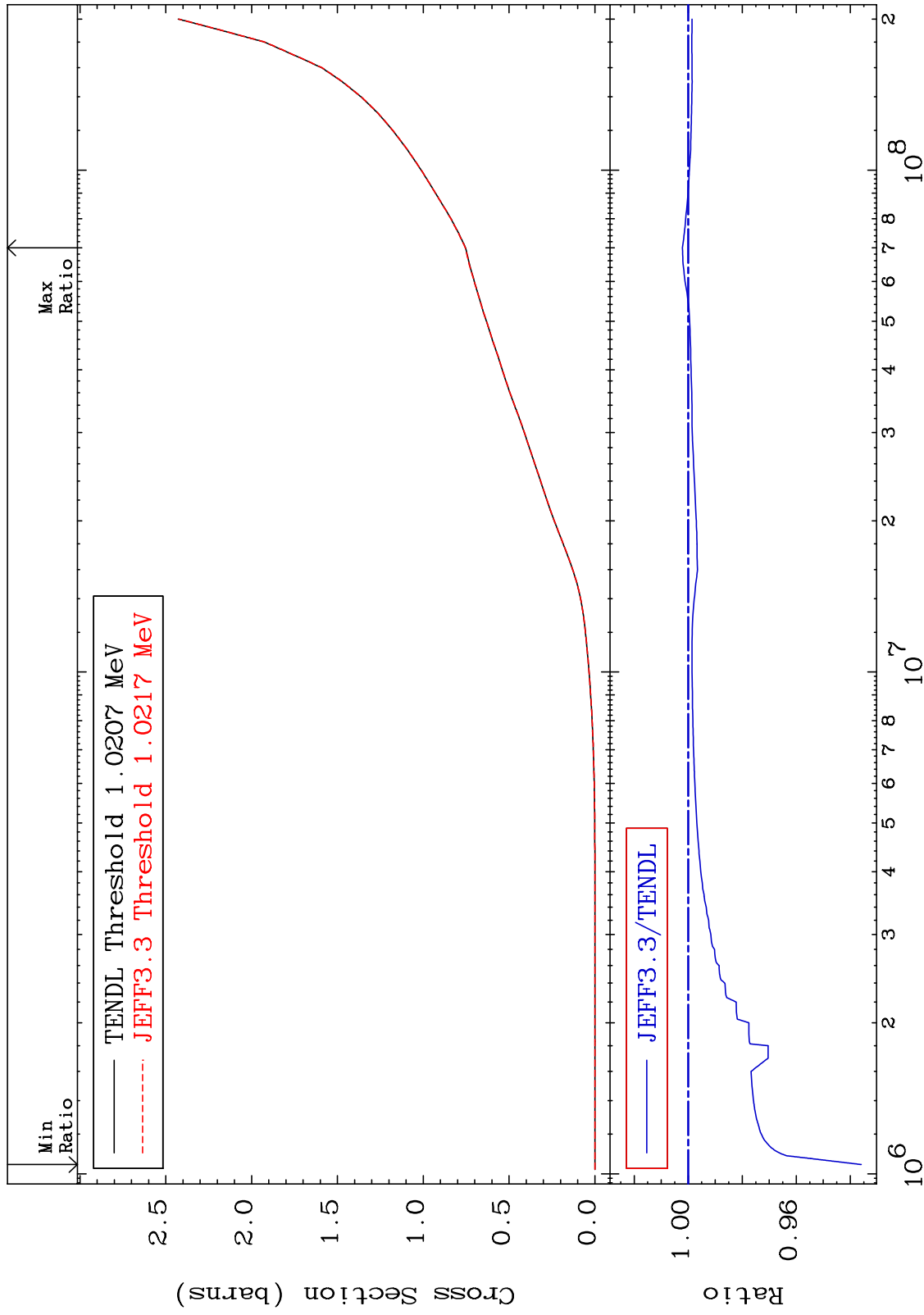
Incident Energy (eV)

44-Ru-98

MAT 4431

Hydrogen Production
Cross Section

44-Ru-98
-6.408 To 0.214 %



62

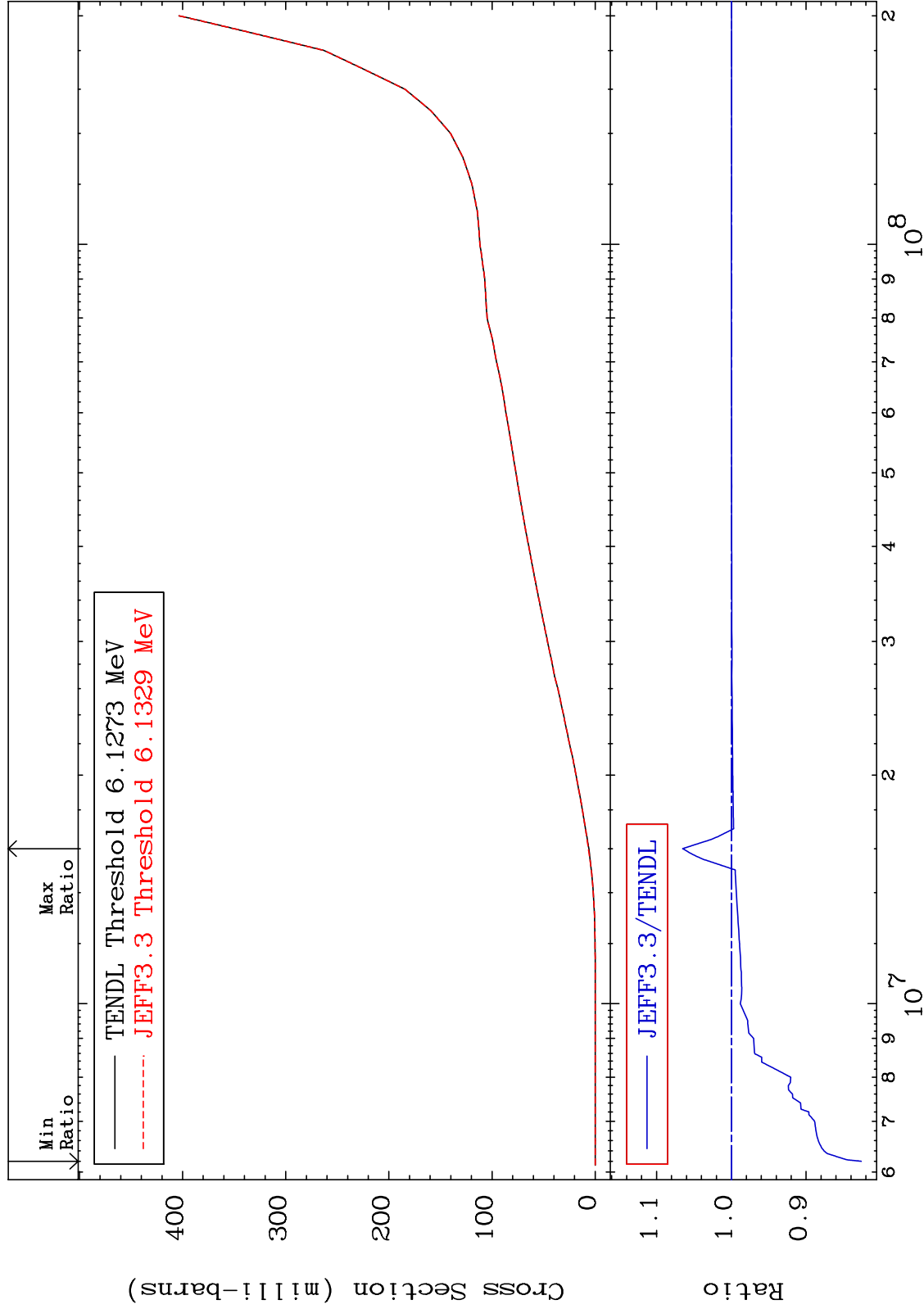
Incident Energy (eV)

44-Ru-98

MAT 4431

Deuterium Production
Cross Section

44-Ru-98
-17.38 To 6.509 %



63

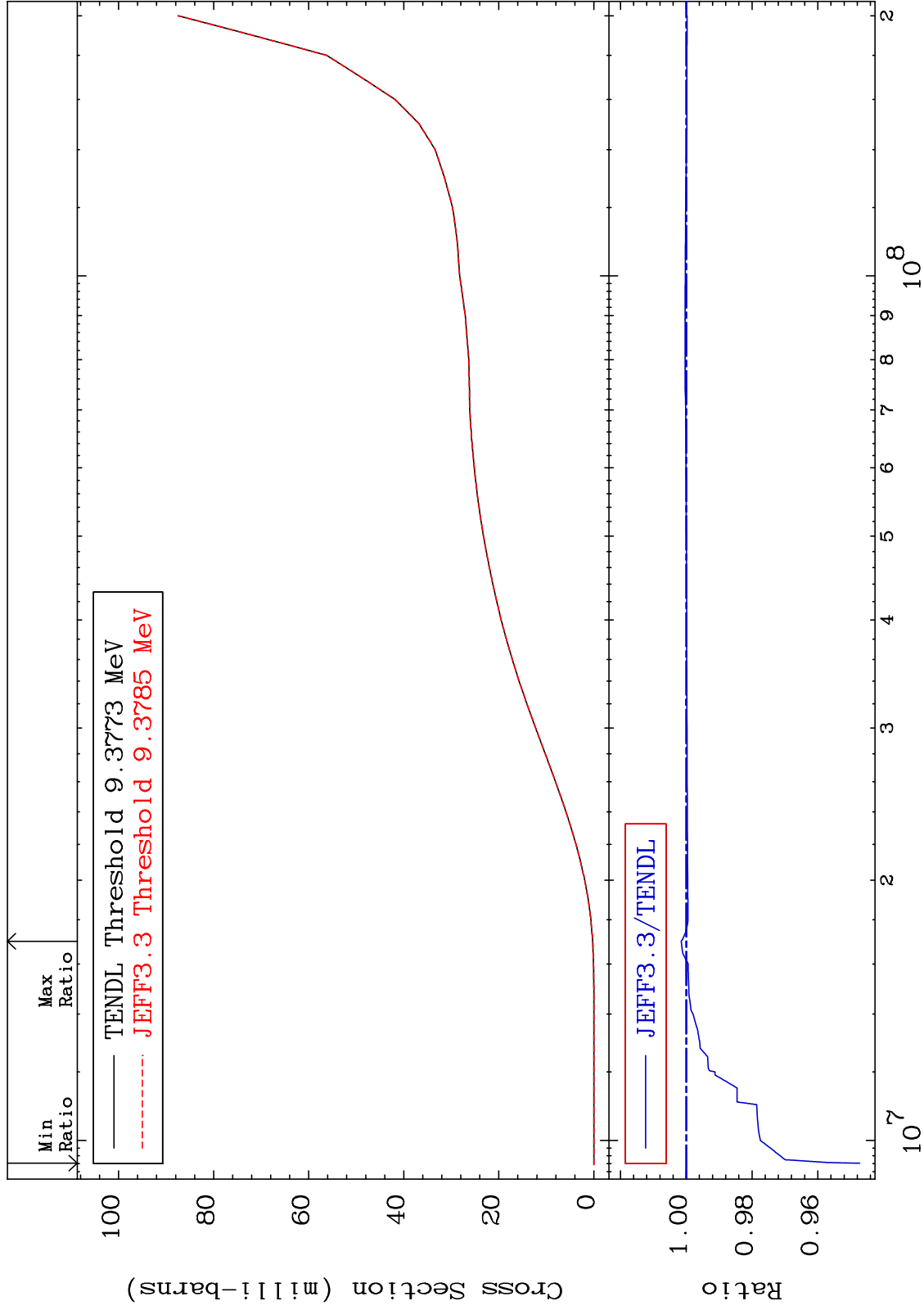
Incident Energy (eV)

44-Ru-98

MAT 4431

Tritium Production
Cross Section

44-Ru-98
-5.276 To 0.151 %



64

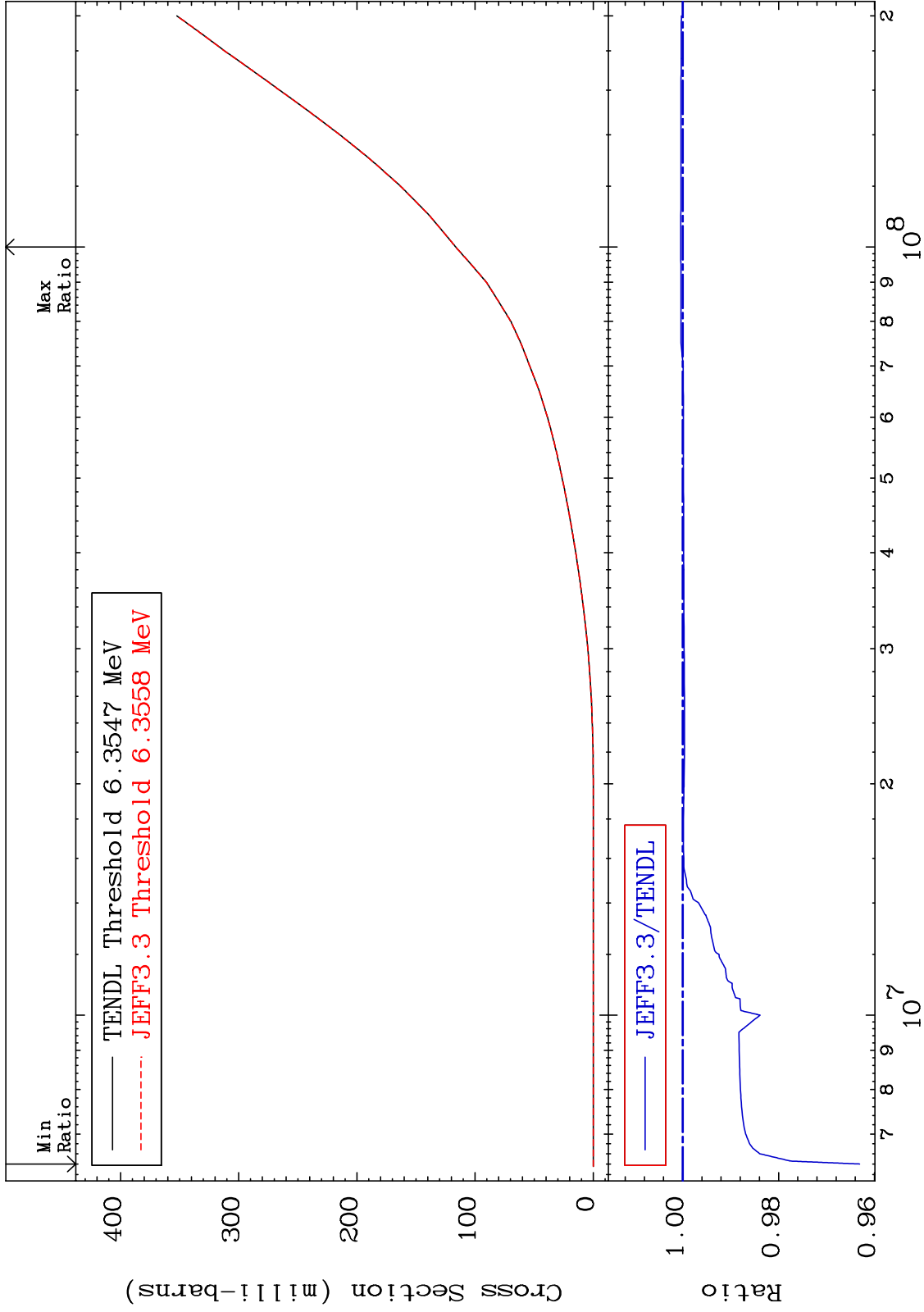
Incident Energy (eV)

44-Ru-98

MAT 4431

He-3 Production
Cross Section

44-Ru-98
-3.690 To 0.040 %



65

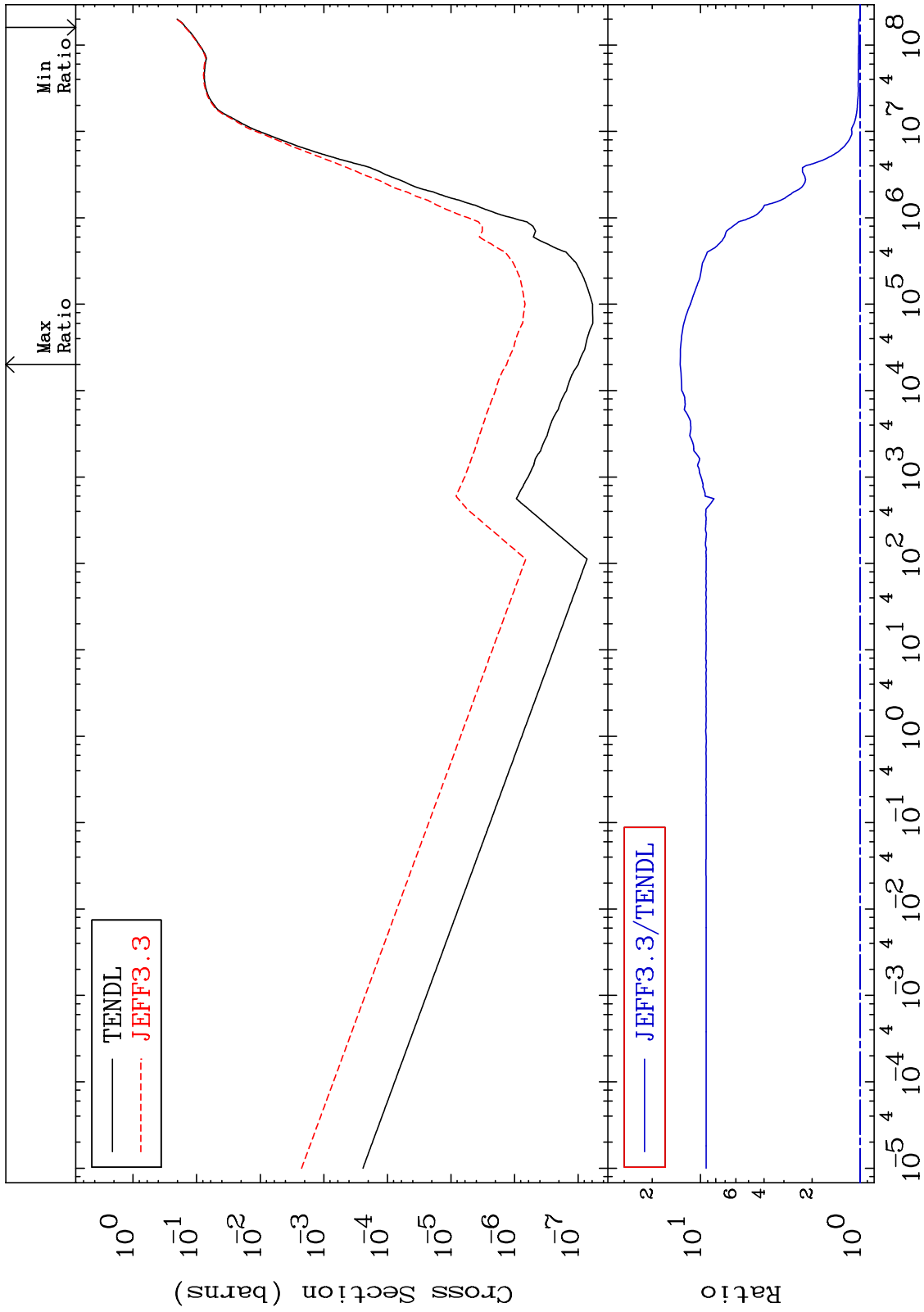
Incident Energy (eV)

