

Program Complot
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

U.S.A.

Tele: 925-443-1911

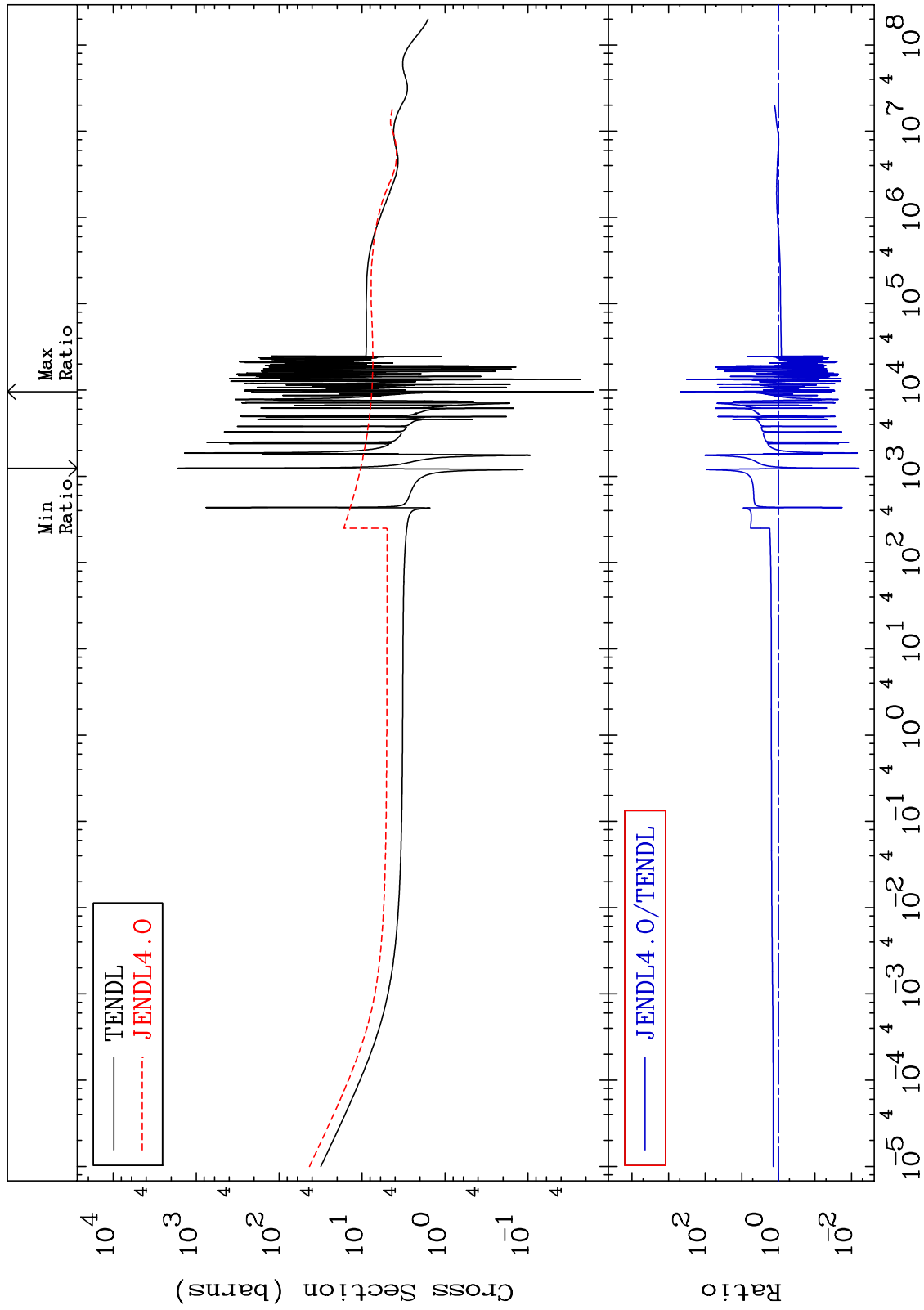
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 4425

Total
Cross Section

44-Ru-96
-99.38 To 9999. %



1

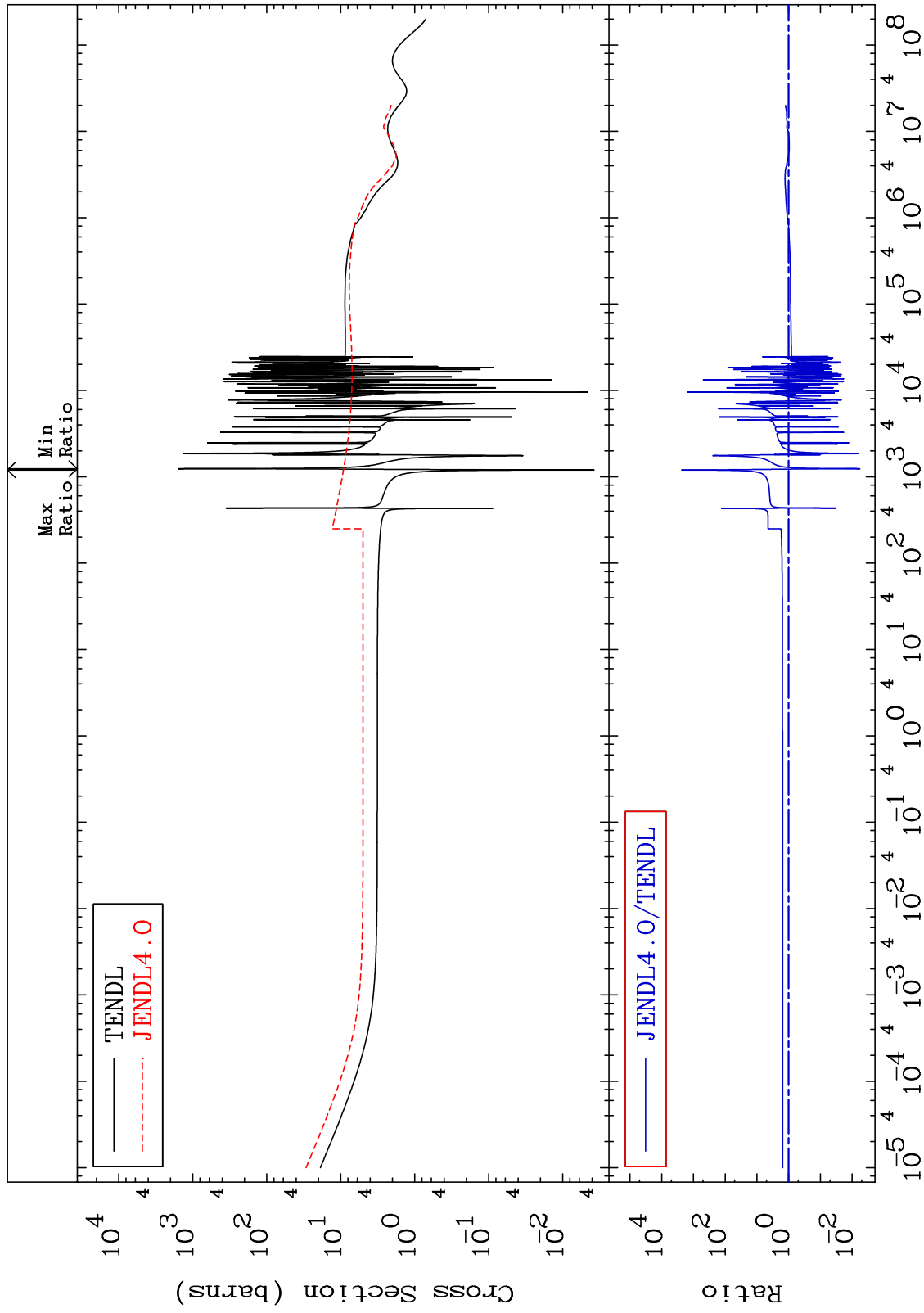
Incident Energy (eV)