44-Ru-98

MAT 4431

He-4 Production
Cross Section

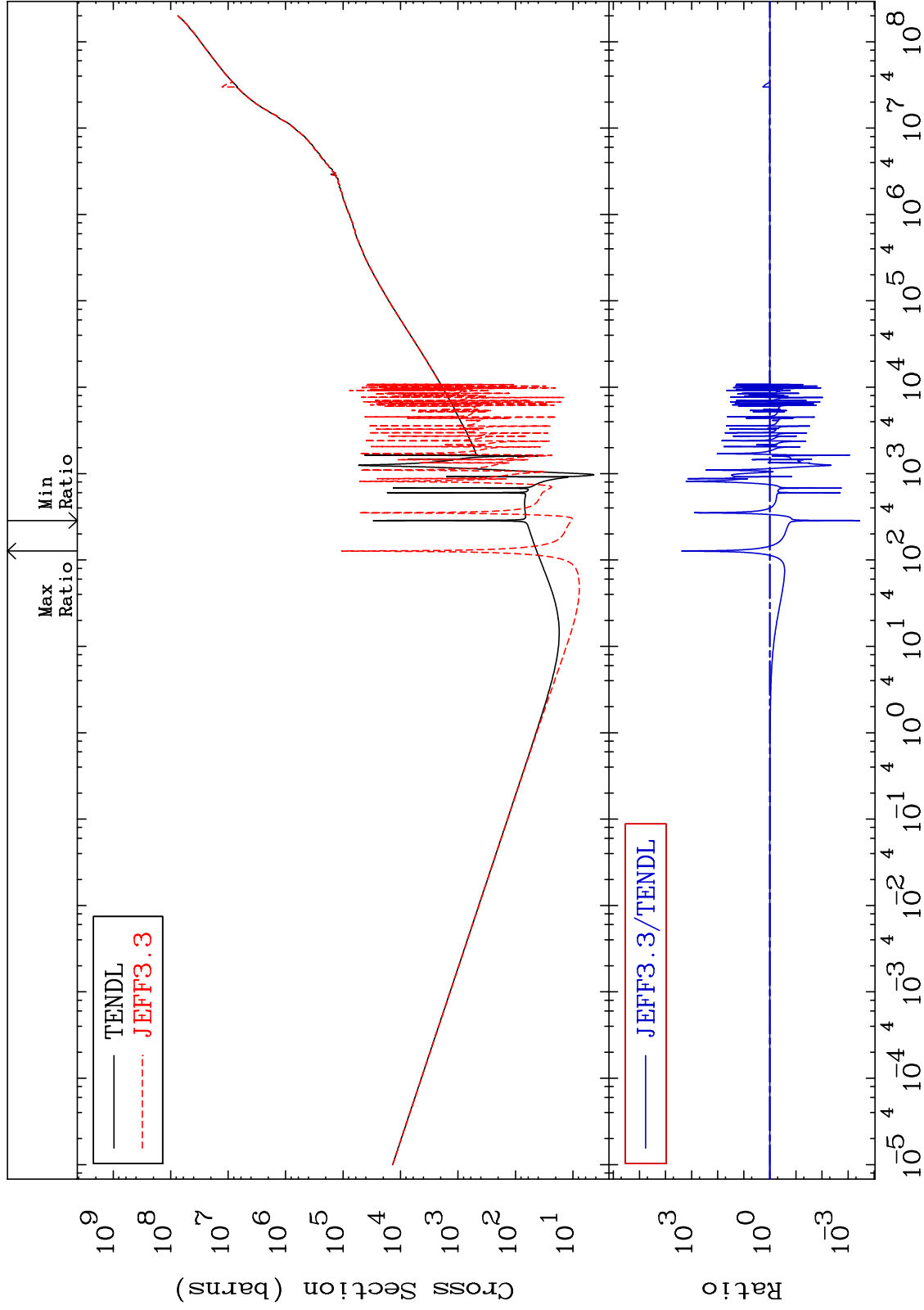
44-Ru-98
1.834 To 1237. %



MAT 4431

Kerma total (eV-barns)
Cross Section

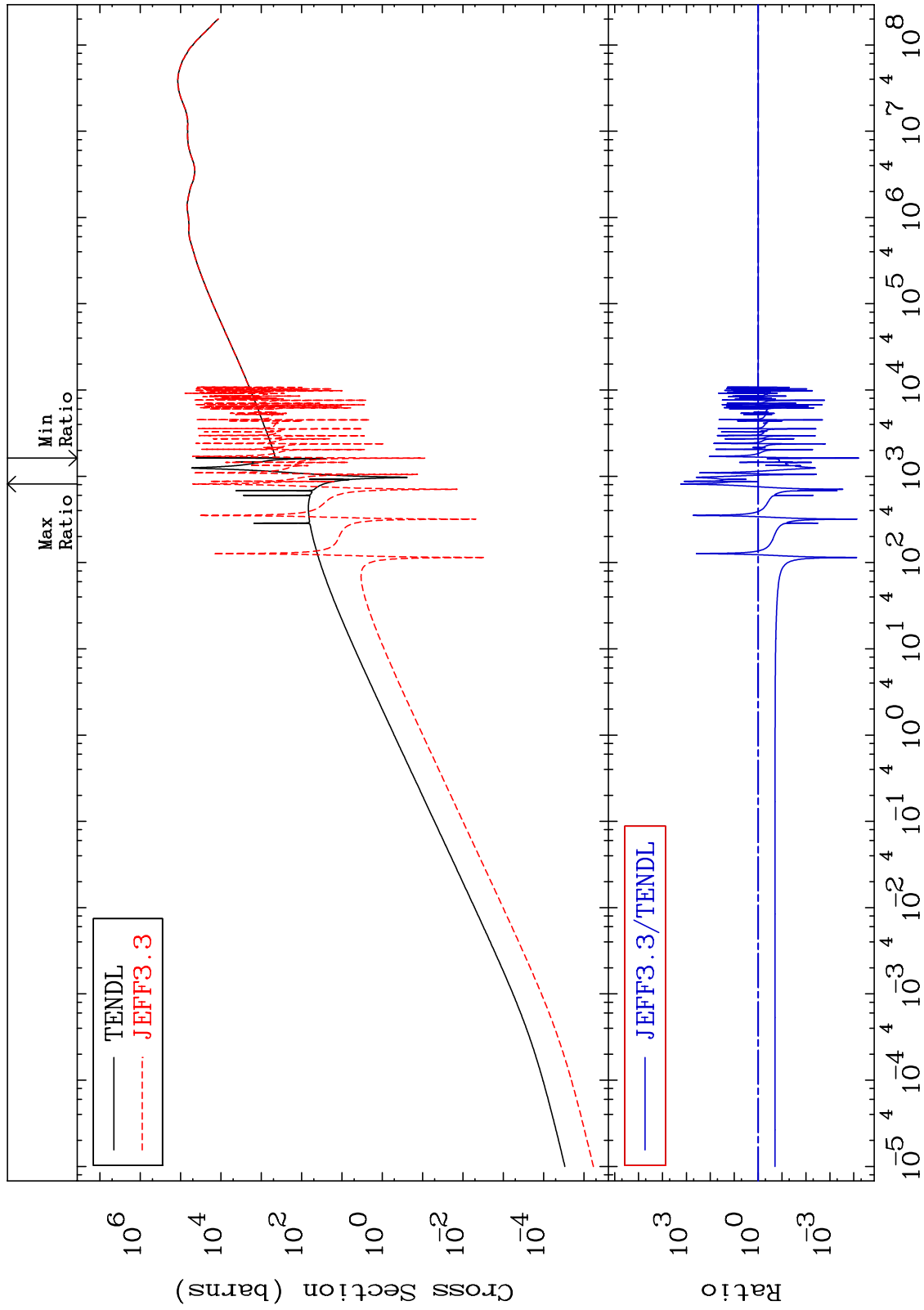
44-Ru-98
-99.96 To 9999. %



MAT 4431

Kerma elastic
Cross Section

44-Ru-98
-99.99 To 9999. %



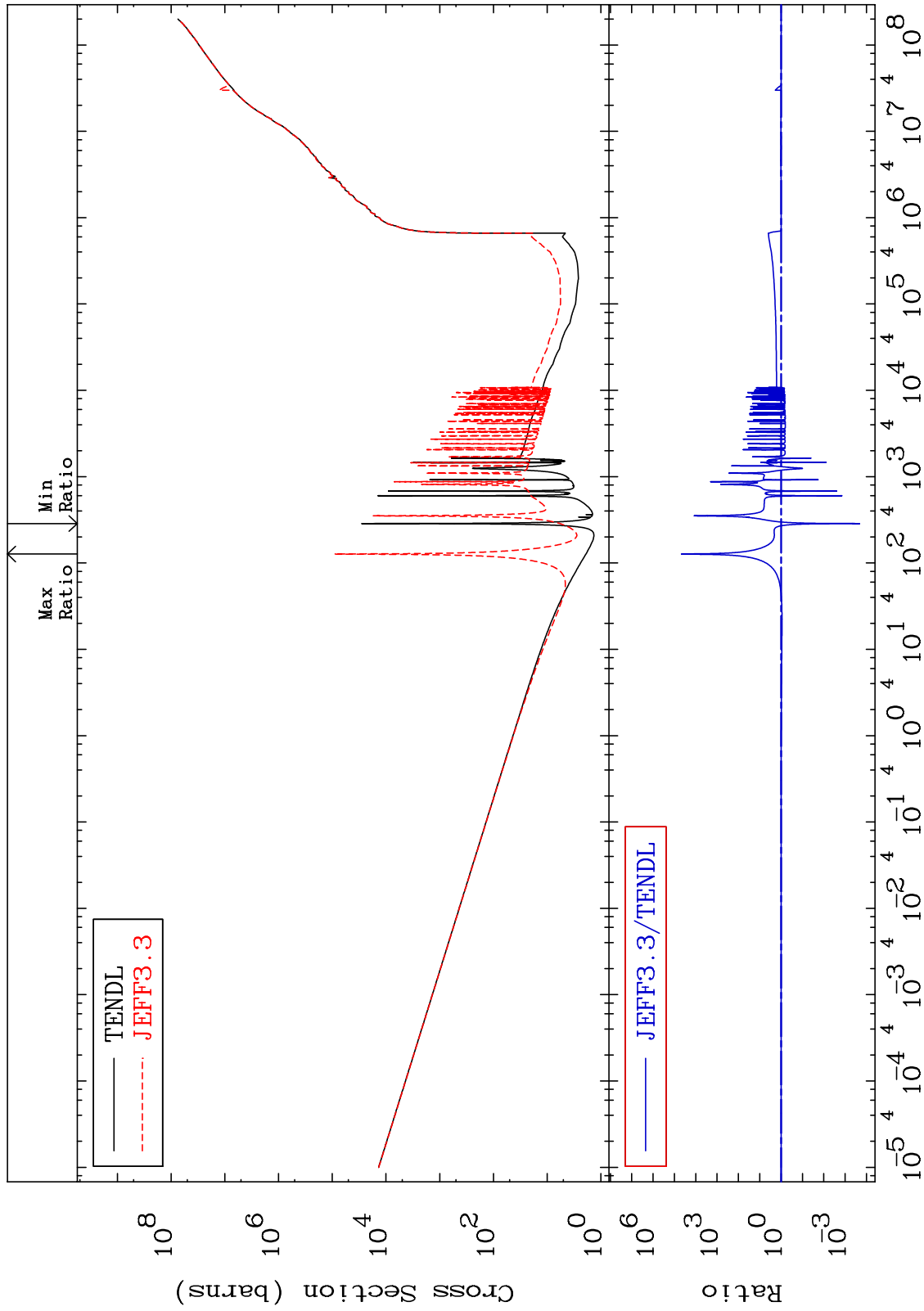
MAT 4431

Kerma non-elastic (all but mt2)

44-Ru-98

-99.98 To 9999. %

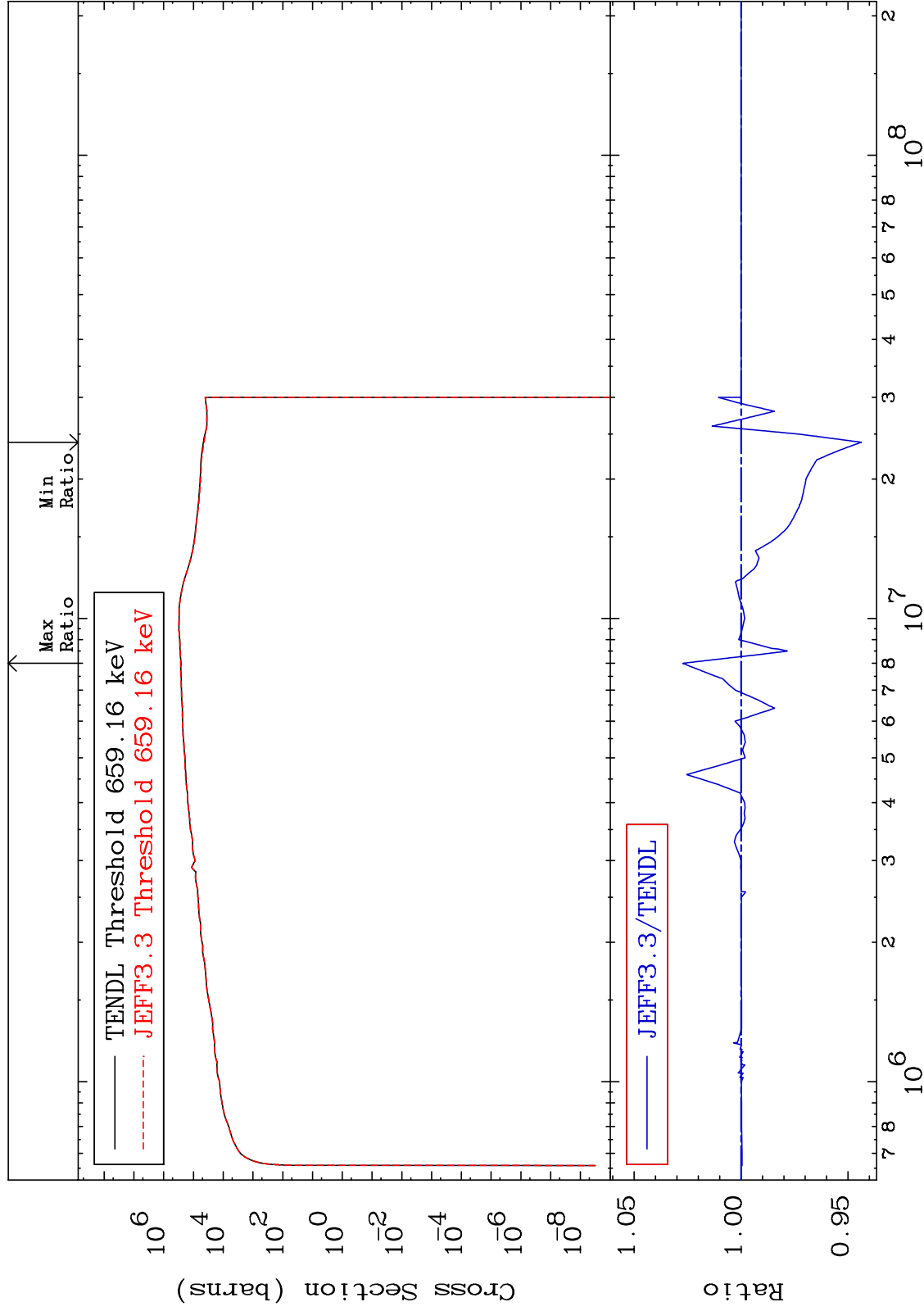
Cross Section



MAT 4431

Kerma inelastic (mt51-91)
Cross Section

44-Ru-98
-5.622 To 2.731 %



70

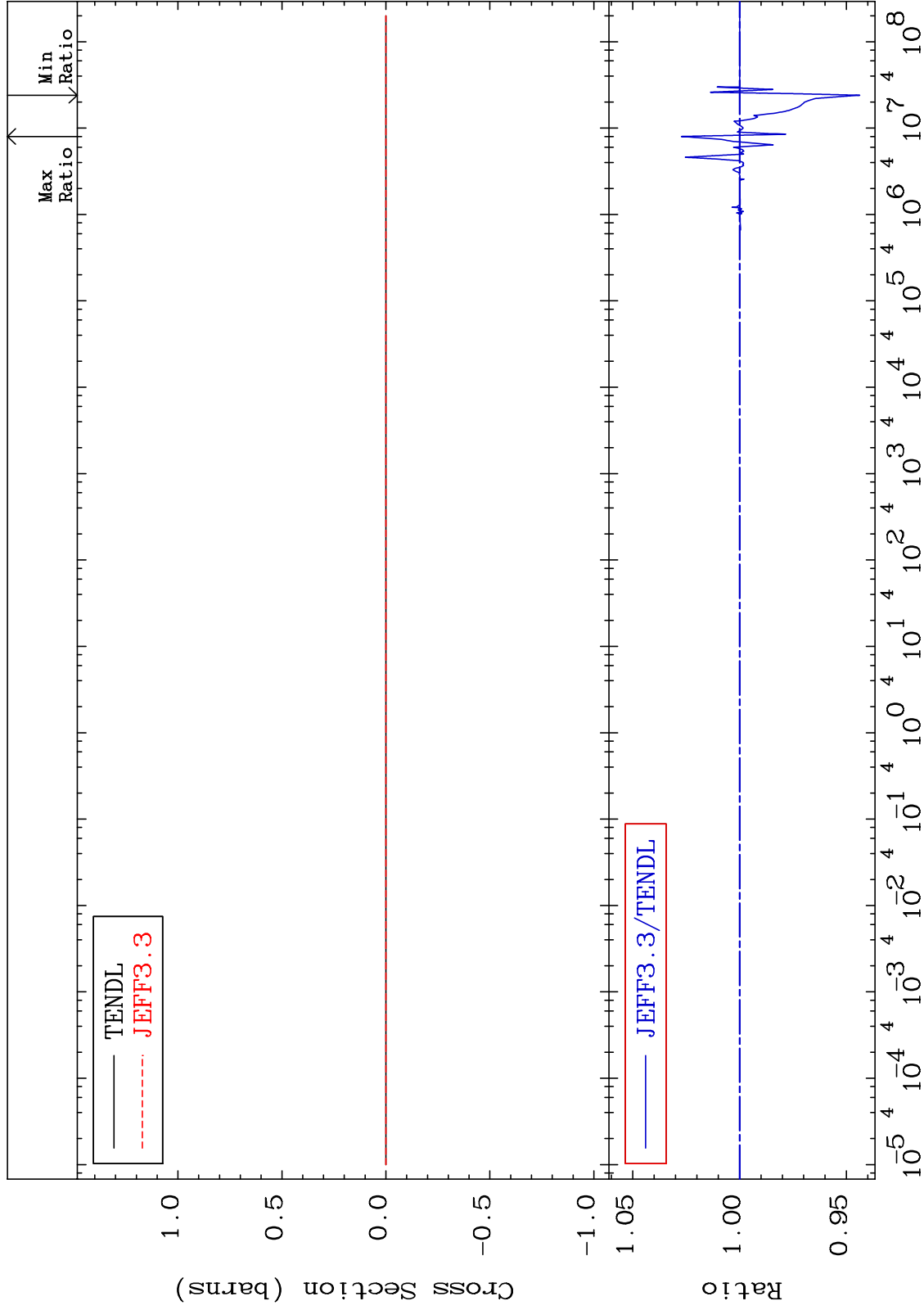
Incident Energy (eV)