44-Ru-96

MAT 4425

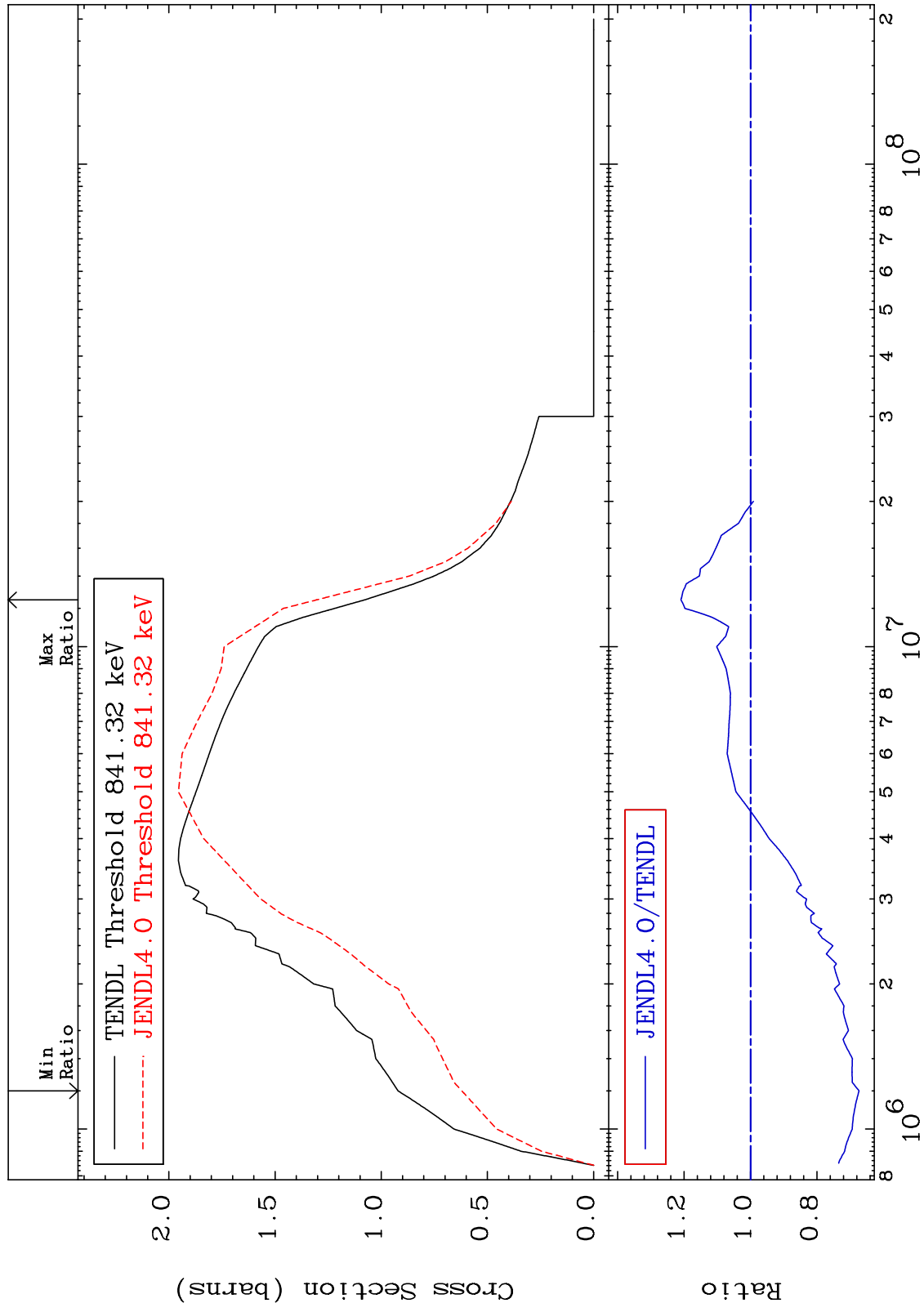
Elastic
Cross Section

44-Ru-96
-99.42 To 9999. %

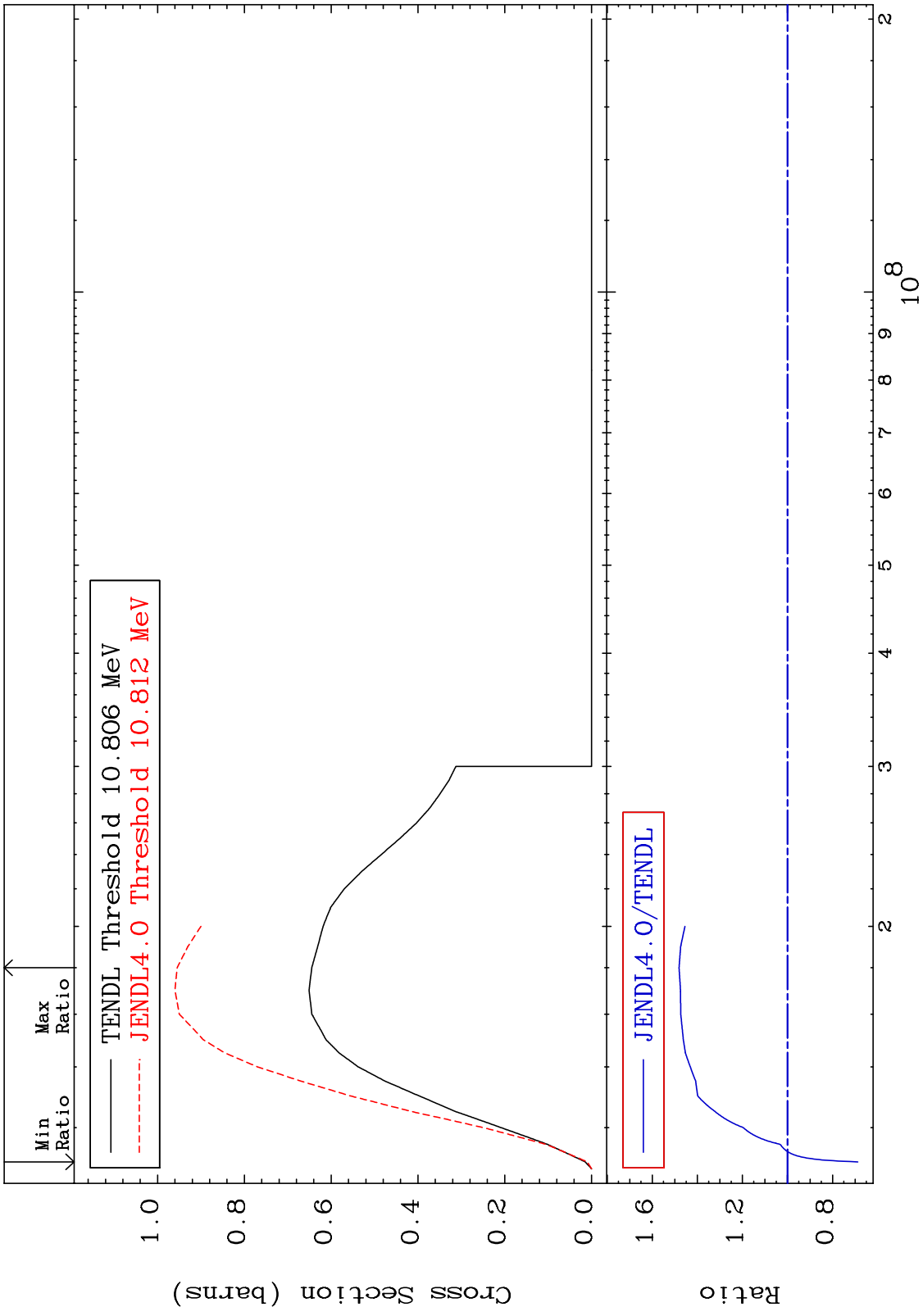


MAT 4425 44-Ru-96 -32.64 To 20.99 %

Inelastic Cross Section



MAT 4425 (n,2n) Cross Section 44-Ru-96 -31.21 To 48.13 %



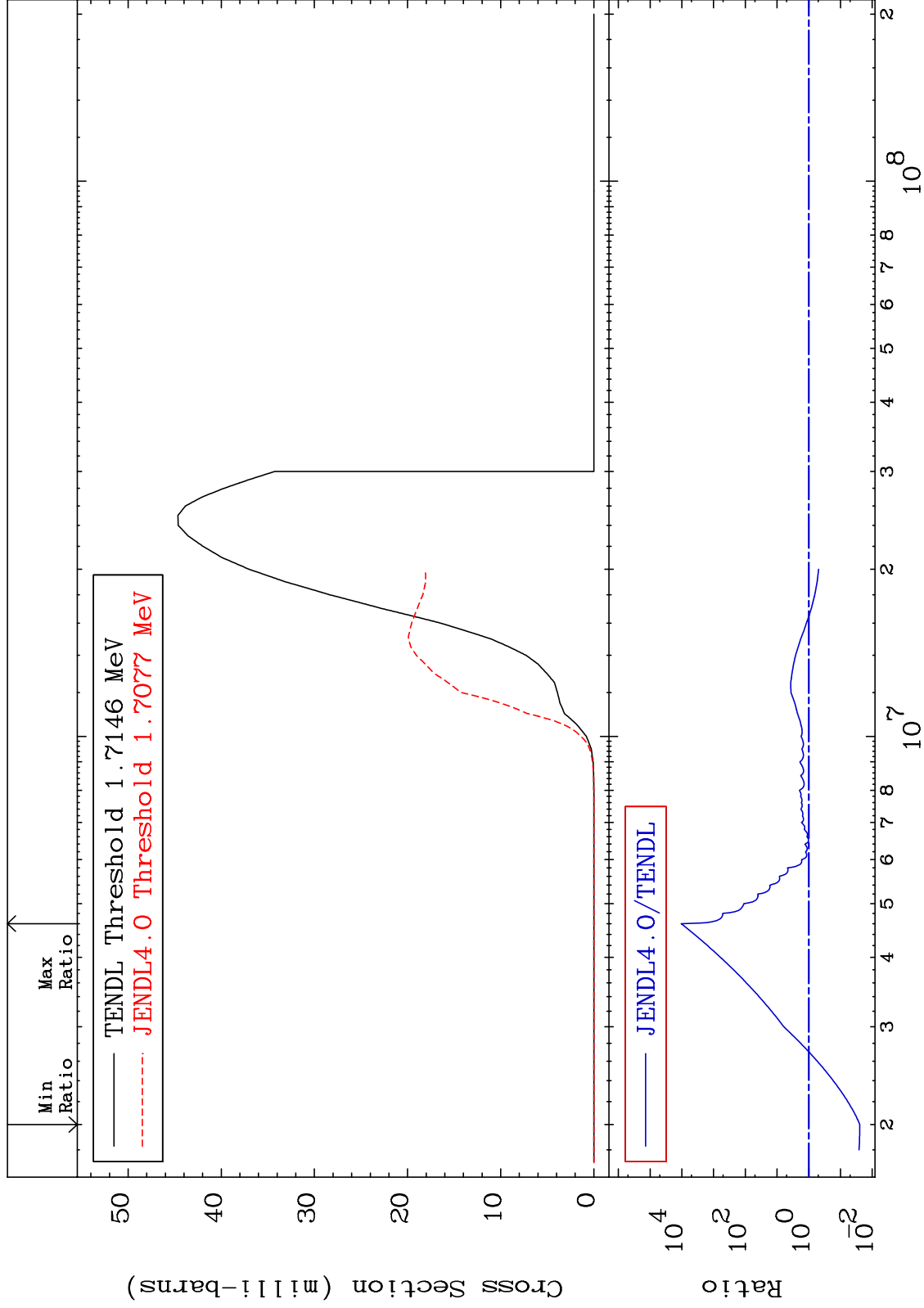
MAT 4425

(n, n') α

44-Ru-96

Cross Section

-97.53 To 9999. %