44-Ru-98

MAT 4431

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

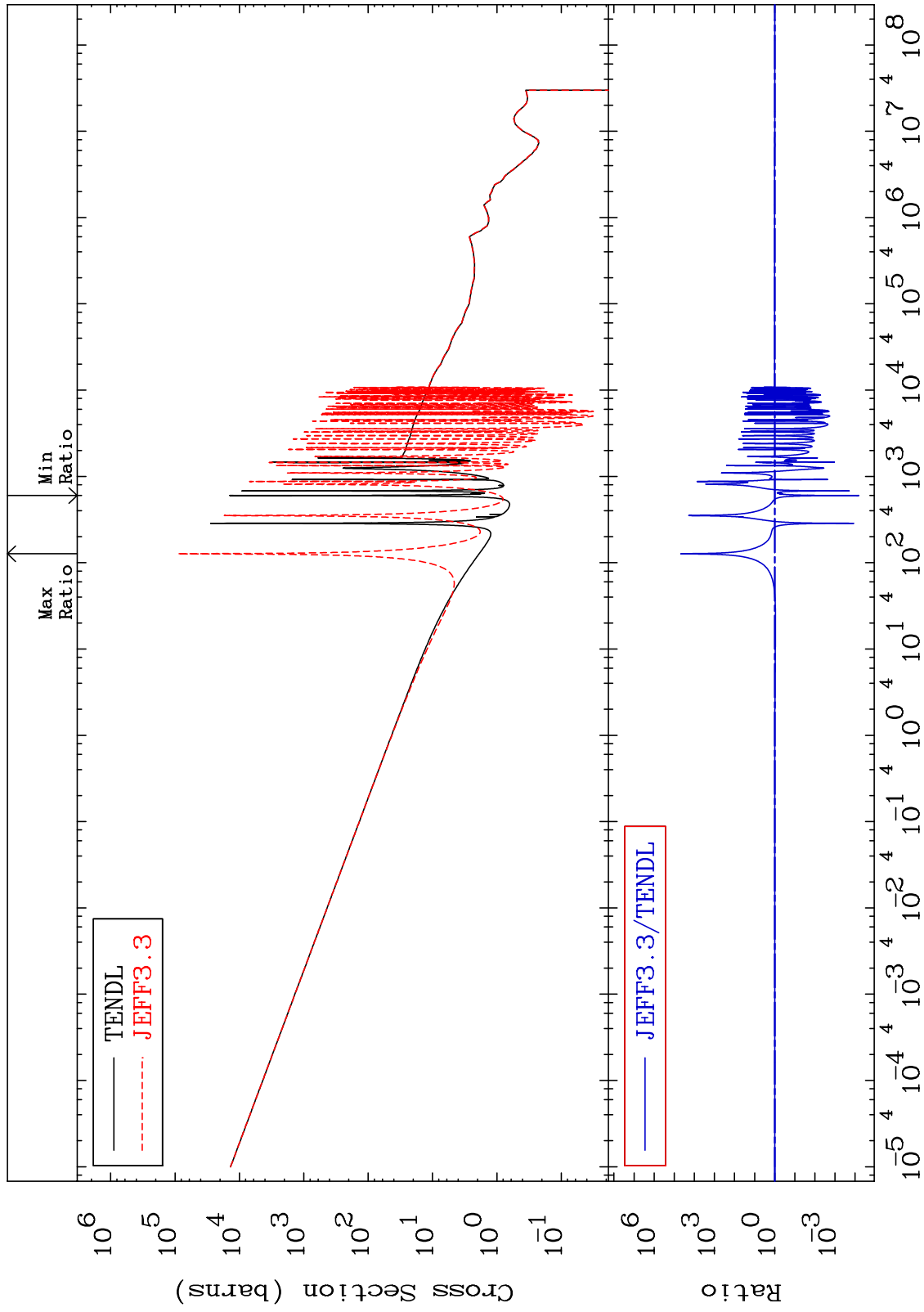
44-Ru-98
-5.622 To 2.731 %



MAT 4431

Kerma capture (mt102)
Cross Section

44-Ru-98
-99.99 To 9999. %



72

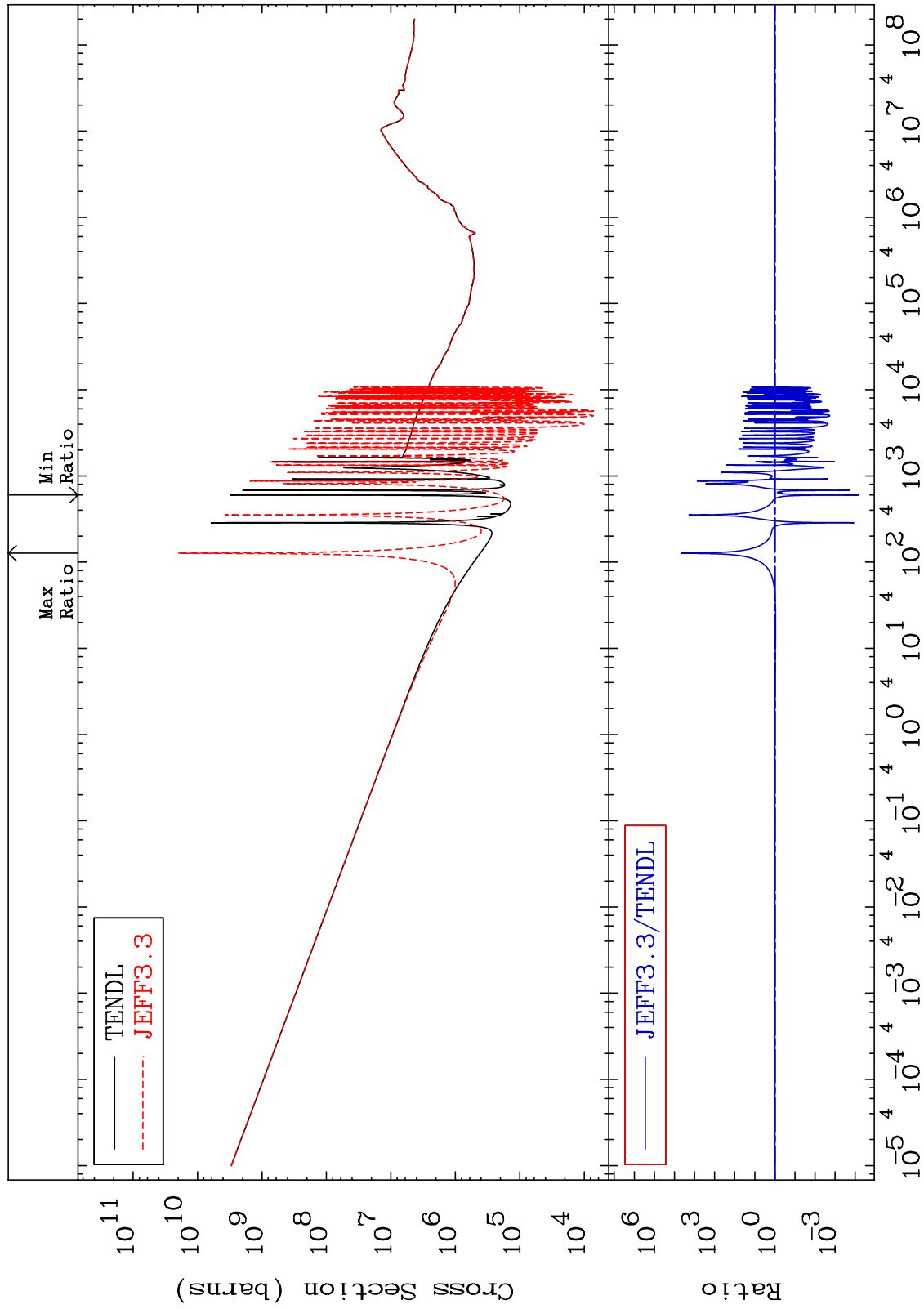
Incident Energy (eV)

44-Ru-98

MAT 4431

Total photon (eV-barns)
Cross Section

44-Ru-98
-99.99 To 9999. %

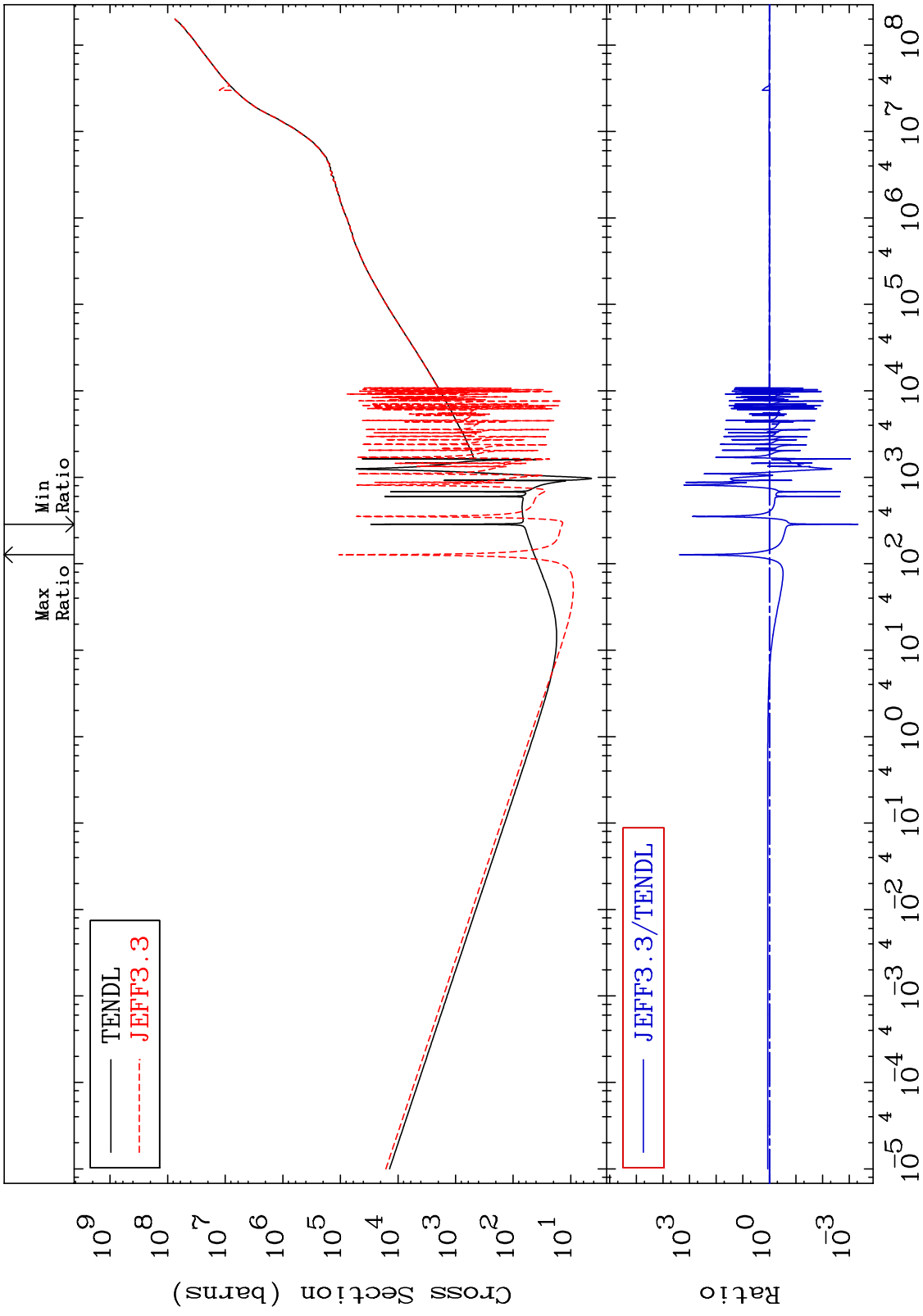


73

Incident Energy (eV)

44-Ru-98

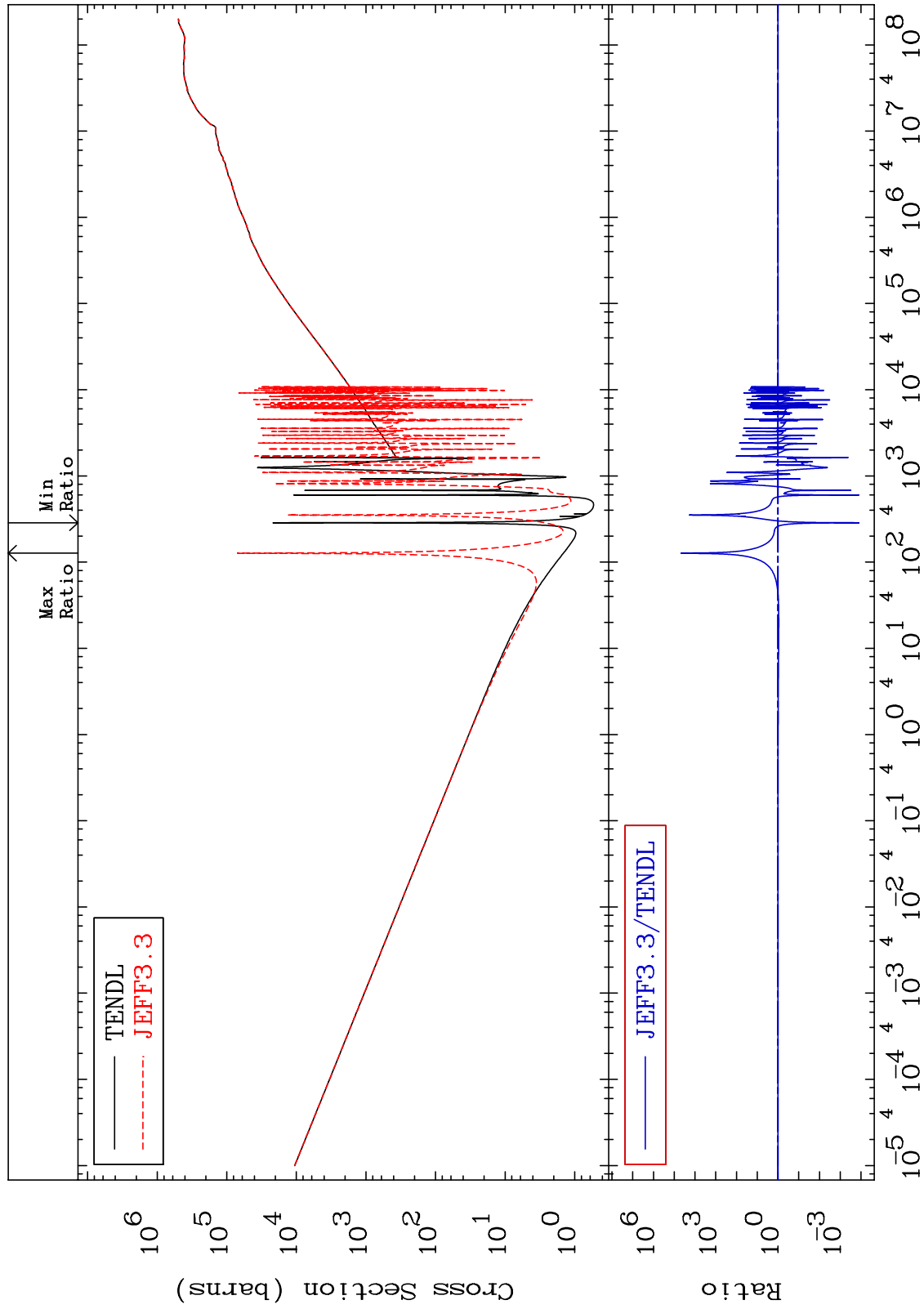
MAT 4431 Total kinematic kerma (high limit) 44-Ru-98
 Cross Section -99.95 To 9999. %



MAT 4431

Dpa total (eV-barns)
Cross Section

44-Ru-98
-99.99 To 9999. %



75

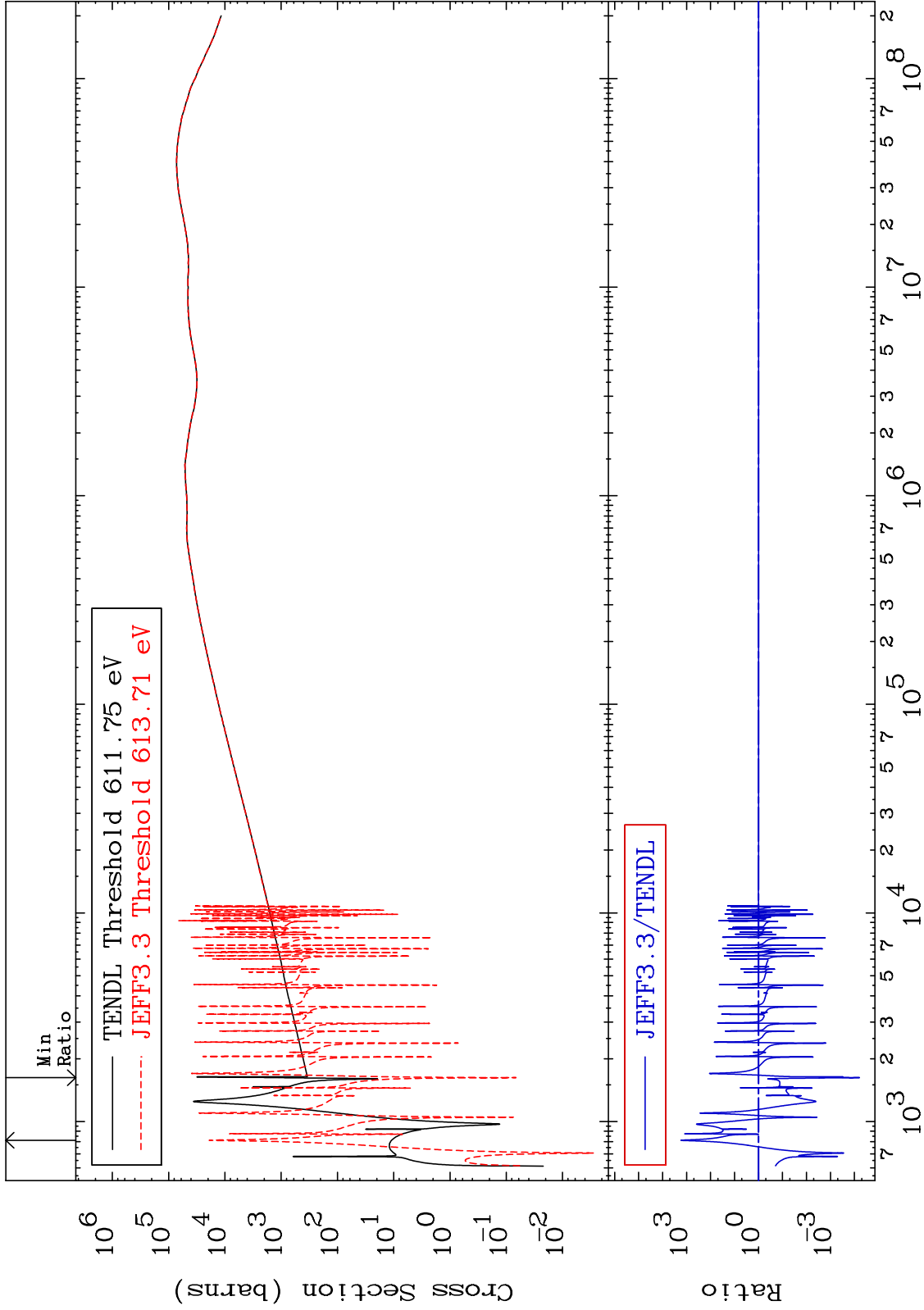
Incident Energy (eV)

44-Ru-98

MAT 4431

Dpa elastic (mt2)
Cross Section

44-Ru-98
-99.99 To 9999. %



76

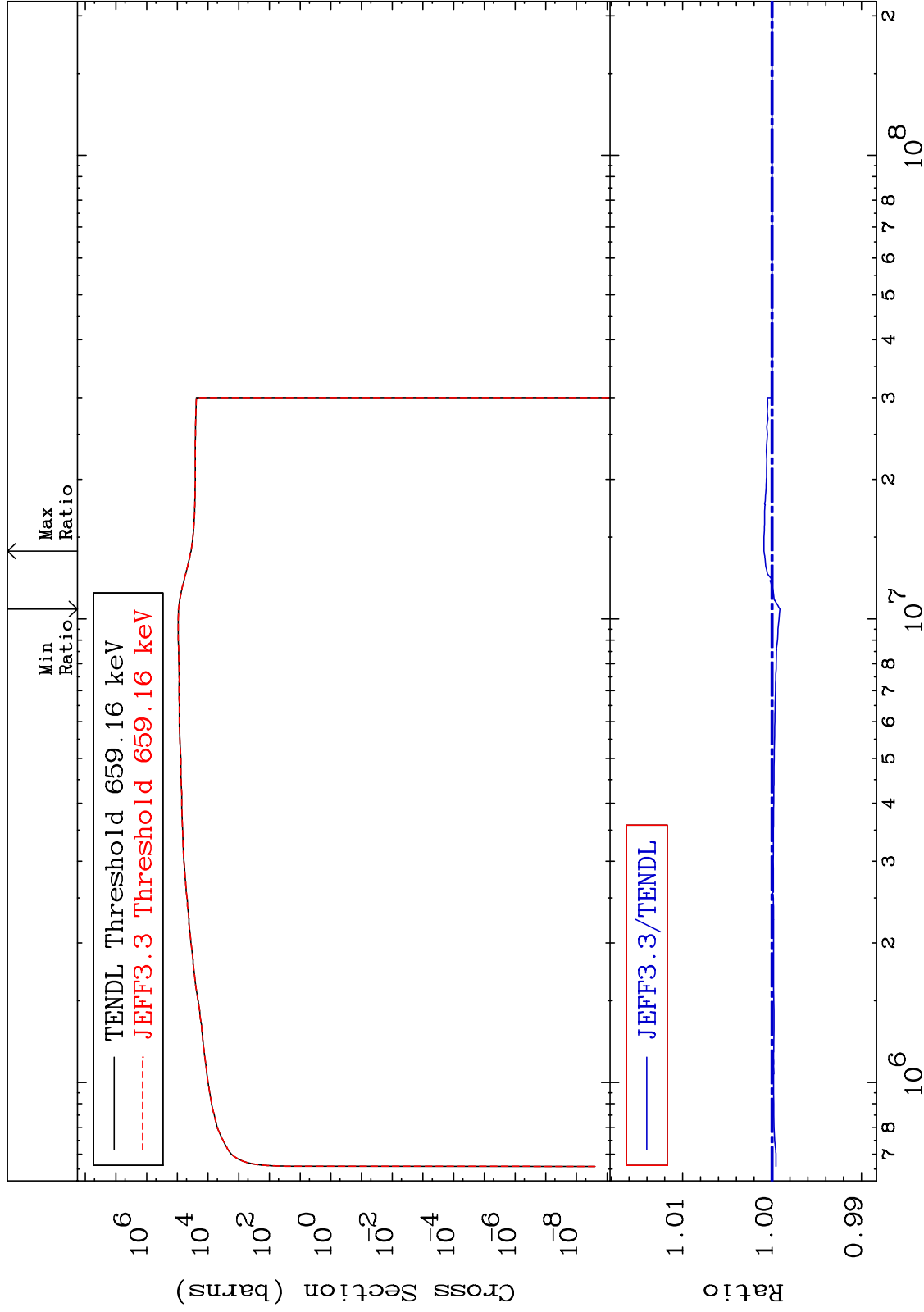
44-Ru-98

44-Ru-98

MAT 4431

Dpa inelastic (mt51-91)
Cross Section

44-Ru-98
-0.087 To 0.091 %



77

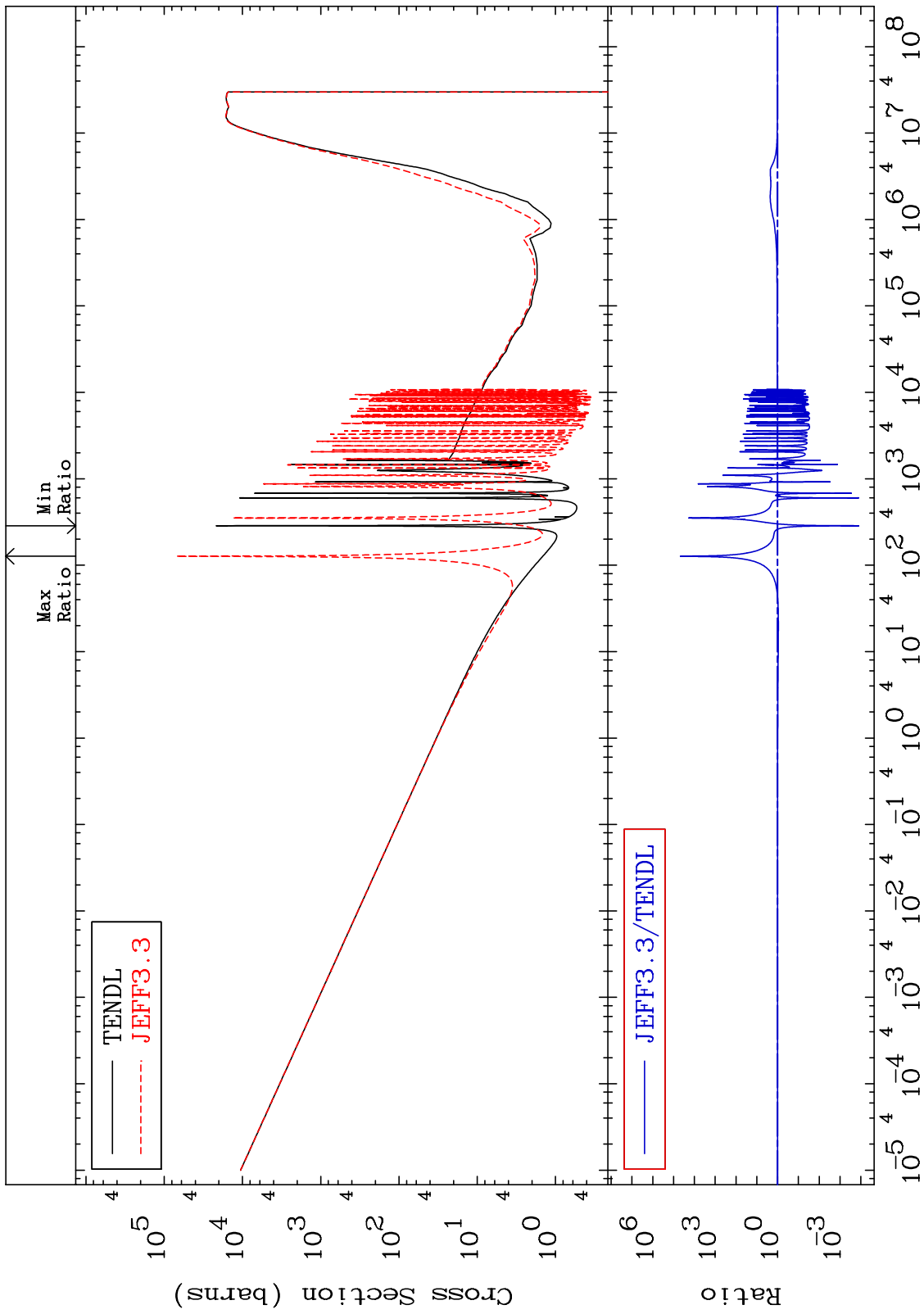
Incident Energy (eV)

44-Ru-98

MAT 4431

Dpa disappearance (mt102 -120)
Cross Section

44-Ru-98
-99.99 To 9999. %

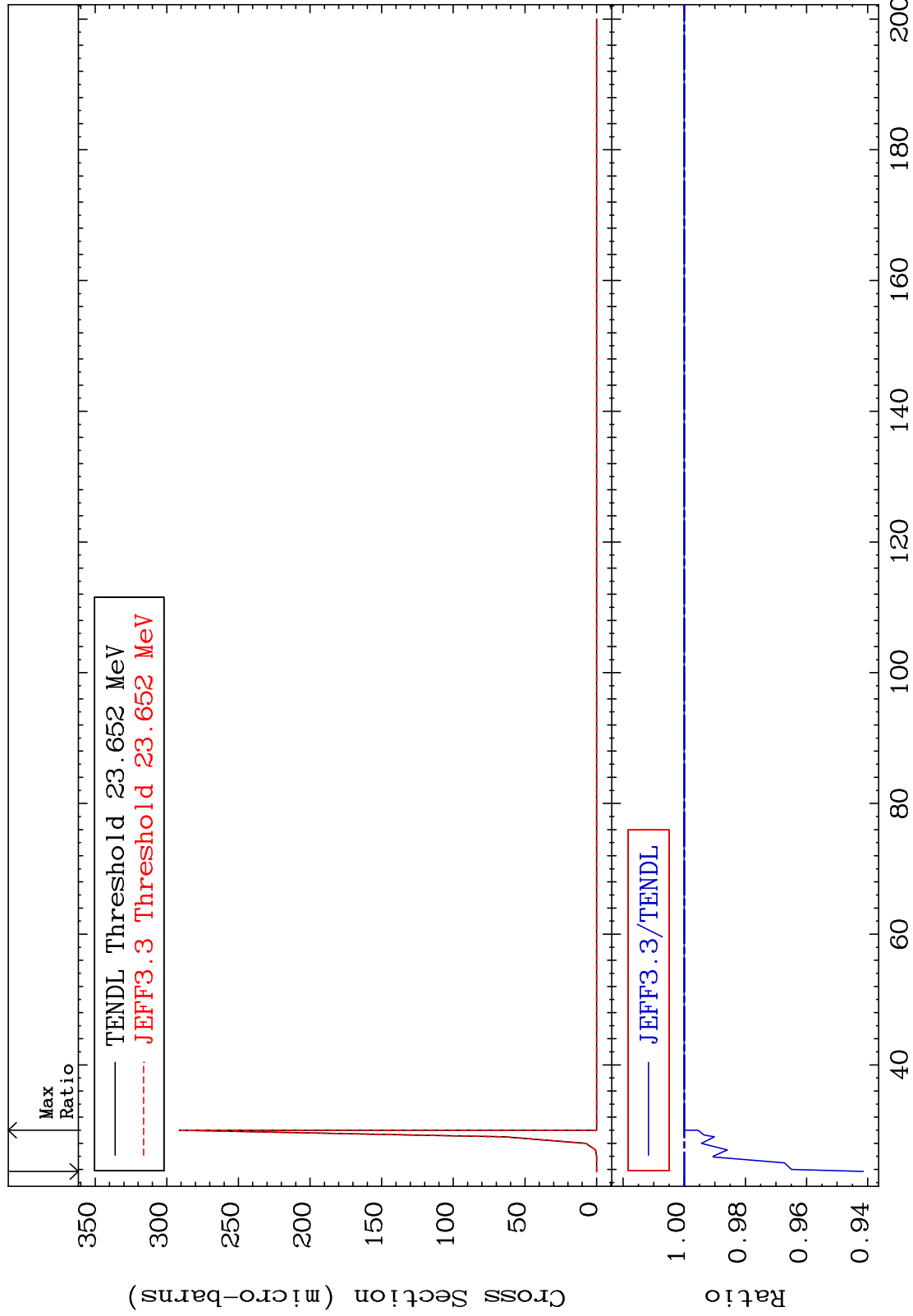


MAT 4431

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

44-Ru-98

Radionuclide Production Cross Section -5.858 To 0.000 %

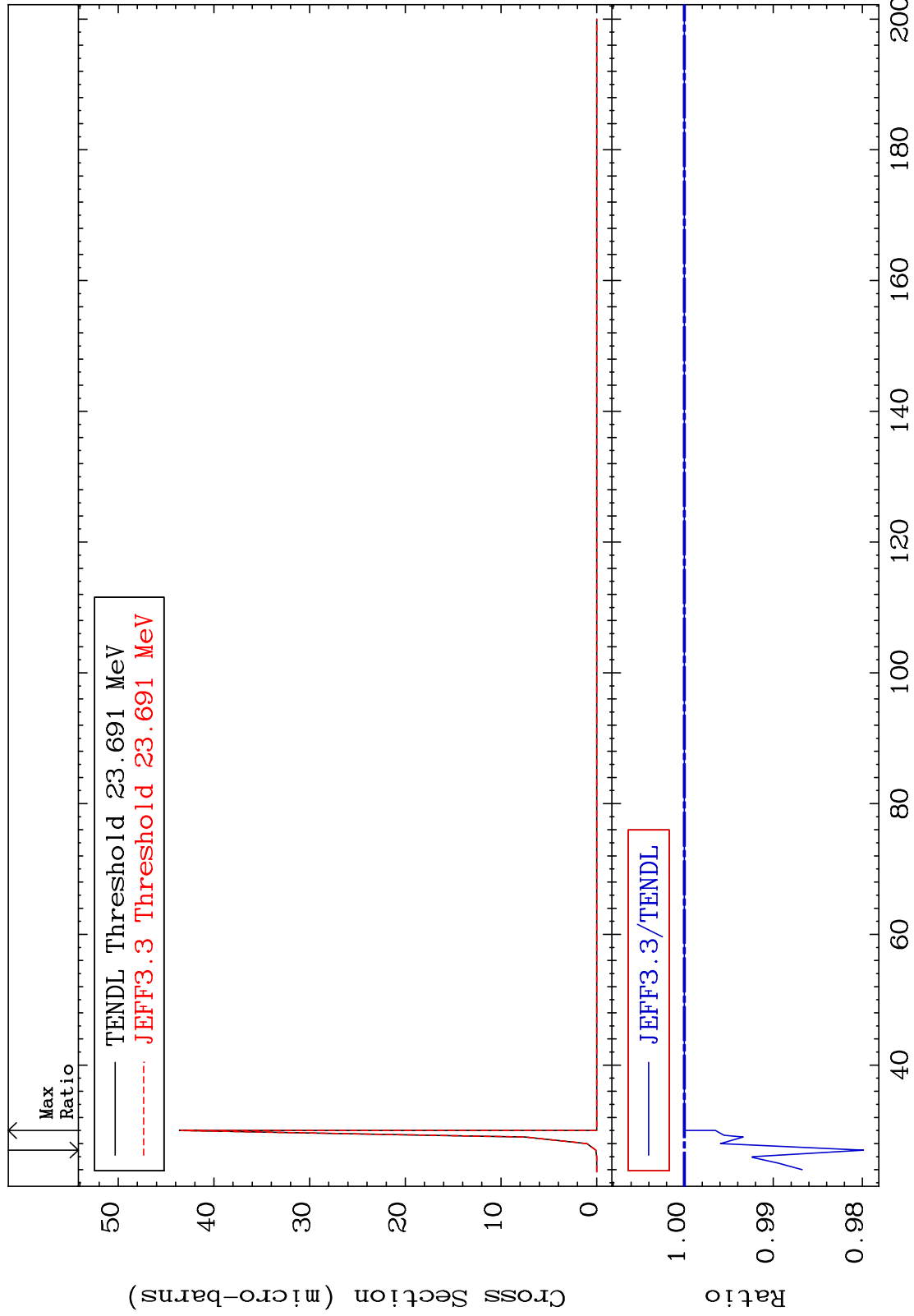


MAT 4431

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

44-Ru-98

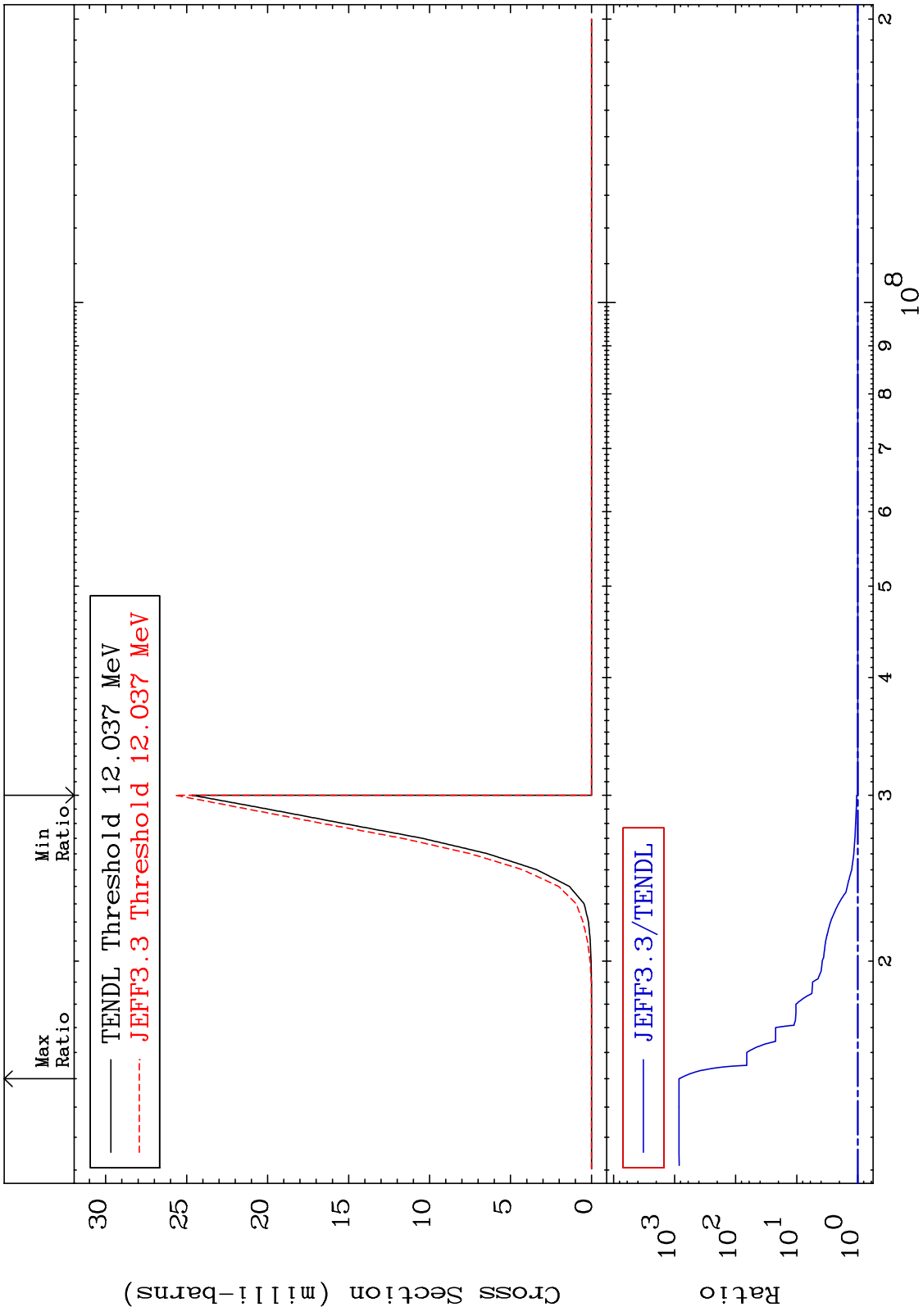
Radionuclide Production Cross Section -2.014 To 0.000 %



80

Incident Energy (MeV)