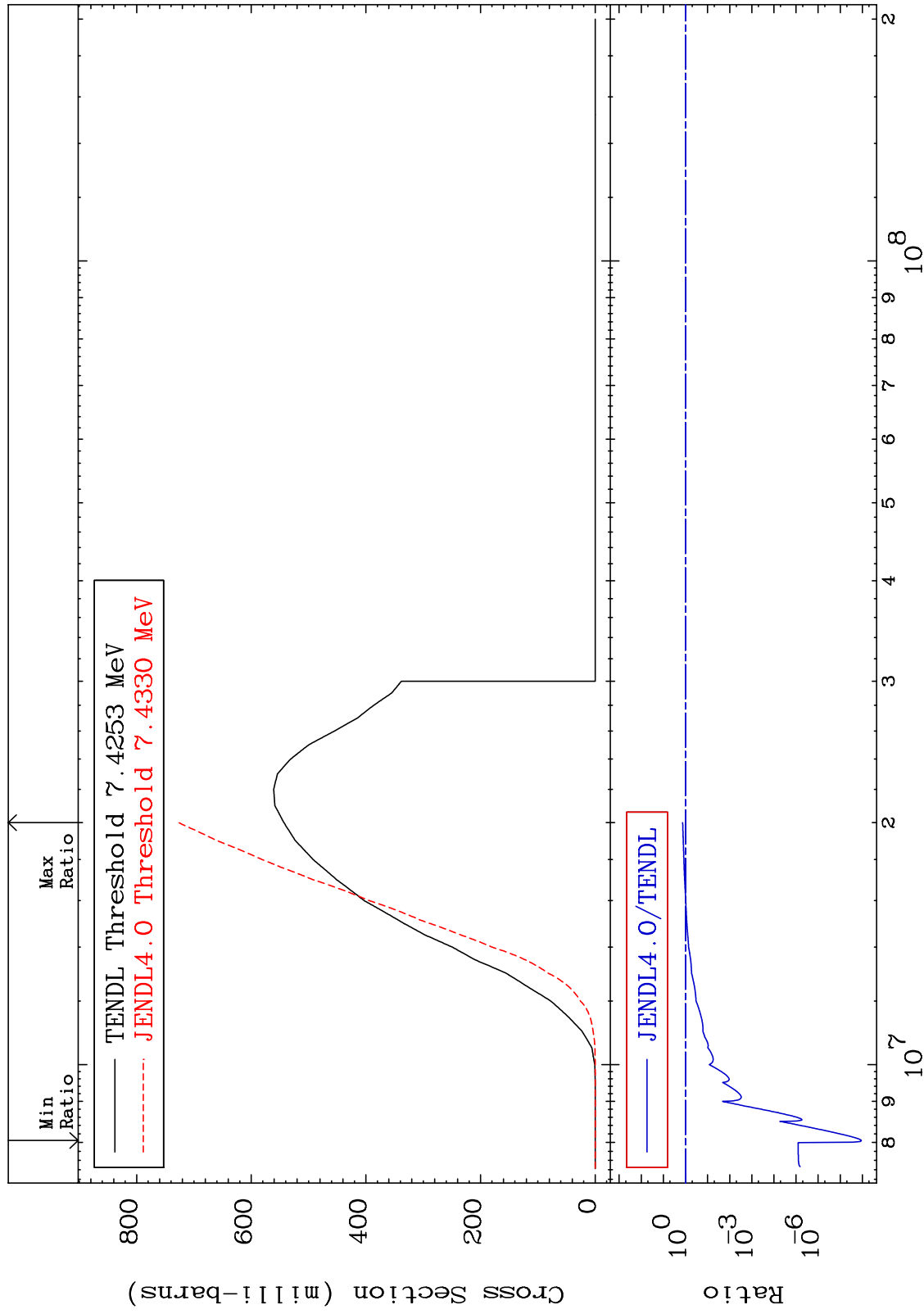
MAT 4425

(n, n') p

44-Ru-96

Cross Section

-100.0 To 33.71 %

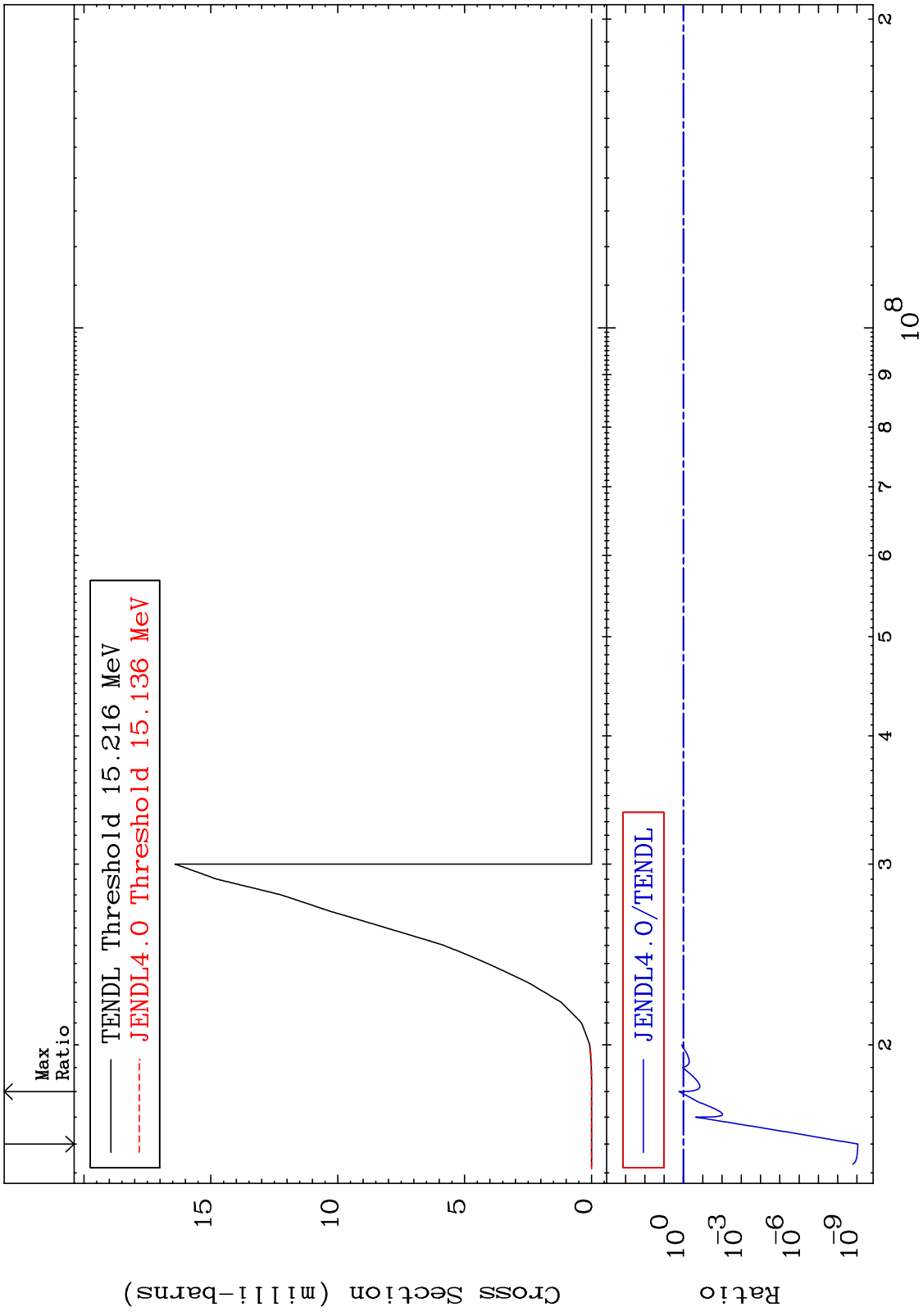


6

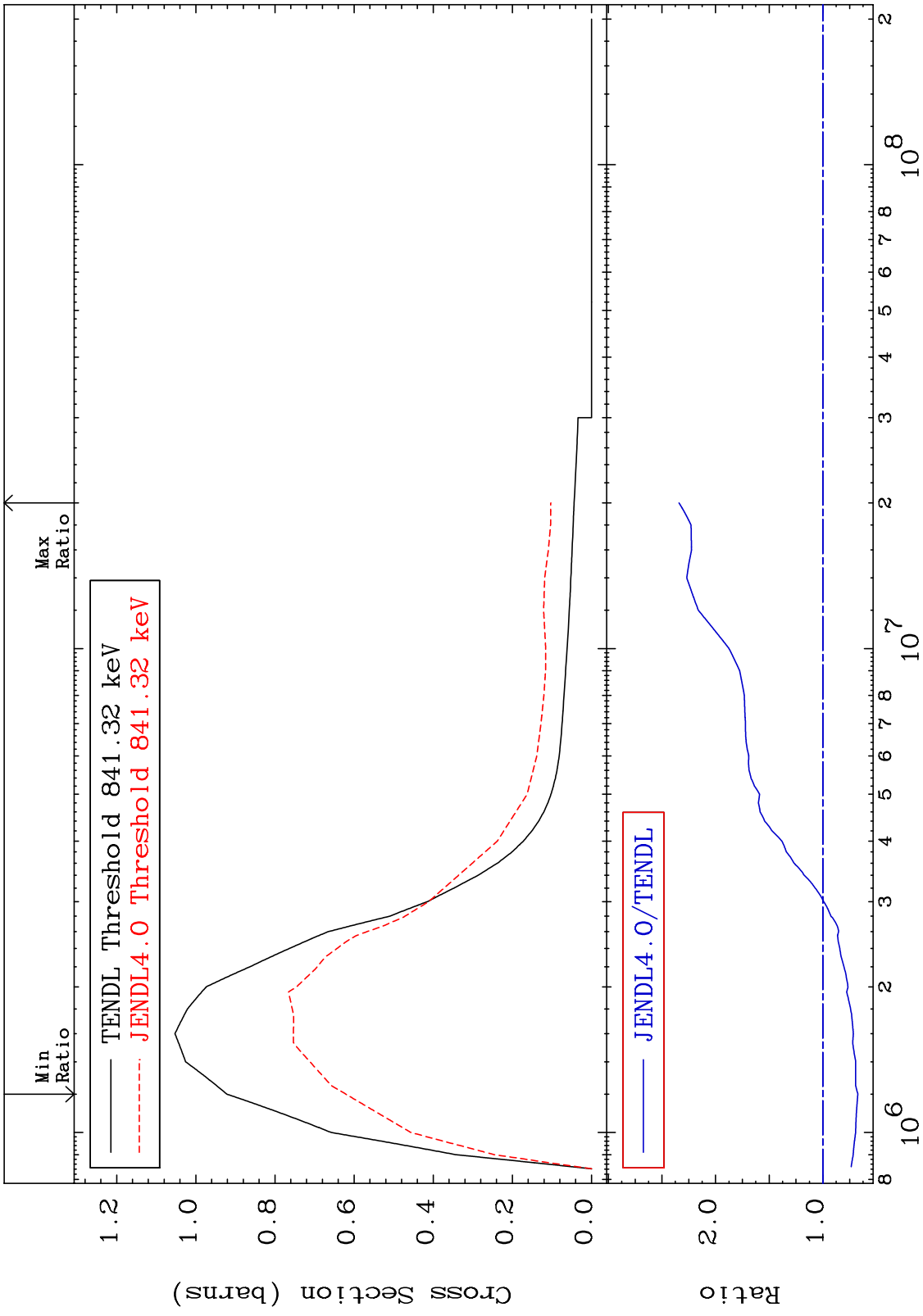
Incident Energy (eV)