44-Ru-98

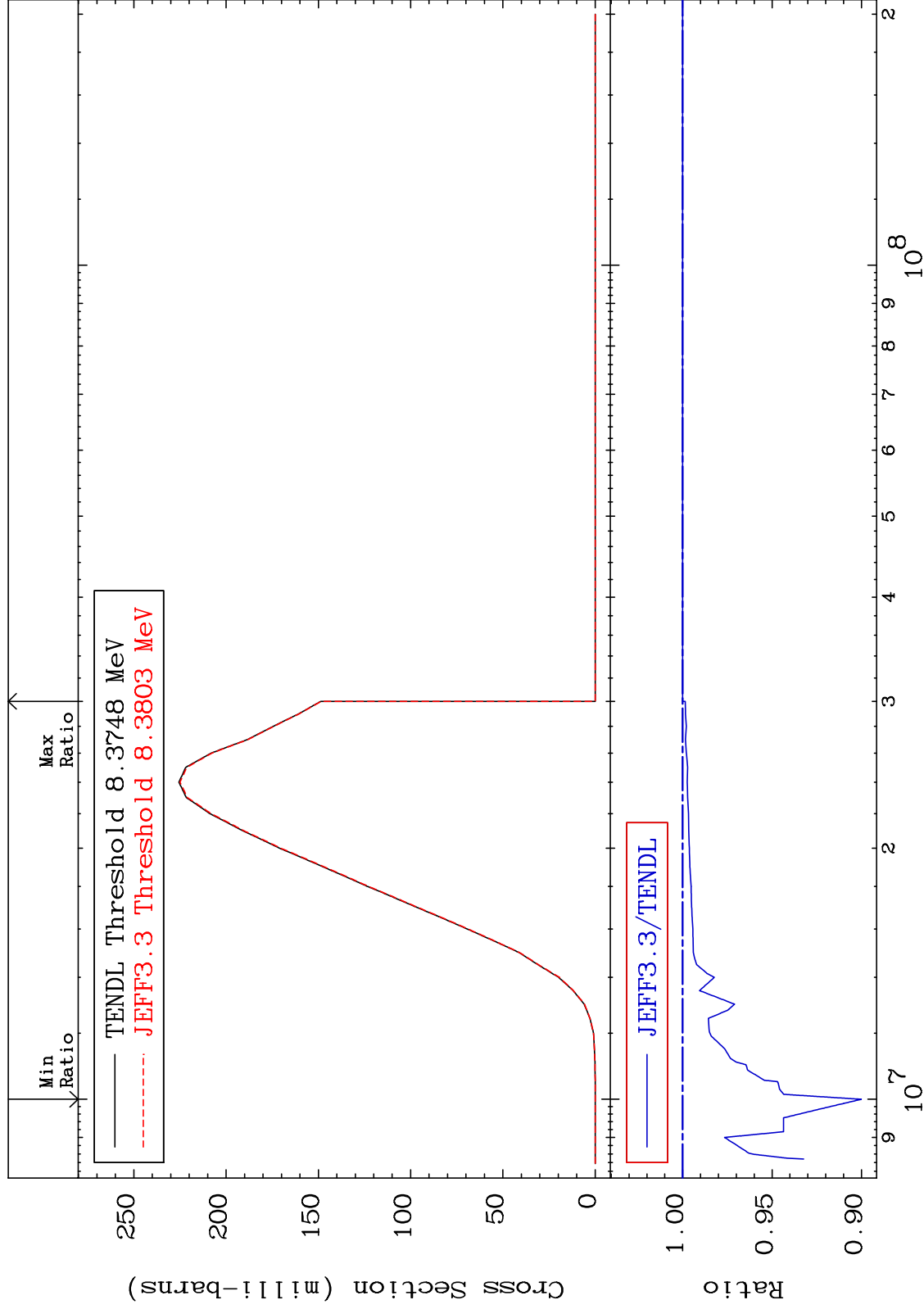


MAT 4431

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

44-Ru-98

Radionuclide Production Cross Section -9.994 To 0.000 %

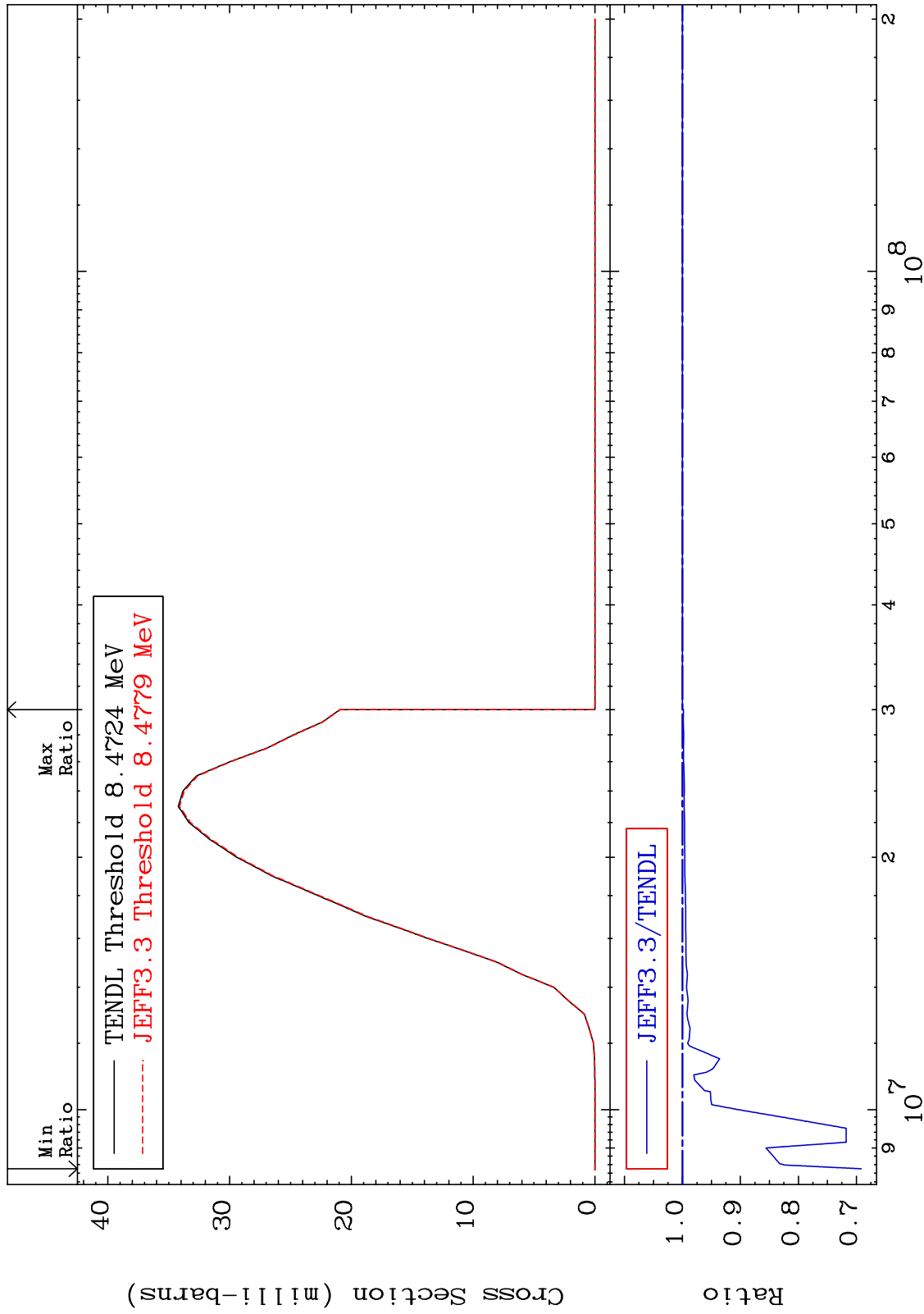


MAT 4431

(n, n') p:43-Tc-97m1

44-Ru-98

Radionuclide Production Cross Section -30.85 To 0.000 %

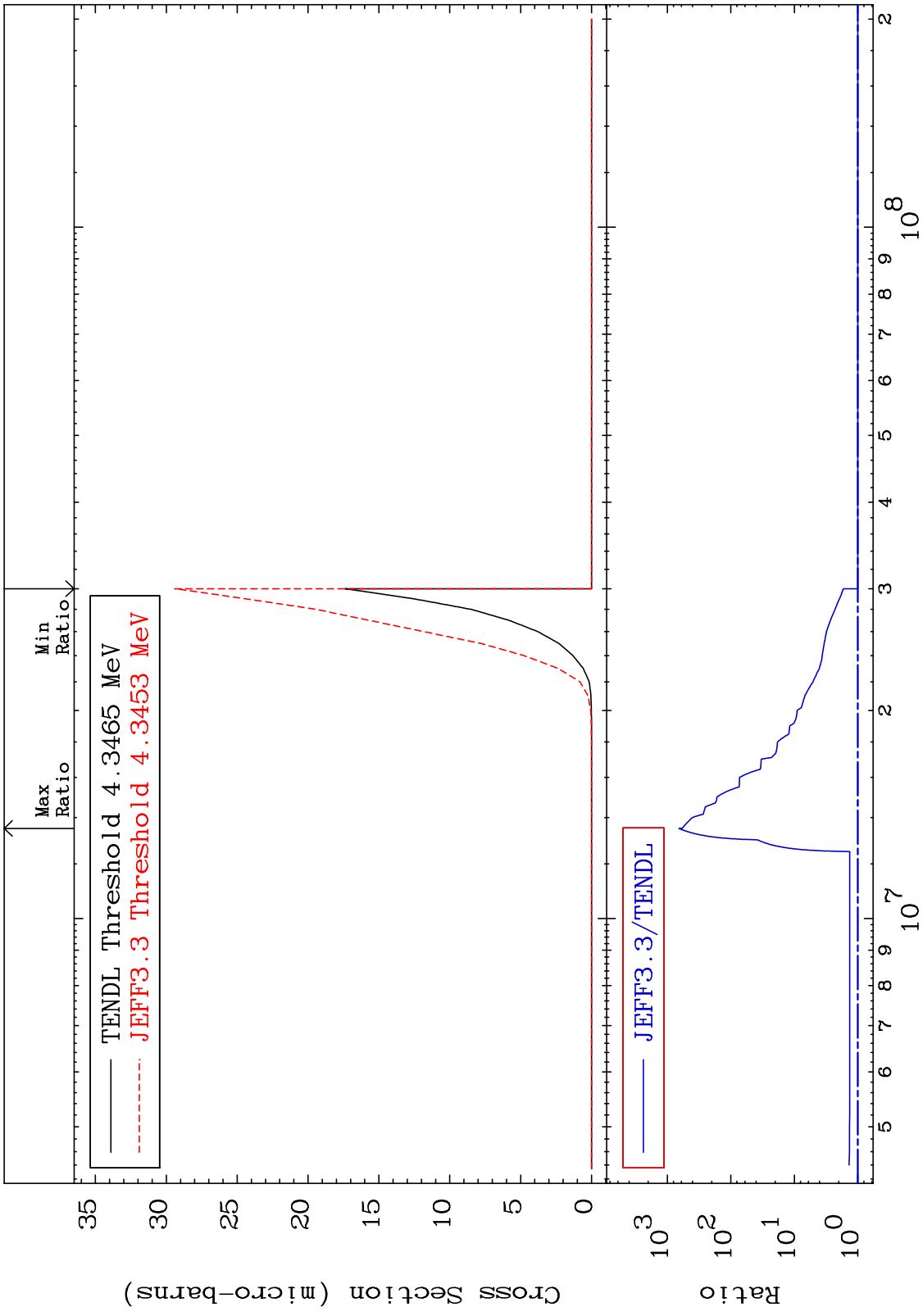


83

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. %

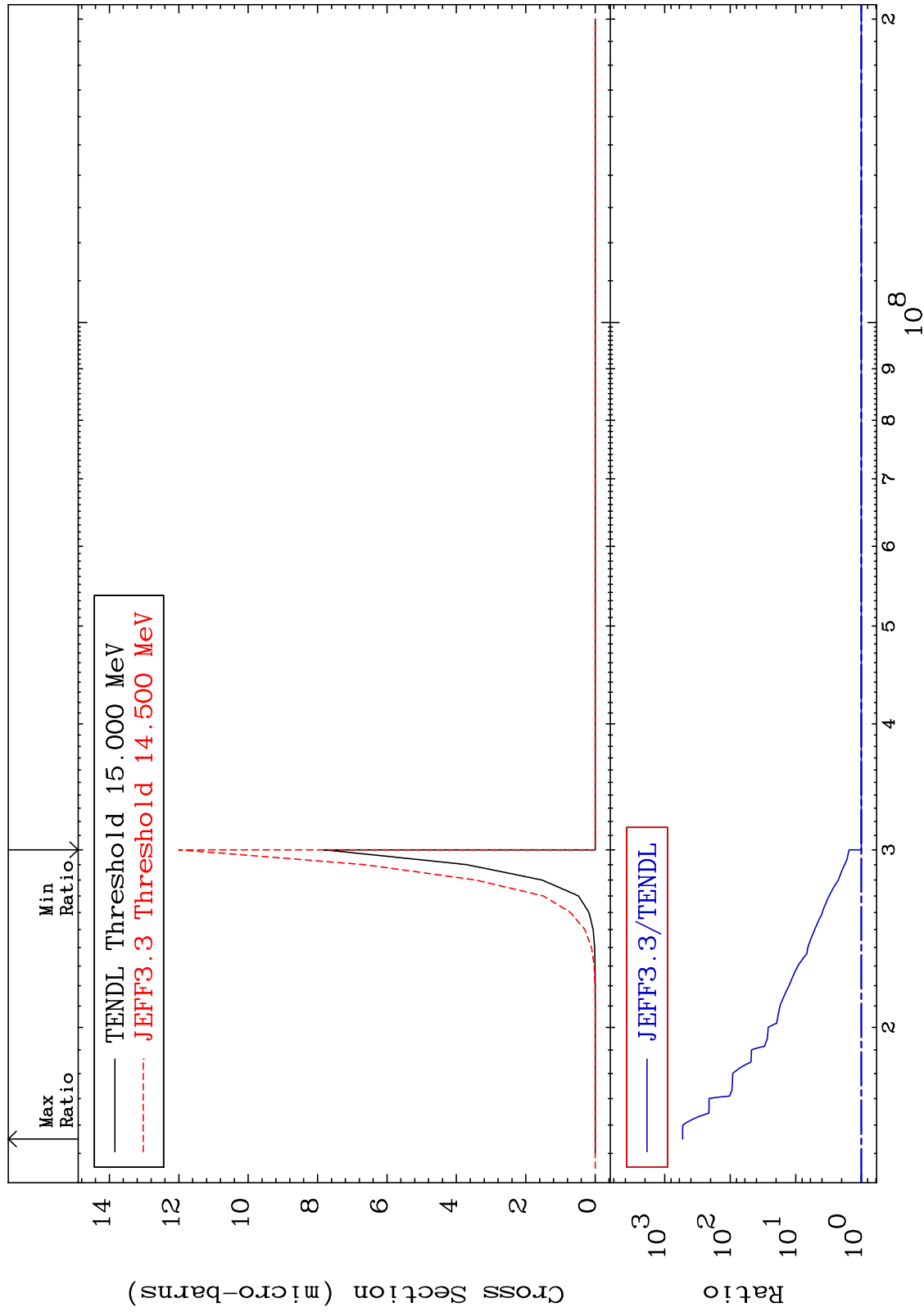


MAT 4431

(n, n') 2α :40-Zr-90m3

44-Ru-98

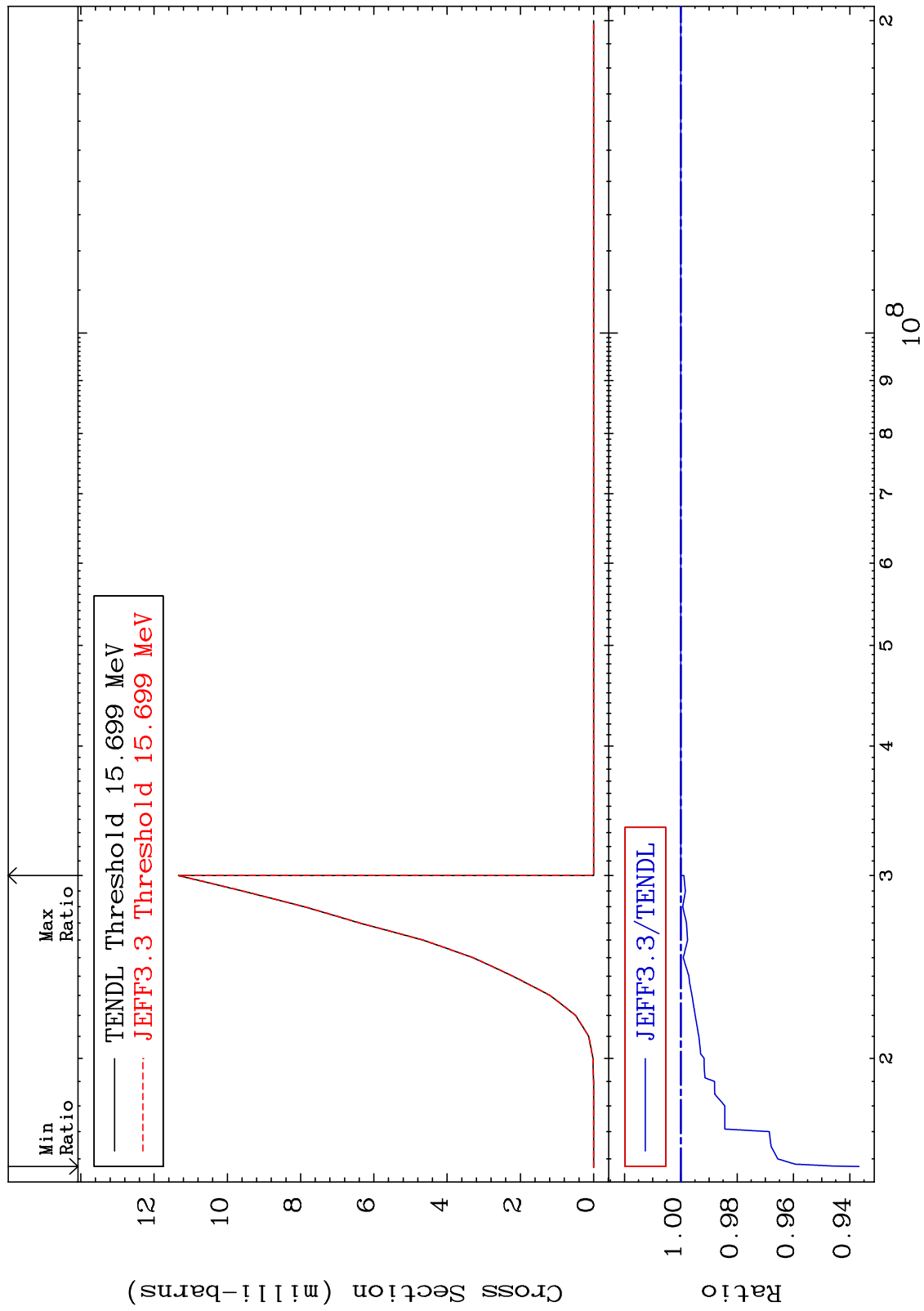
Radionuclide Production Cross Section 0.000 To 9999. %



85

44-Ru-98

MAT 4431 (n, n') d:43-Tc-96g 44-Ru-98
 Radionuclide Production Cross Section -6.327 To 0.000 %