44-Ru-96

MAT 4425 (n, n') d 44-Ru-96
 Cross Section -100.0 To 68.90 %



MAT 4425 MT= 51 (n,n') Level 44-Ru-96
Cross Section -32.64 To 134.1 %

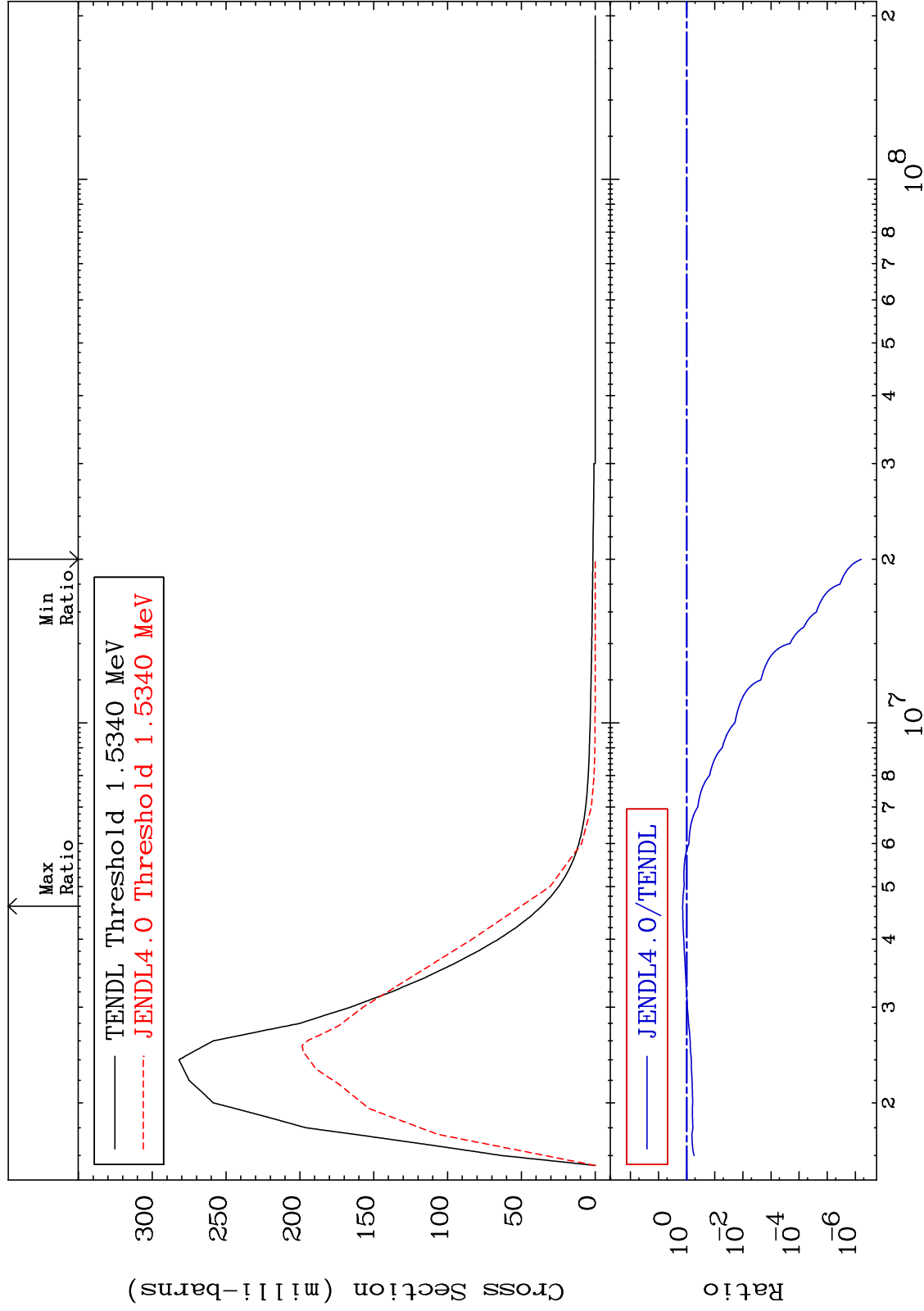


8 Incident Energy (eV) 8
44-Ru-96

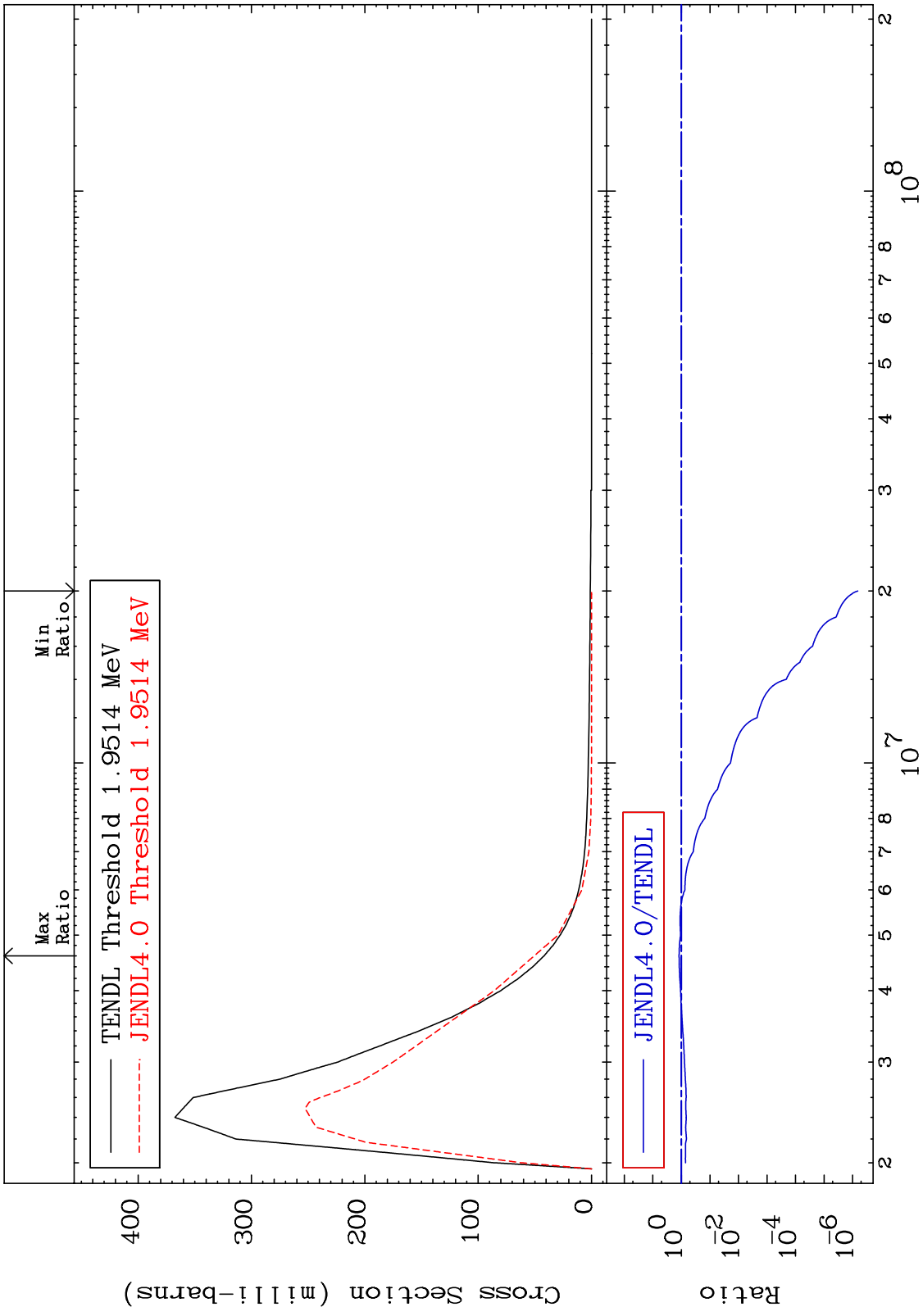
MAT 4425

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