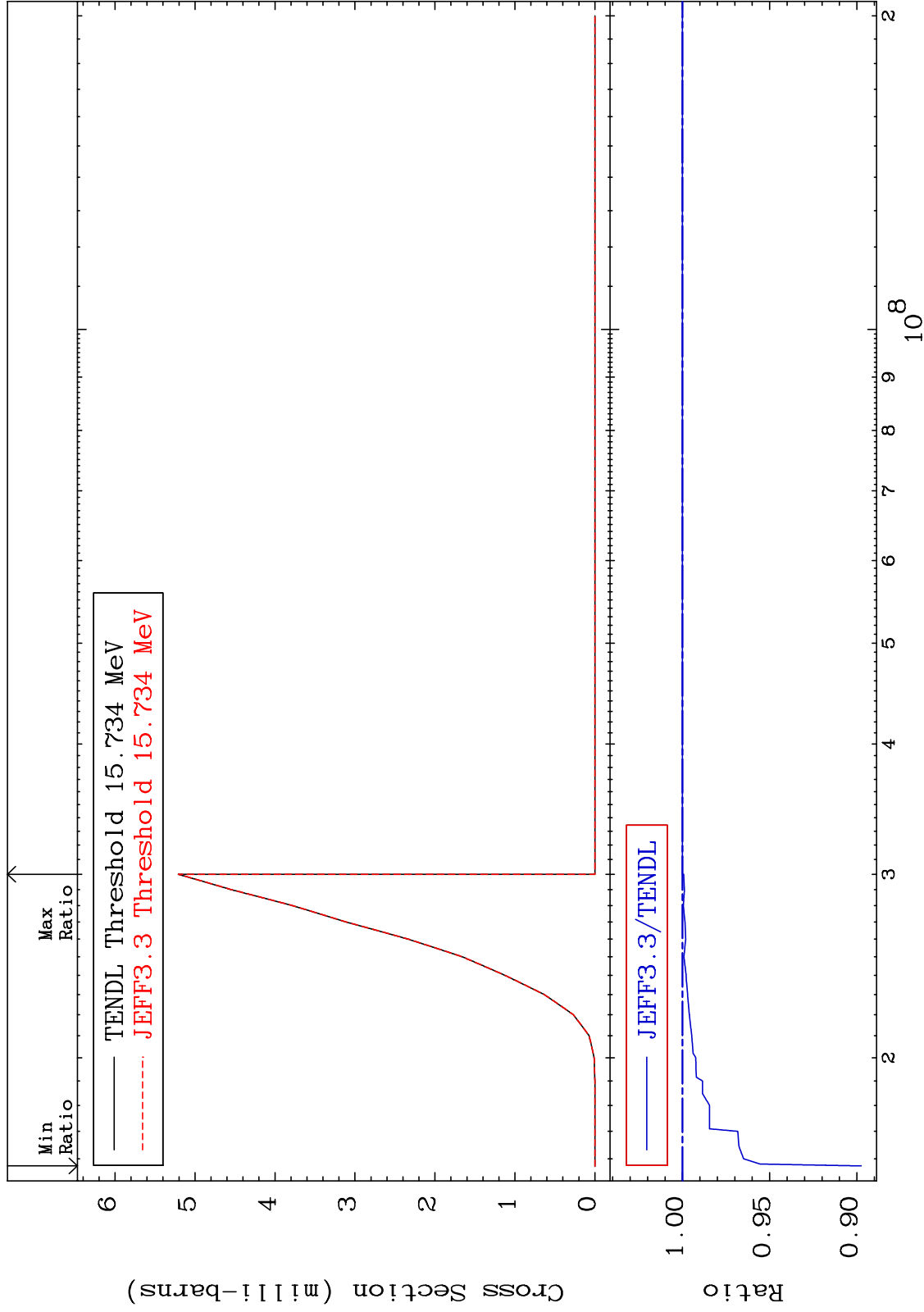


MAT 4431

(n, n') d:43-Tc-96m1

44-Ru-98

Radionuclide Production Cross Section -10.25 To 0.000 %

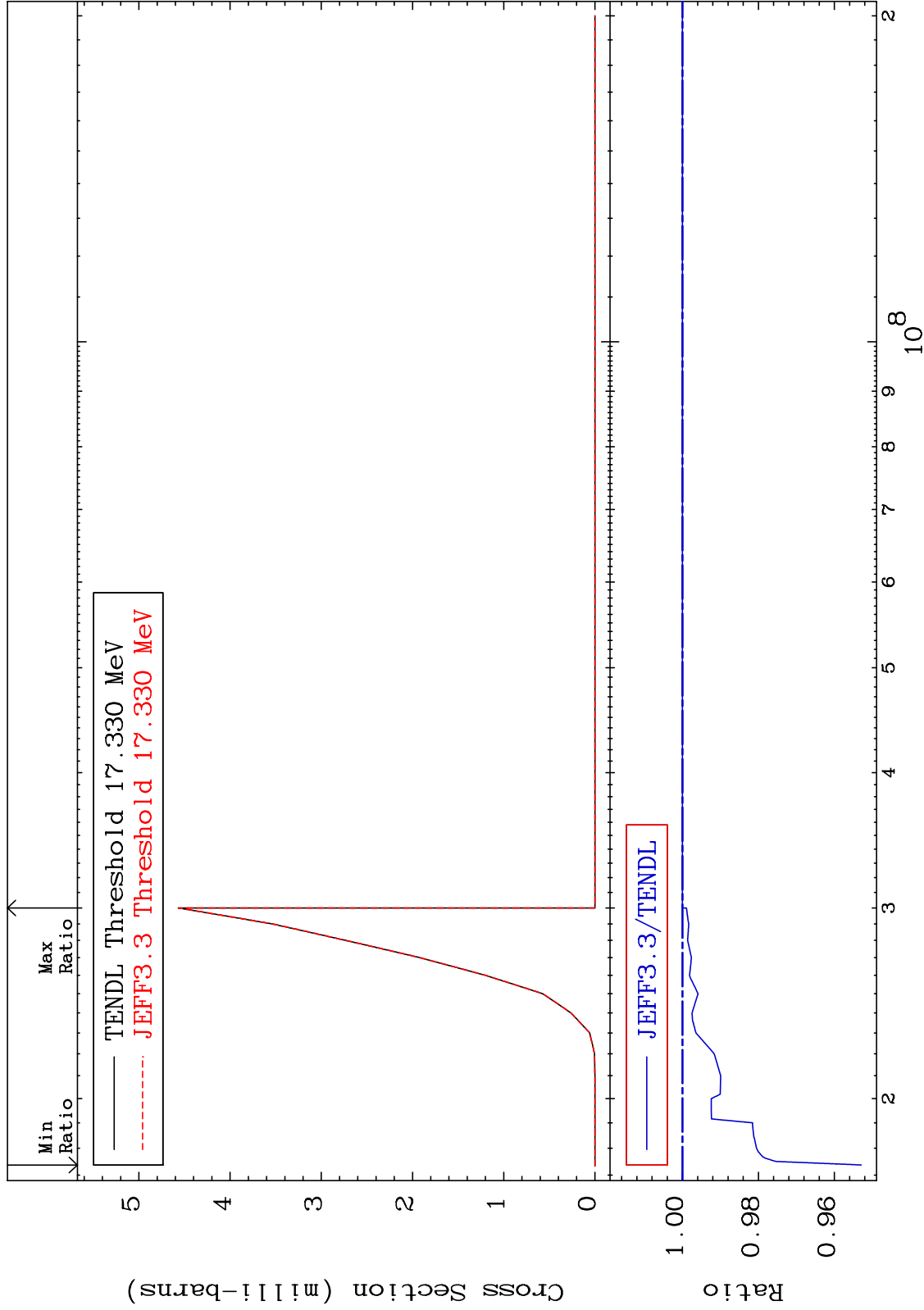


MAT 4431

(n, n') t: 43-Tc-95g

44-Ru-98

Radionuclide Production Cross Section -4.707 To 0.000 %

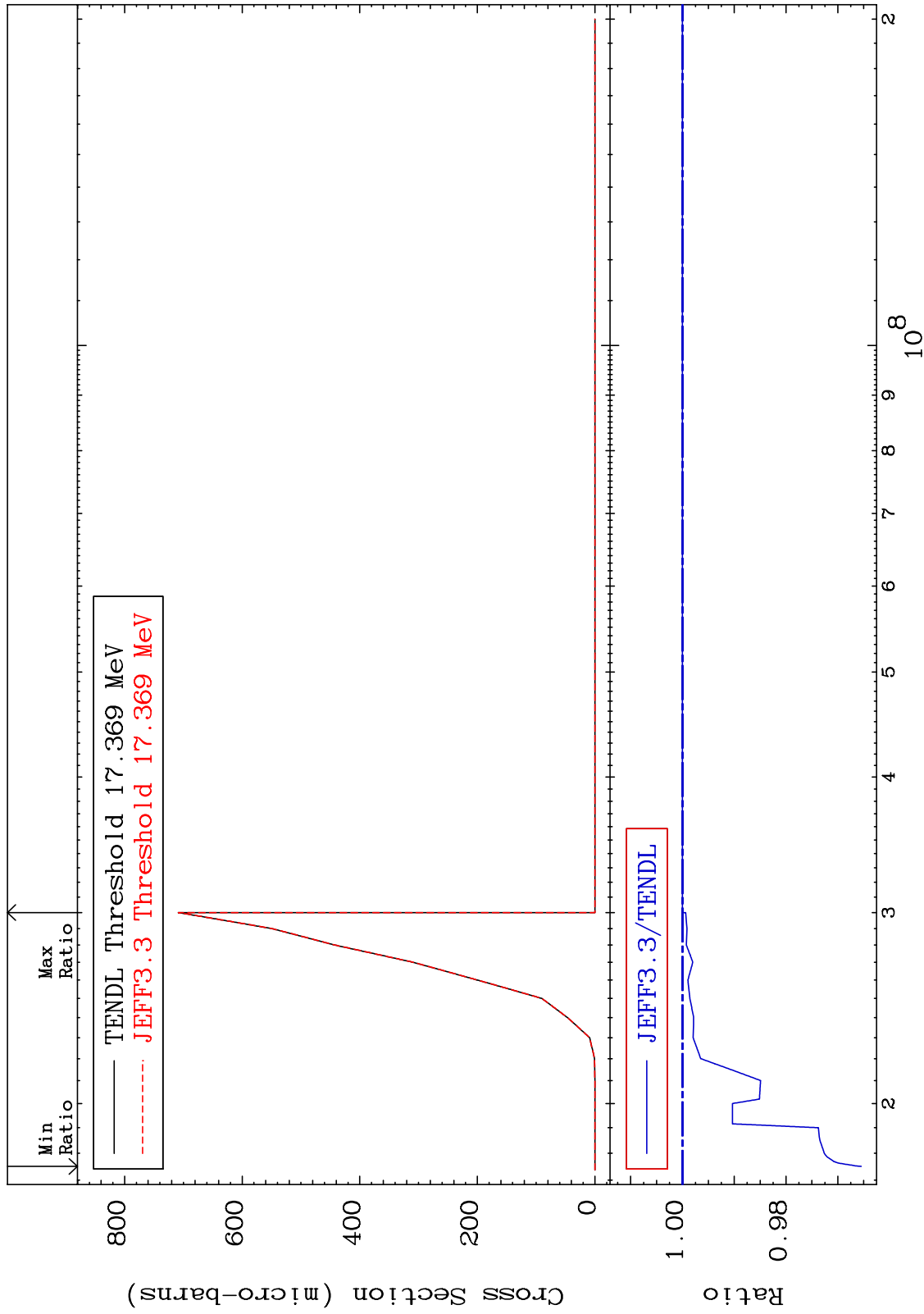


MAT 4431

(n, n') t:43-Tc-95m1

44-Ru-98

Radionuclide Production Cross Section -3.454 To 0.000 %



89

Incident Energy (eV)

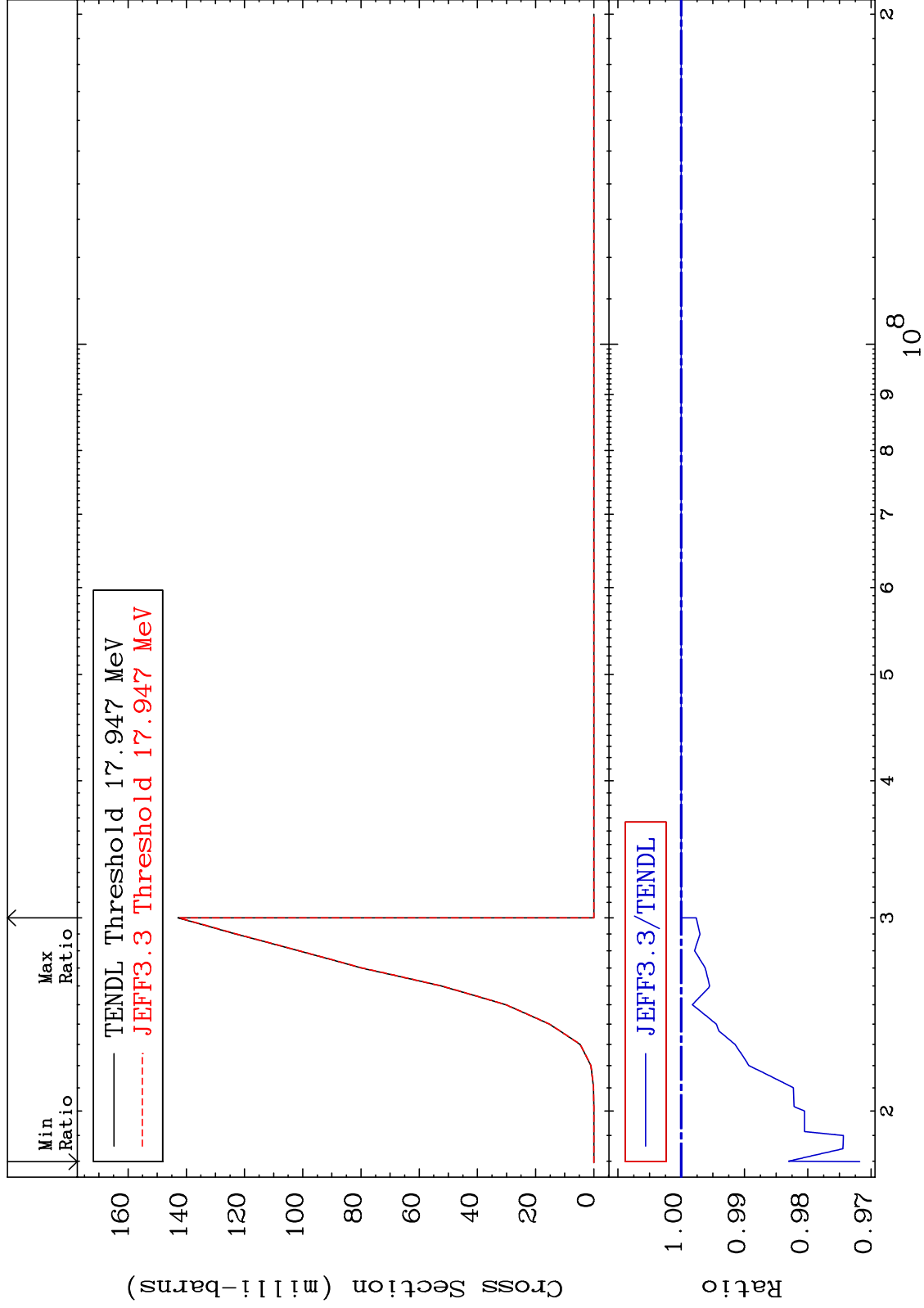
44-Ru-98

MAT 4431

(n,2n) p:43-Tc-96g

44-Ru-98

Radionuclide Production Cross Section -2.820 To 0.000 %



90

Incident Energy (eV)

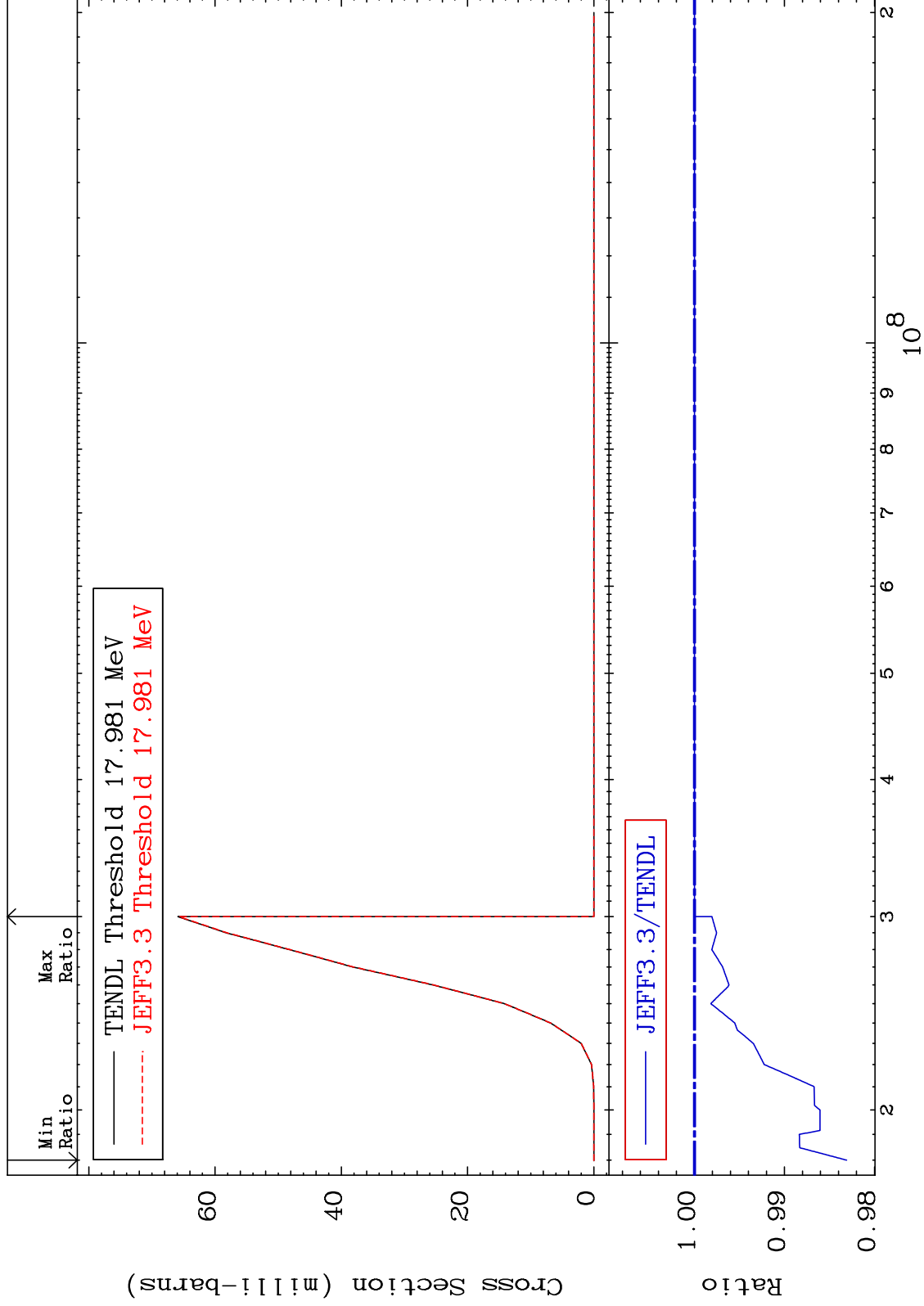
44-Ru-98

MAT 4431

(n,2n) p:43-Tc-96m1

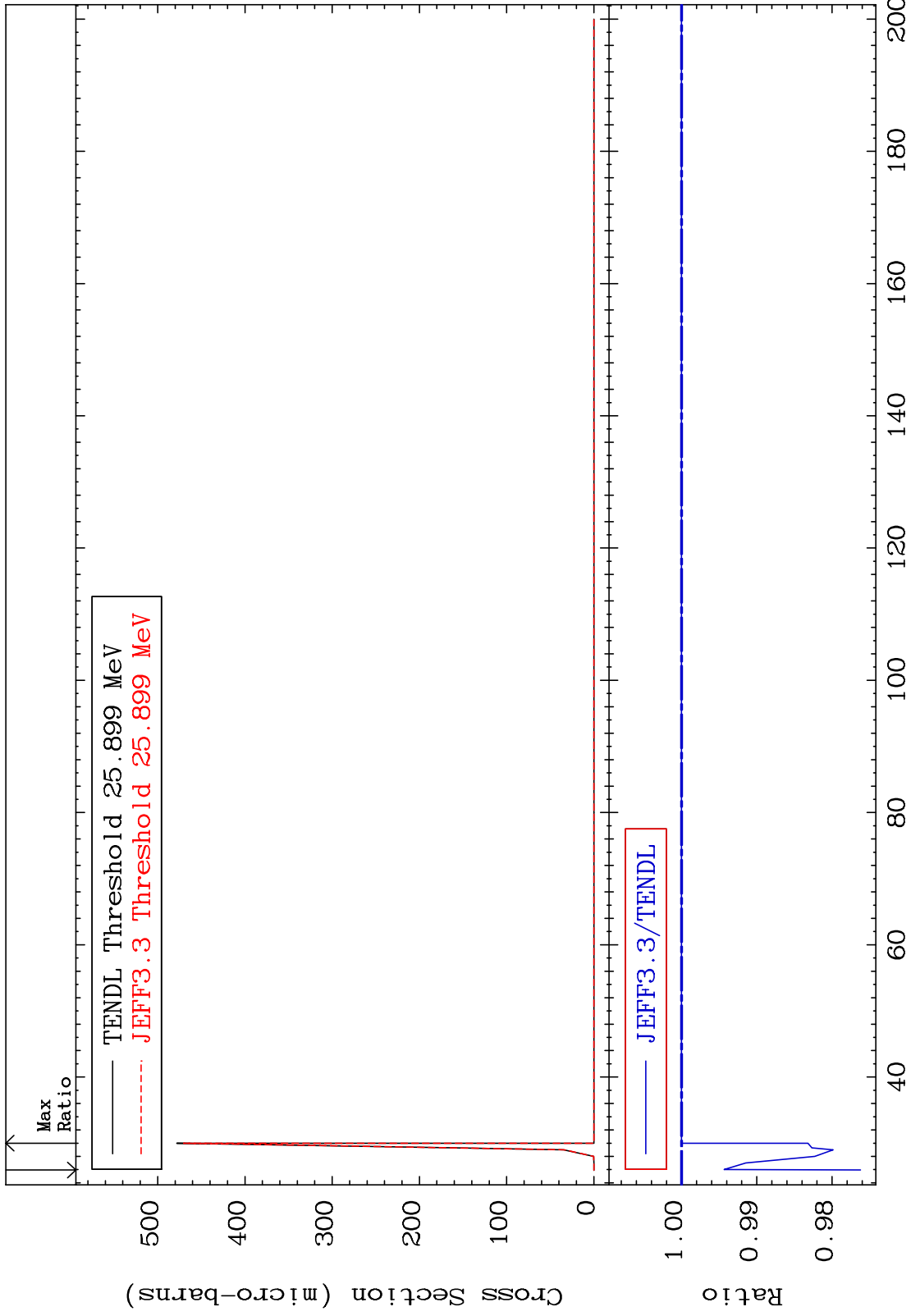
44-Ru-98

Radionuclide Production Cross Section -1.690 To 0.000 %



MAT 4431

(n, 3n) p:43-Tc-95g 44-Ru-98
Radionuclide Production Cross Section -2.378 To 0.000 %



92

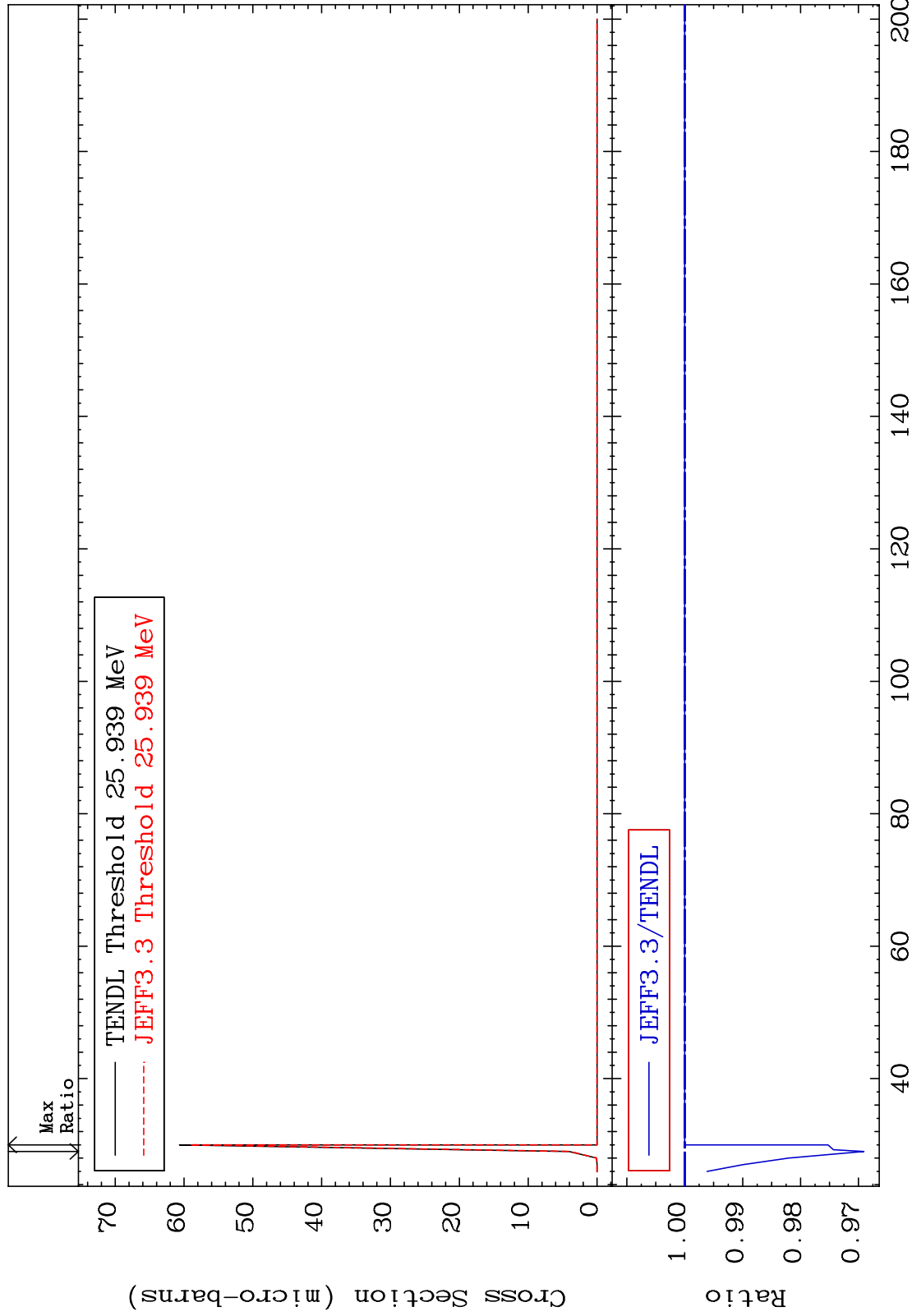
44-Ru-98

MAT 4431

(n,3n) p:43-Tc-95m1

44-Ru-98

Radionuclide Production Cross Section -3.095 To 0.000 %



93

Incident Energy (MeV)

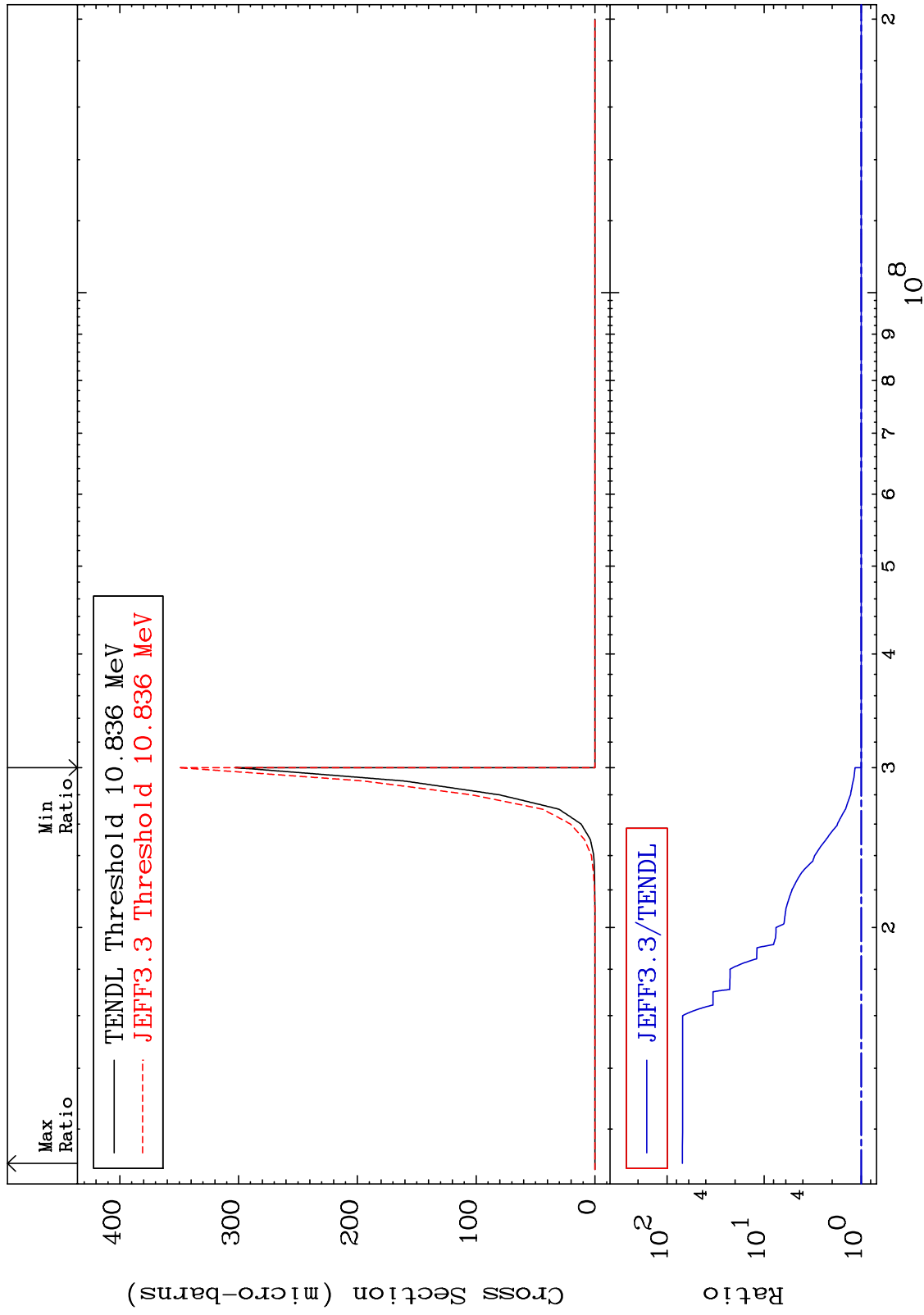
44-Ru-98

MAT 4431

(n,n') p α :41-Nb-93g

44-Ru-98

Radionuclide Production Cross Section 0.000 To 6860. %

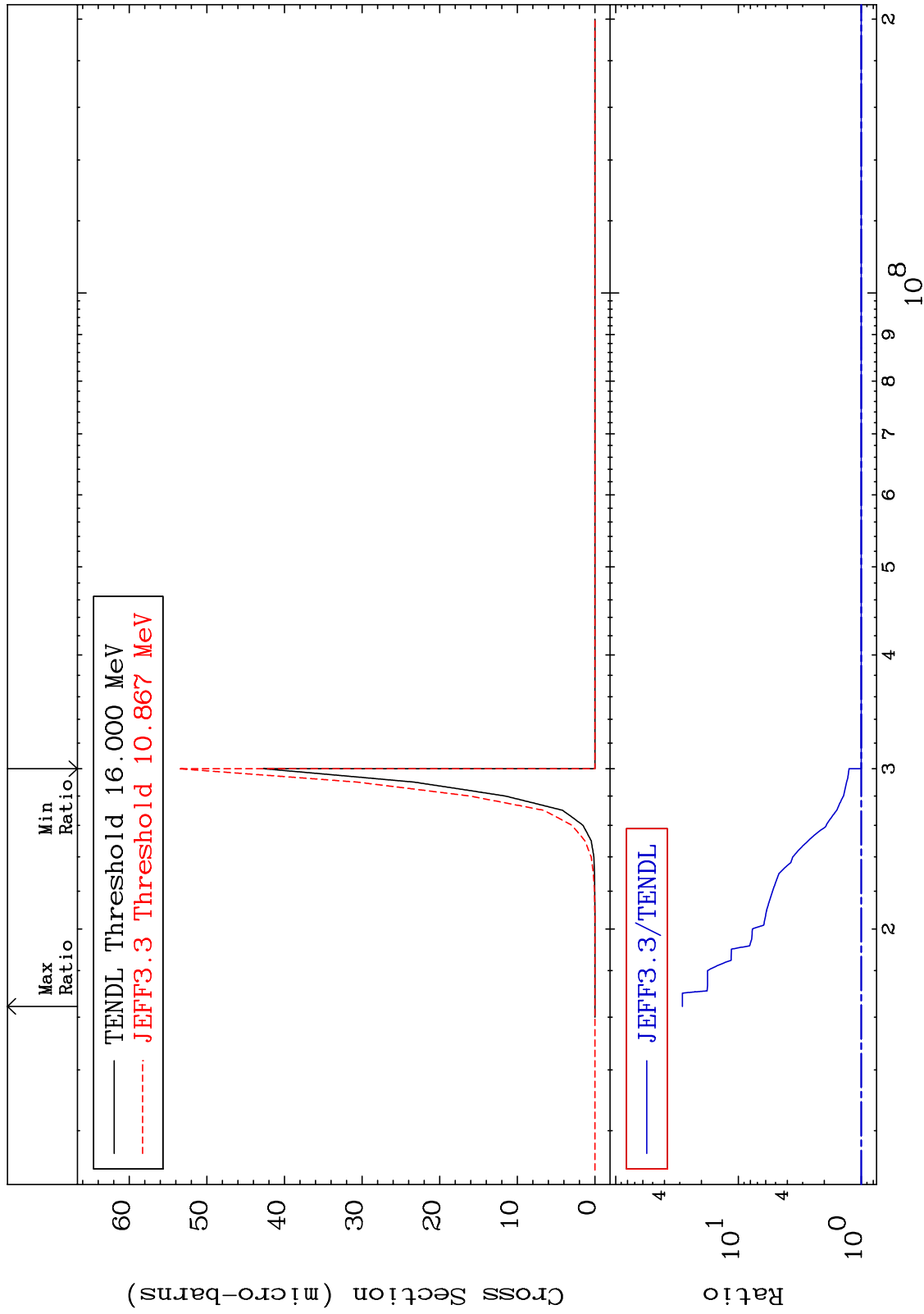


MAT 4431

(n,n') p α :41-Nb-93m1

44-Ru-98

Radionuclide Production Cross Section 0.000 To 2756. %



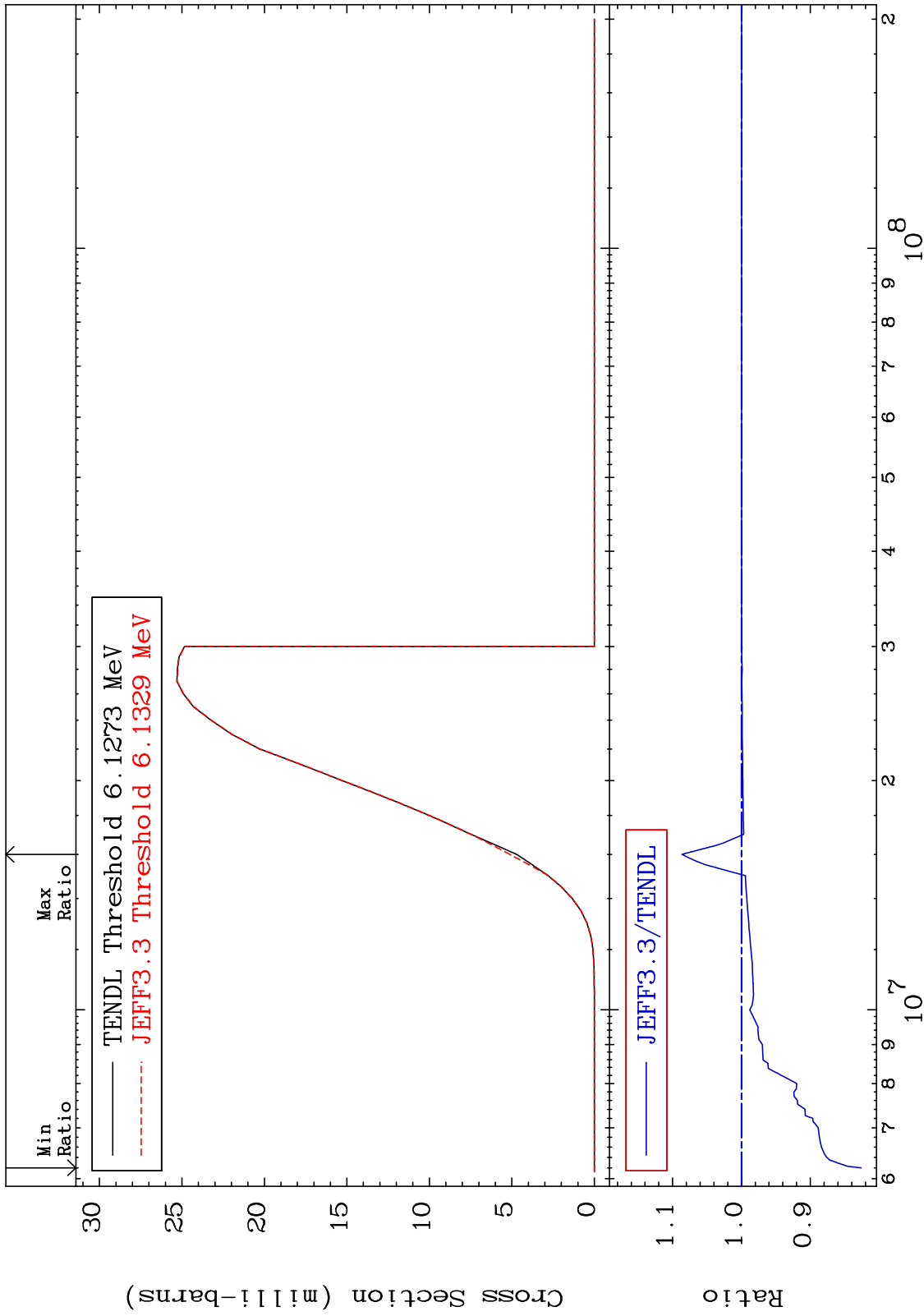
95

44-Ru-98

MAT 4431

44-Ru-98

(n,d):43-Tc-97g
Radionuclide Production Cross Section -17.38 To 8.630 %



96

Incident Energy (eV)

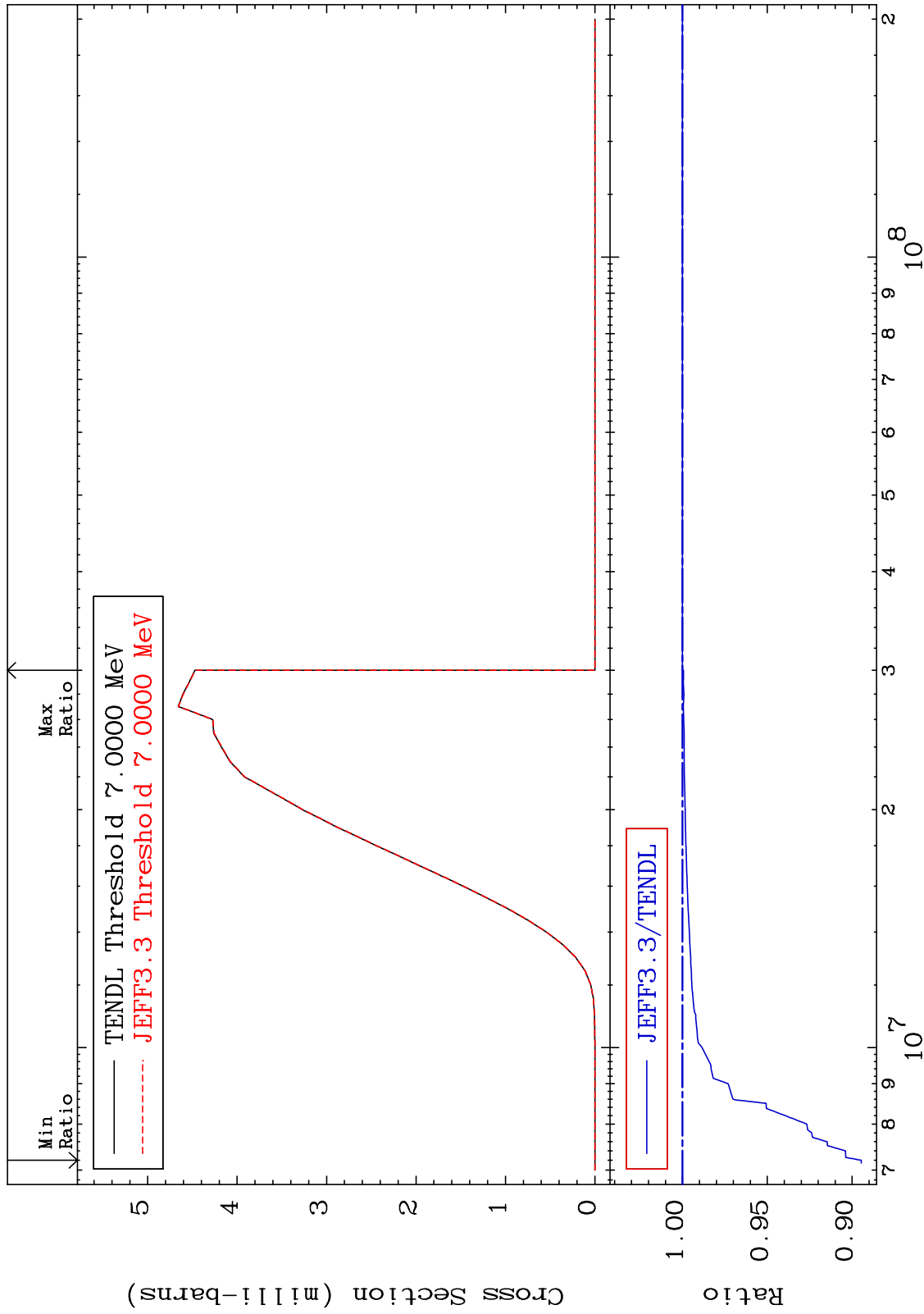
44-Ru-98

MAT 4431

(n,d):43-Tc-97m1

44-Ru-98

Radionuclide Production Cross Section -10.54 To 0.000 %



97

Incident Energy (eV)