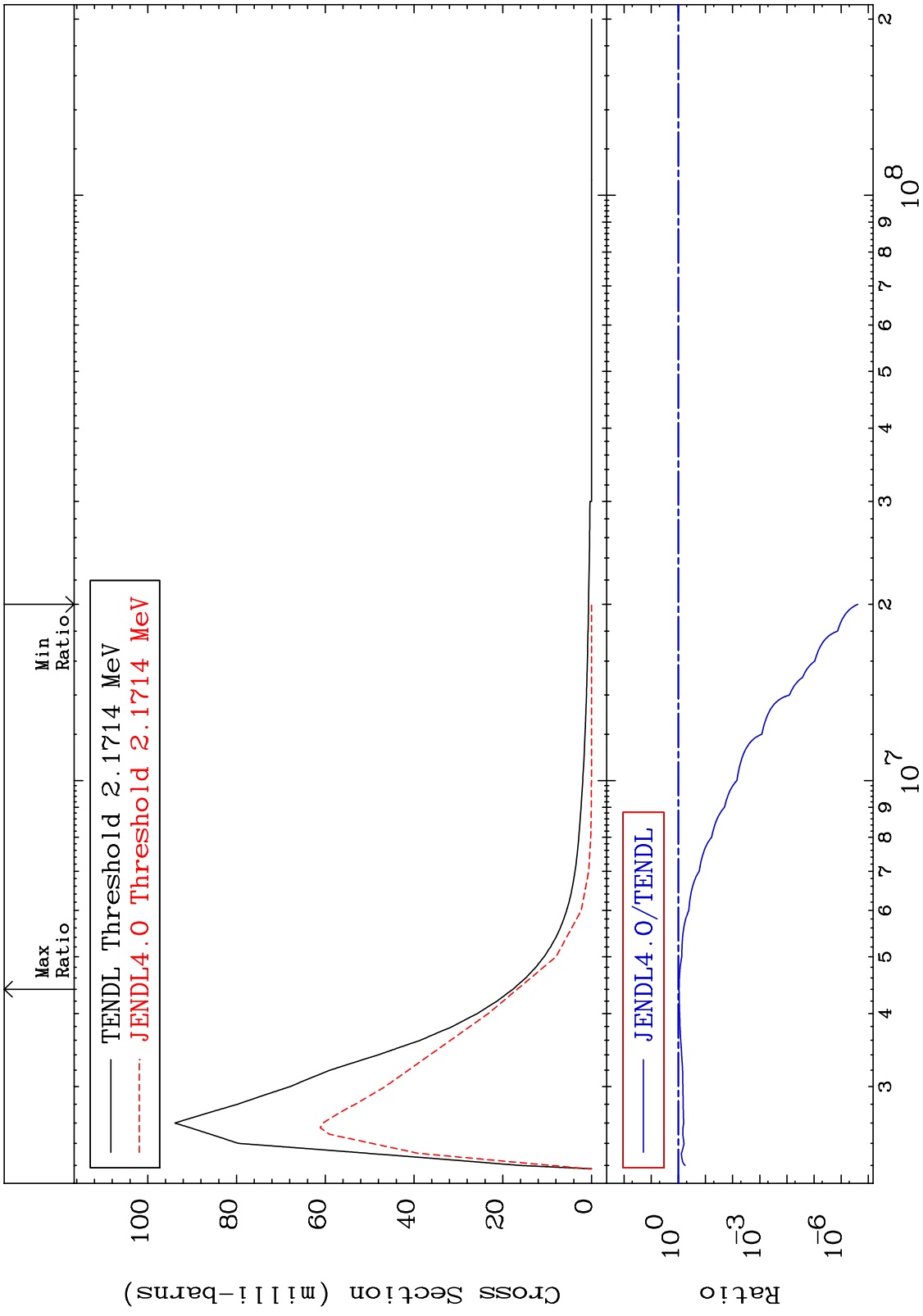
44-Ru-96
-100.0 To 38.93 %



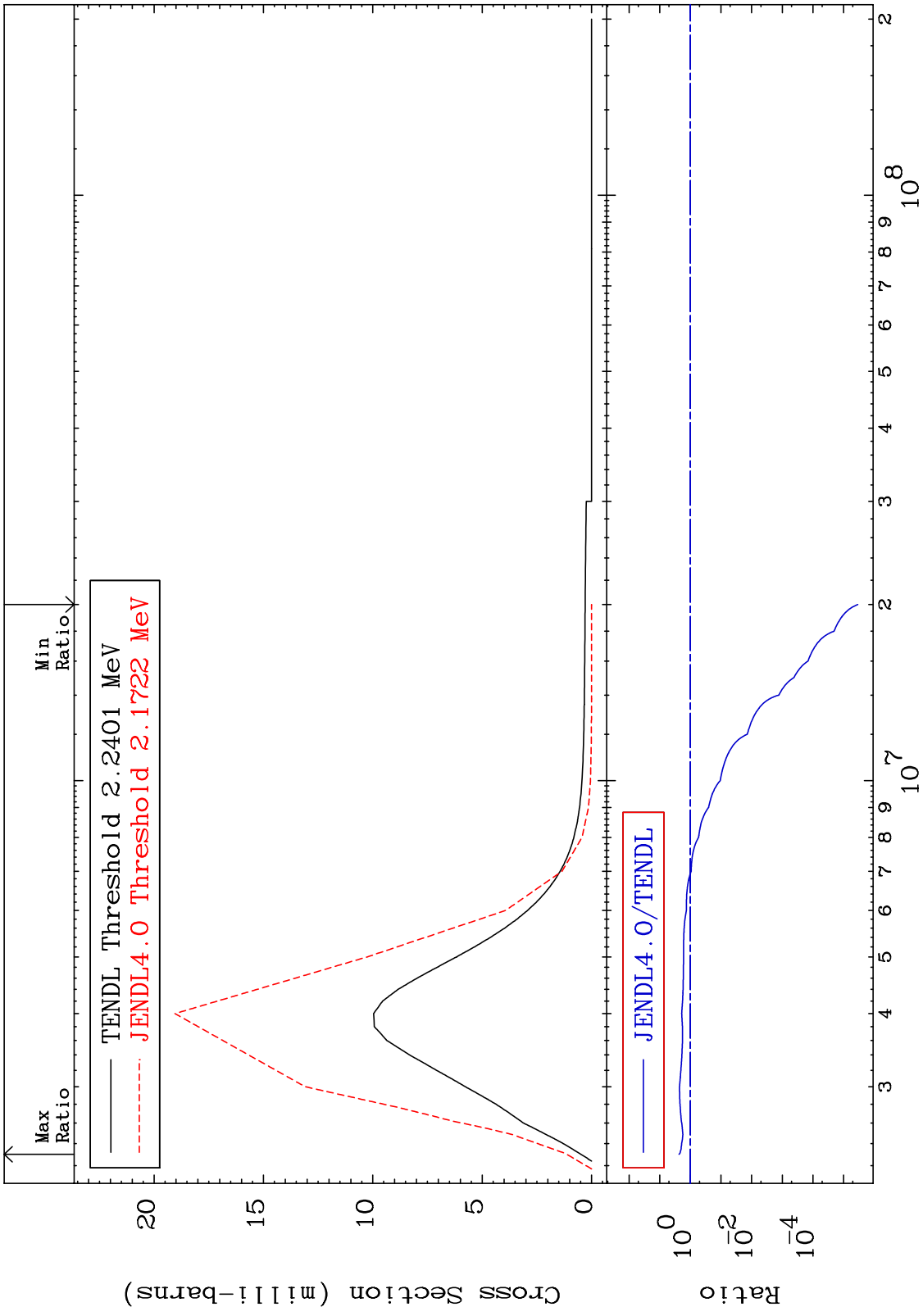
MAT 4425 MT= 53 (n,n') Level Cross Section -100.0 To 20.72 % 44-Ru-96



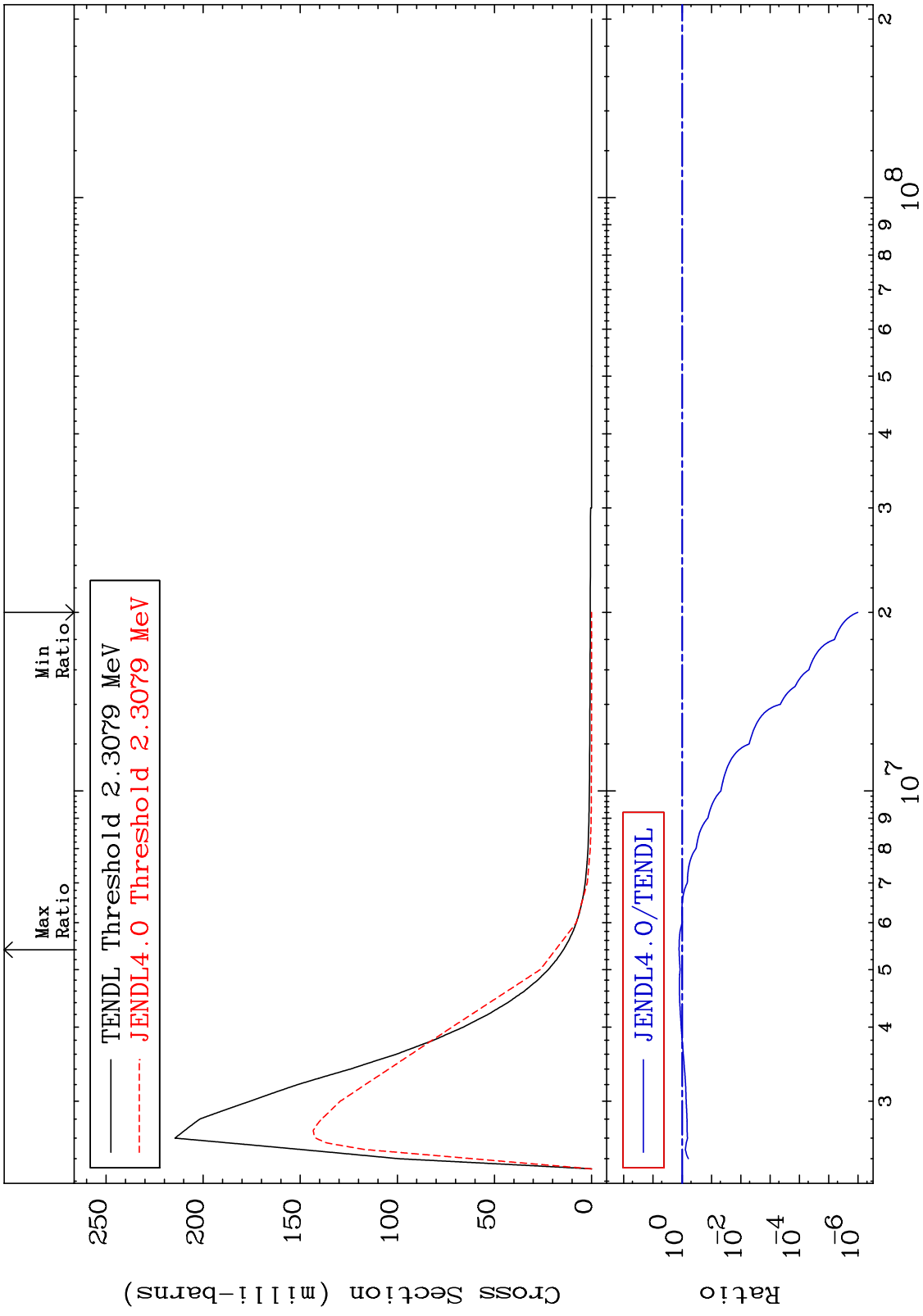
MAT 4425 MT= 54 (n,n') Level Cross Section 44-Ru-96
 -100.0 To -5.520%