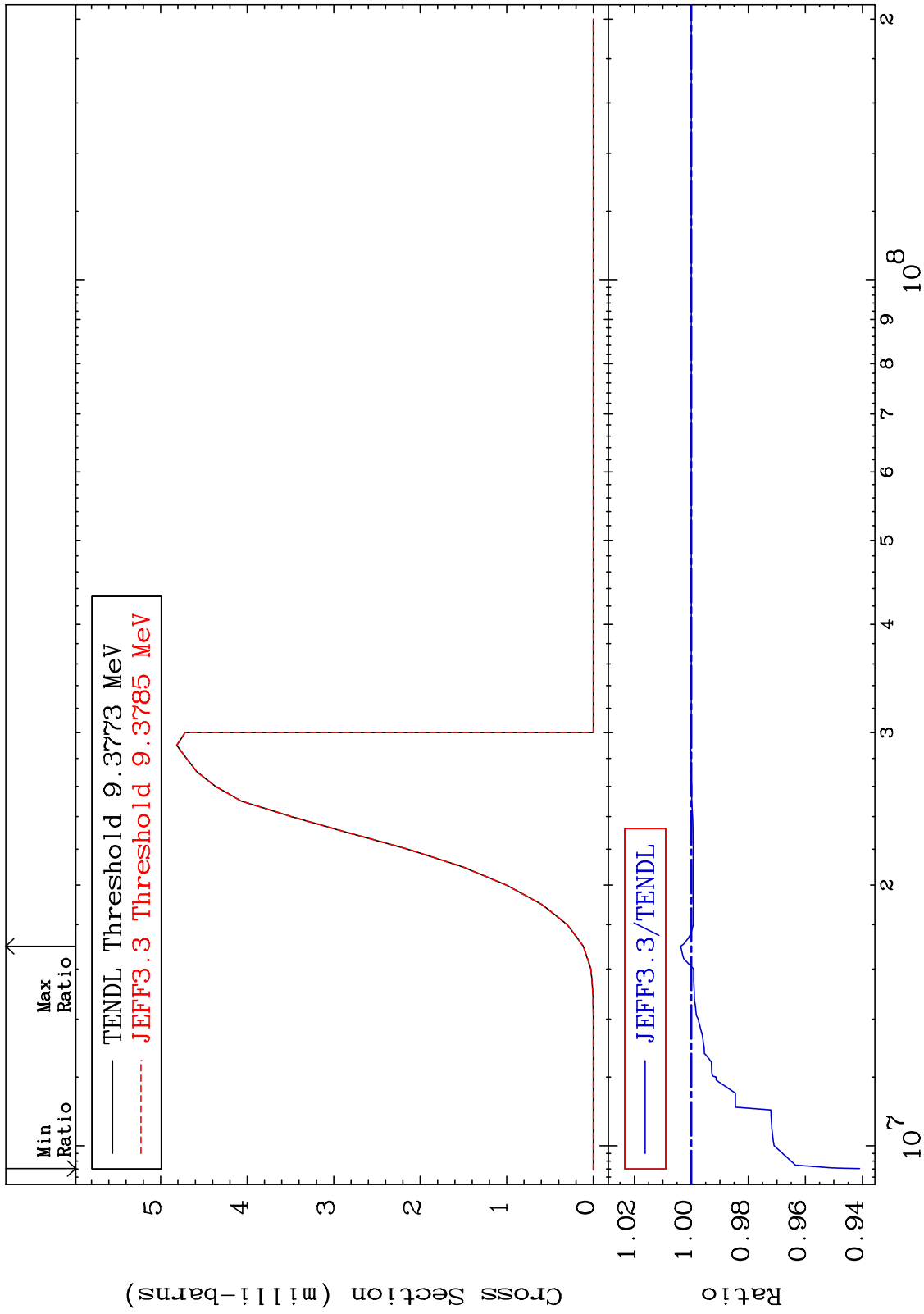
44-Ru-98

MAT 4431

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

44-Ru-98

Radionuclide Production Cross Section -5.904 To 0.369 %



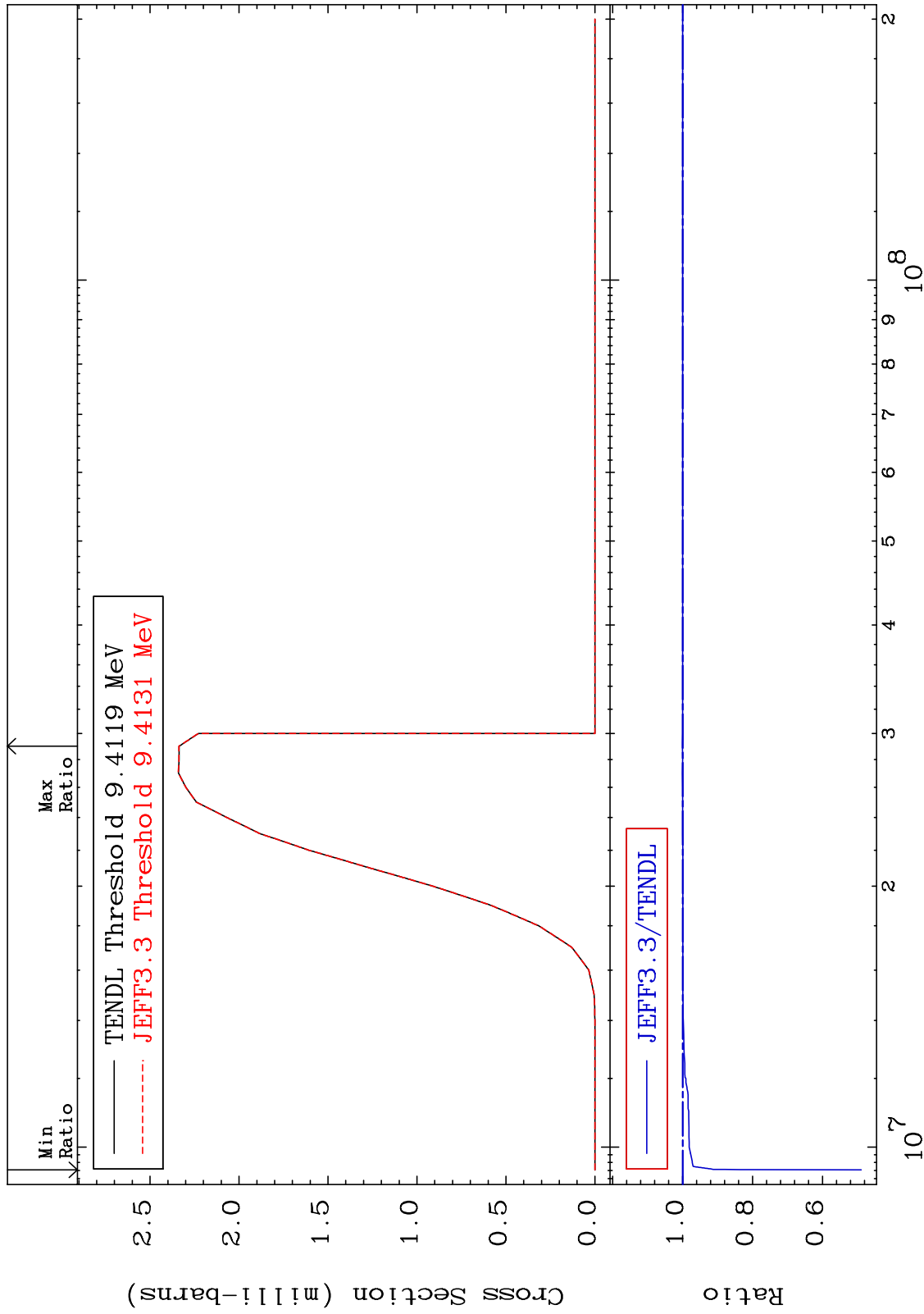
44-Ru-98

MAT 4431

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

44-Ru-98

Radionuclide Production Cross Section -51.05 To 0.071 %



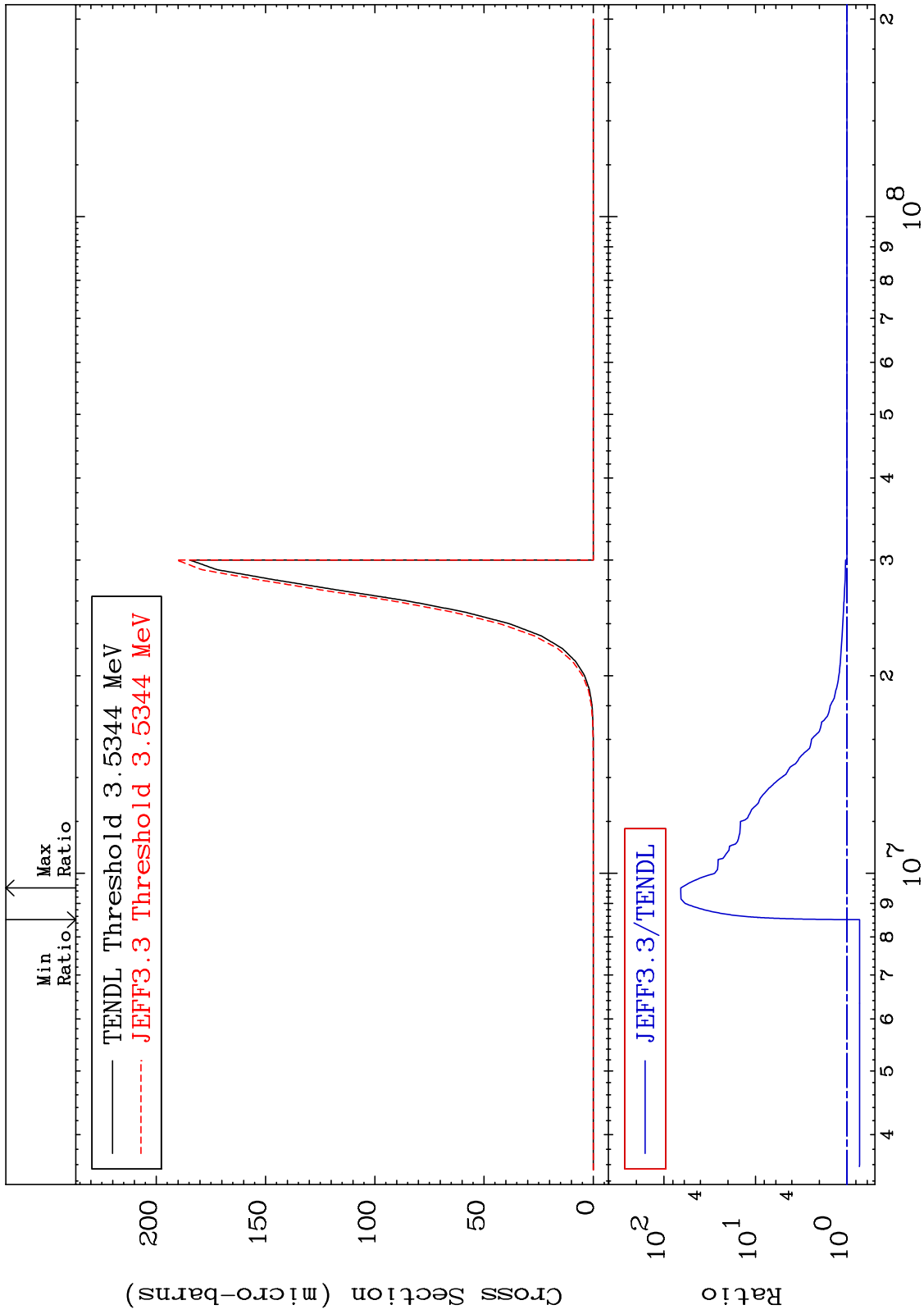
99

Incident Energy (eV)

44-Ru-98

MAT 4431

(n, p) α : 41-Nb-94g 44-Ru-98
Radionuclide Production Cross Section -27.29 To 6437. %



100

Incident Energy (eV)

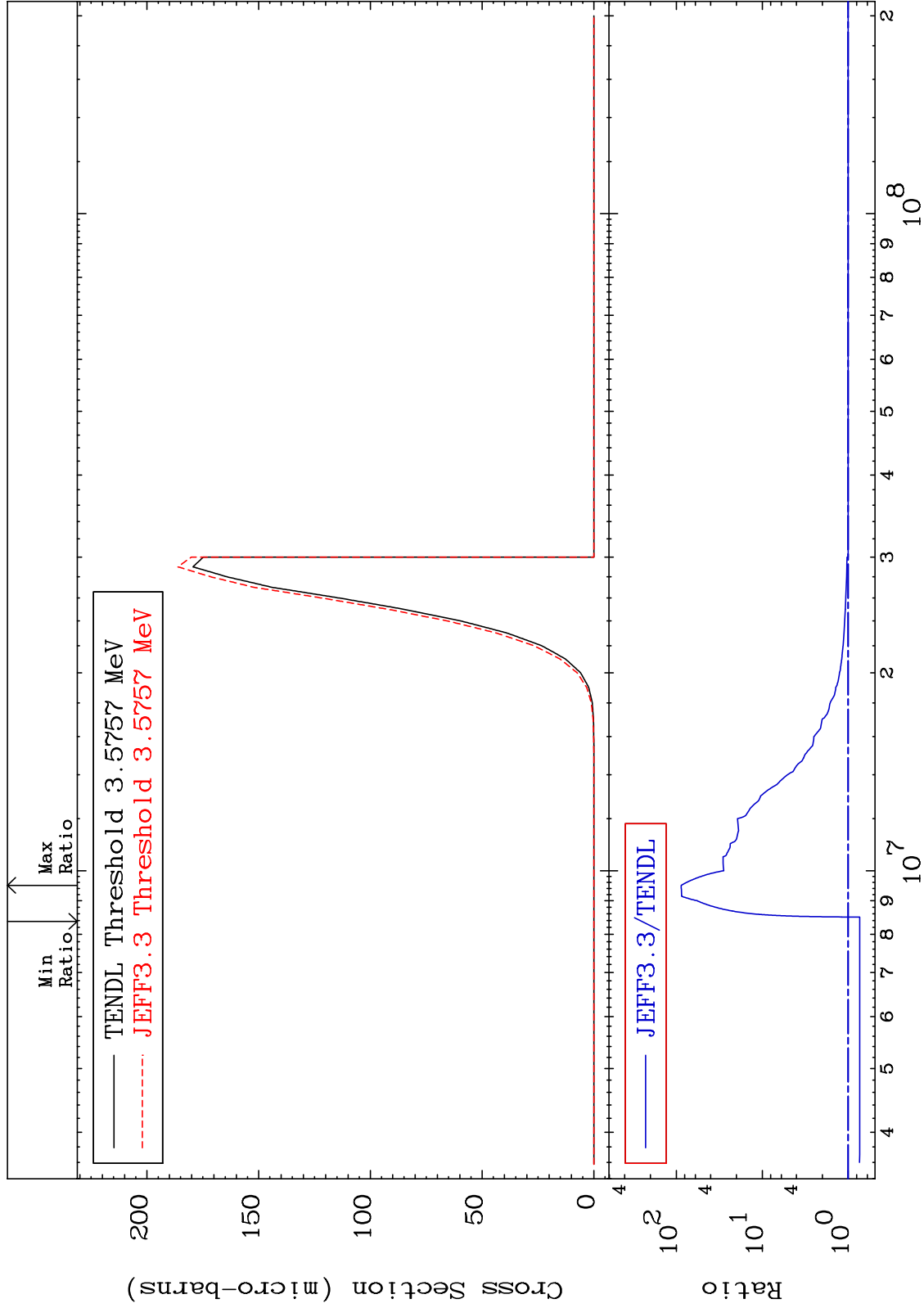
44-Ru-98

MAT 4431

(n, p) α : 41-Nb-94m1

44-Ru-98

Radionuclide Production Cross Section -26.53 To 8670. %



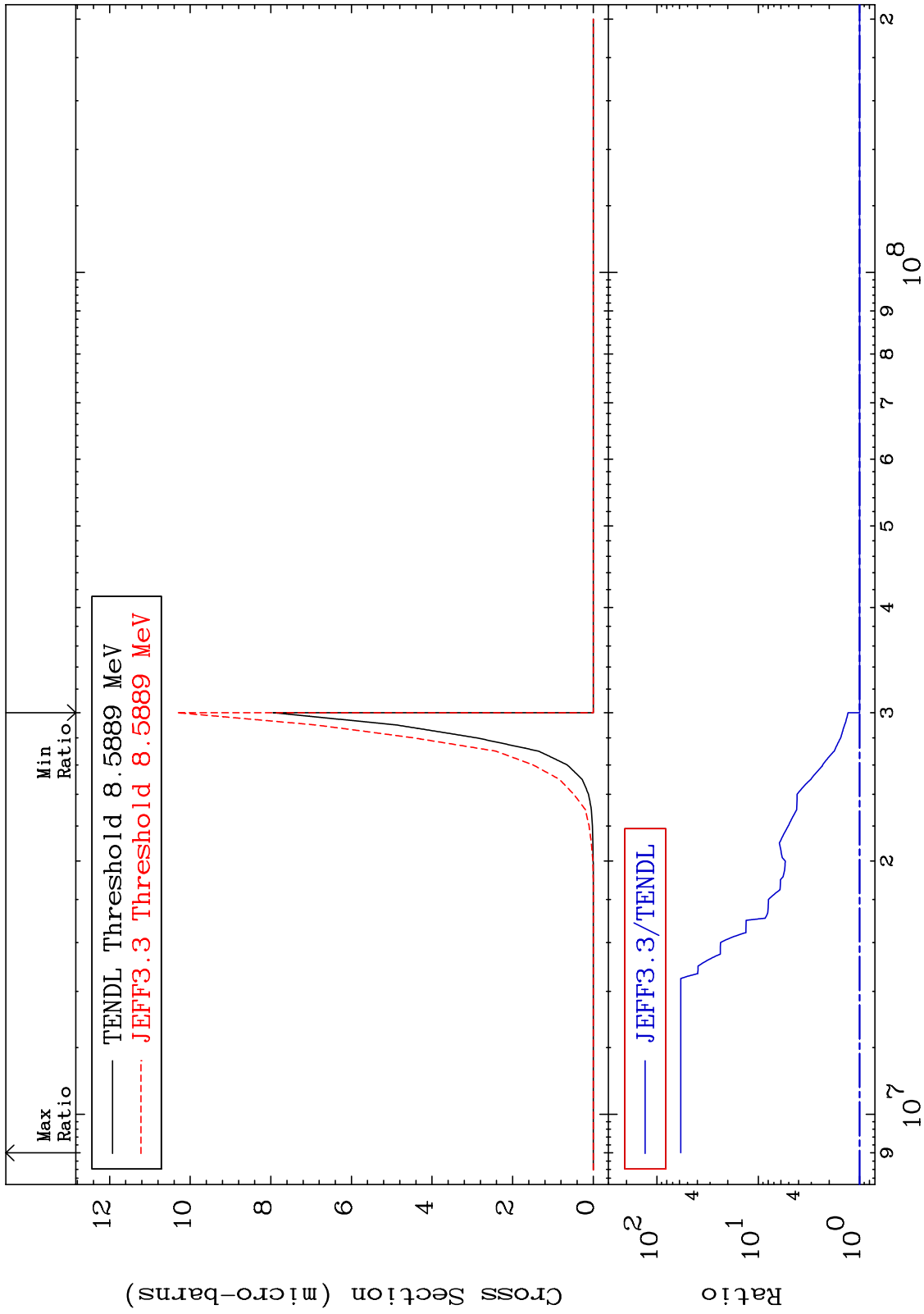
101

Incident Energy (eV)

44-Ru-98

MAT 4431

(n, d) α : 41-Nb-93g 44-Ru-98
Radionuclide Production Cross Section 0.000 To 5715. %



102

Incident Energy (eV)

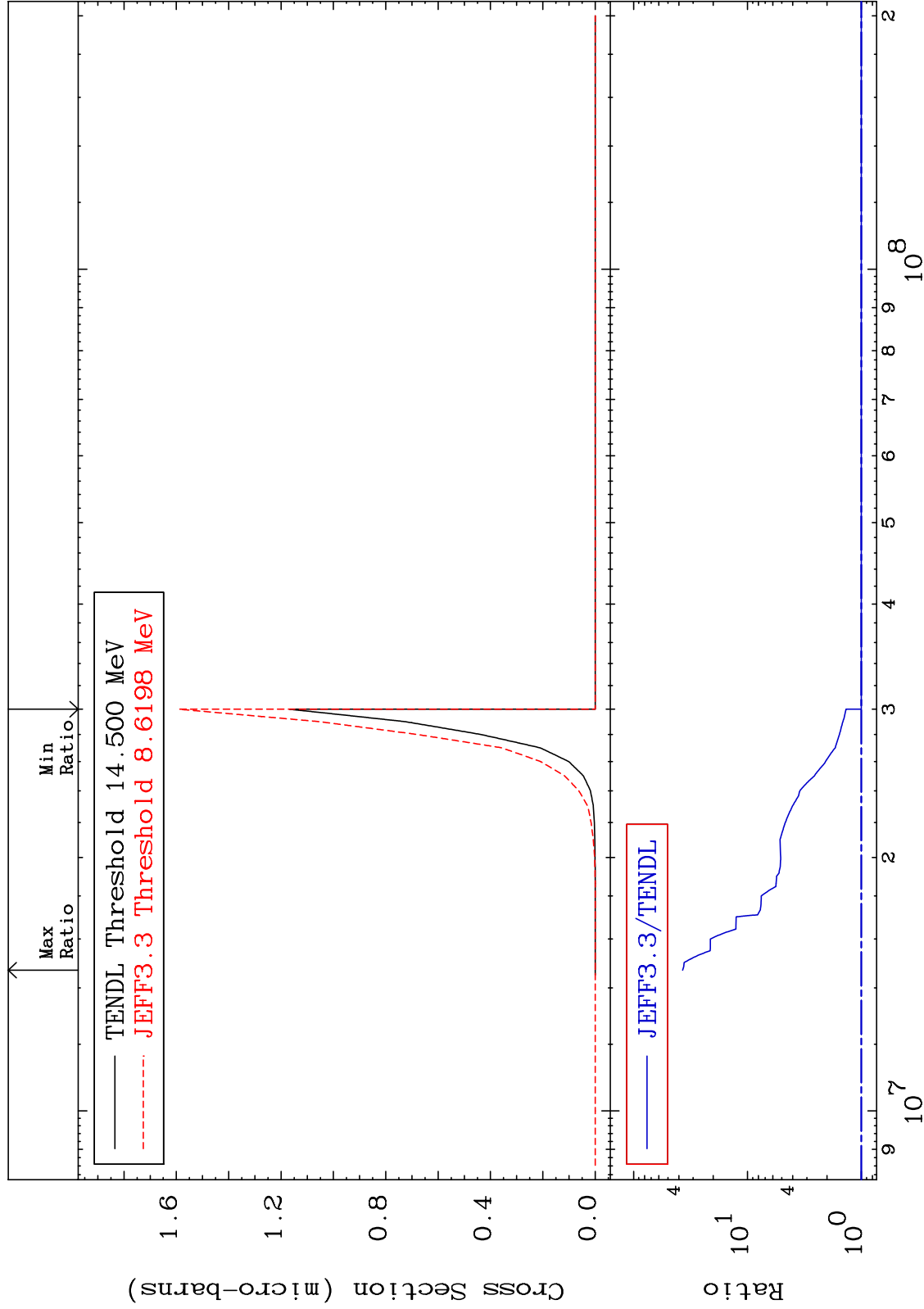
44-Ru-98

MAT 4431

(n, d) α : 41-Nb-93m1

44-Ru-98

Radionuclide Production Cross Section 0.000 To 3606. %



103

Incident Energy (eV)

44-Ru-98