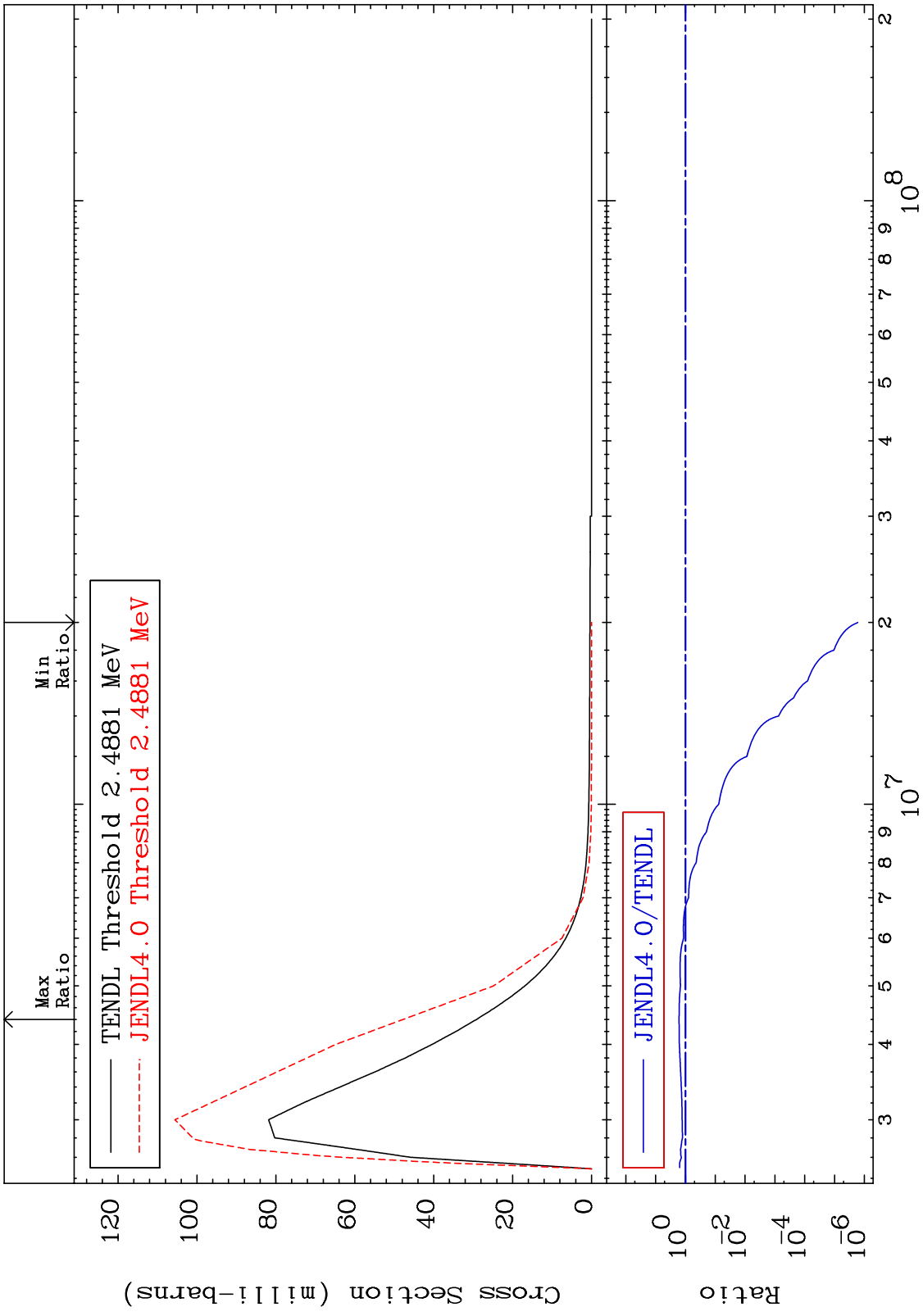
MAT 4425 MT= 55 (n,n') Level Cross Section -100.0 To 133.5 % 44-Ru-96



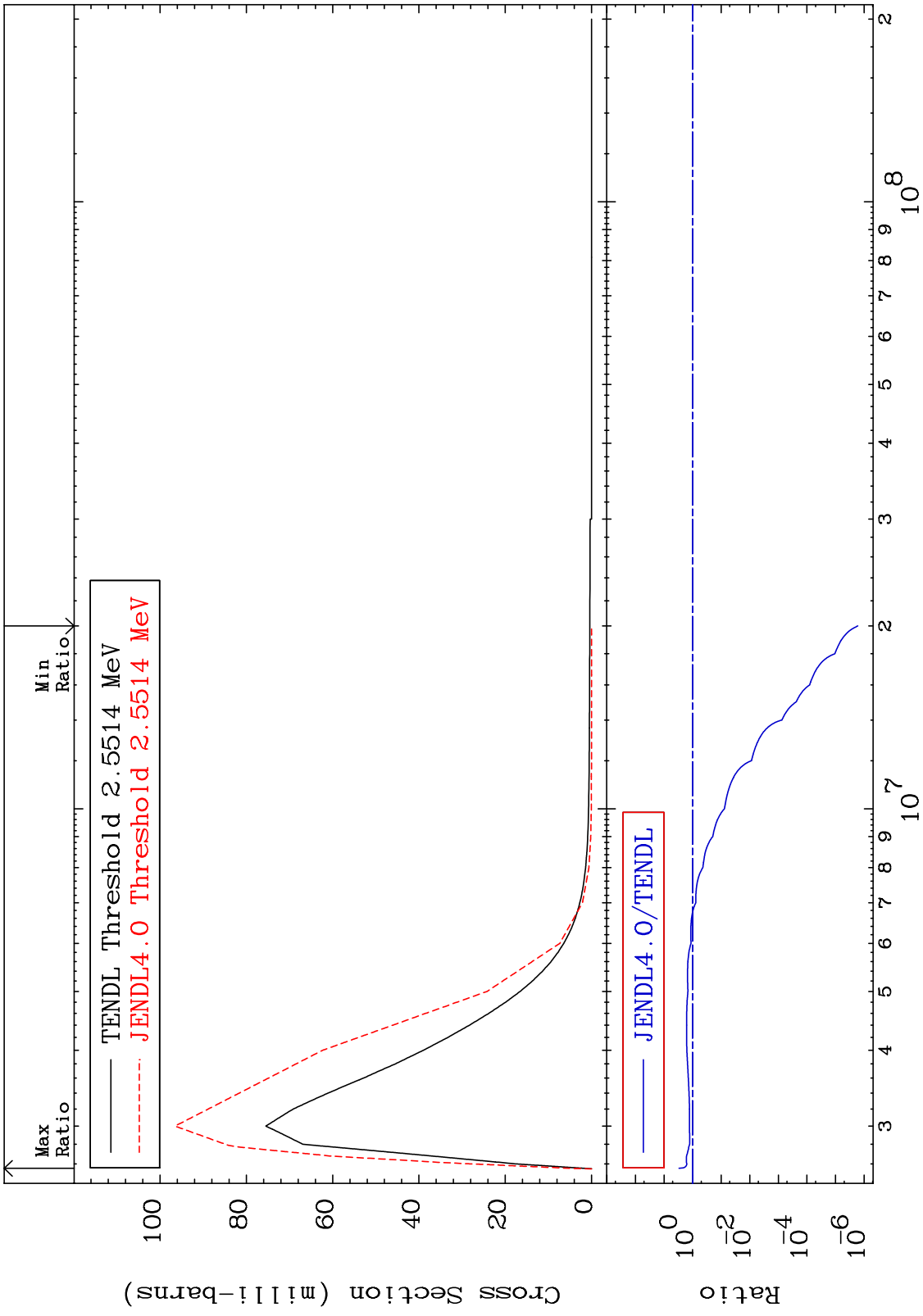
MAT 4425 MT= 56 (n,n') Level Cross Section -100.0 To 28.50 % 44-Ru-96



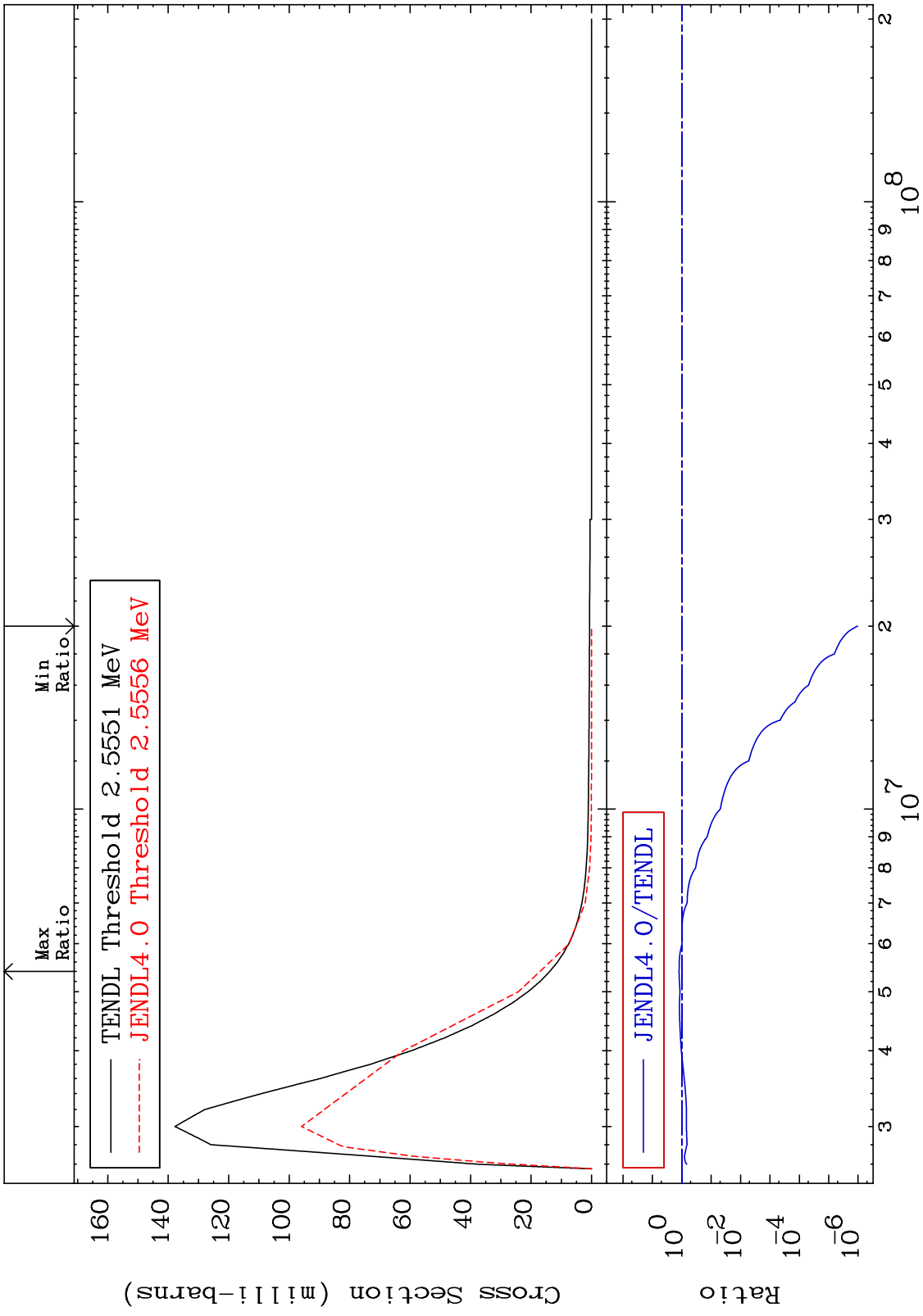
MAT 4425 MT= 57 (n,n') Level Cross Section 44-Ru-96
 -100.0 To 63.88 %



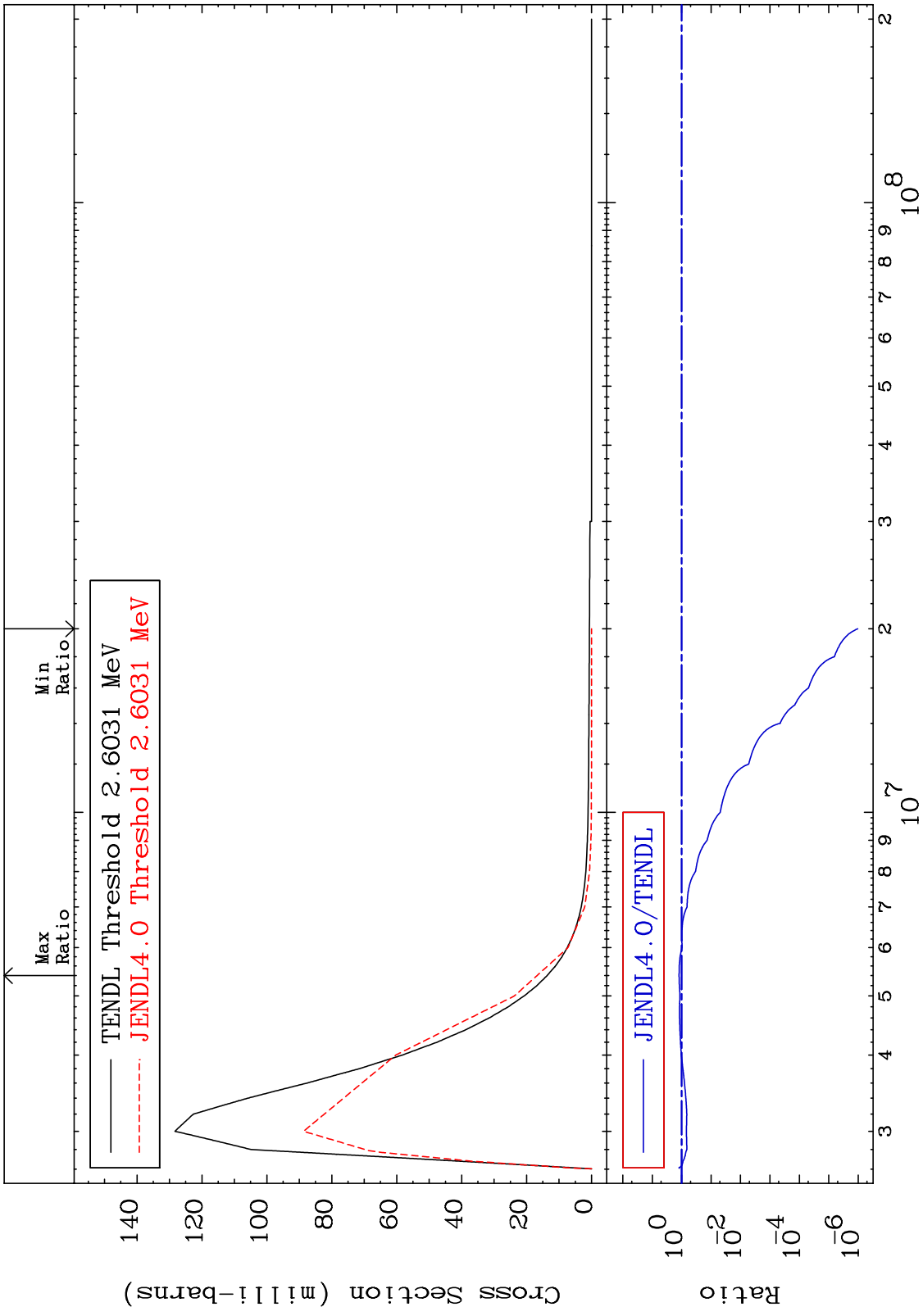
MAT 4425 MT= 58 (n,n') Level Cross Section -100.0 To 198.3 % 44-Ru-96



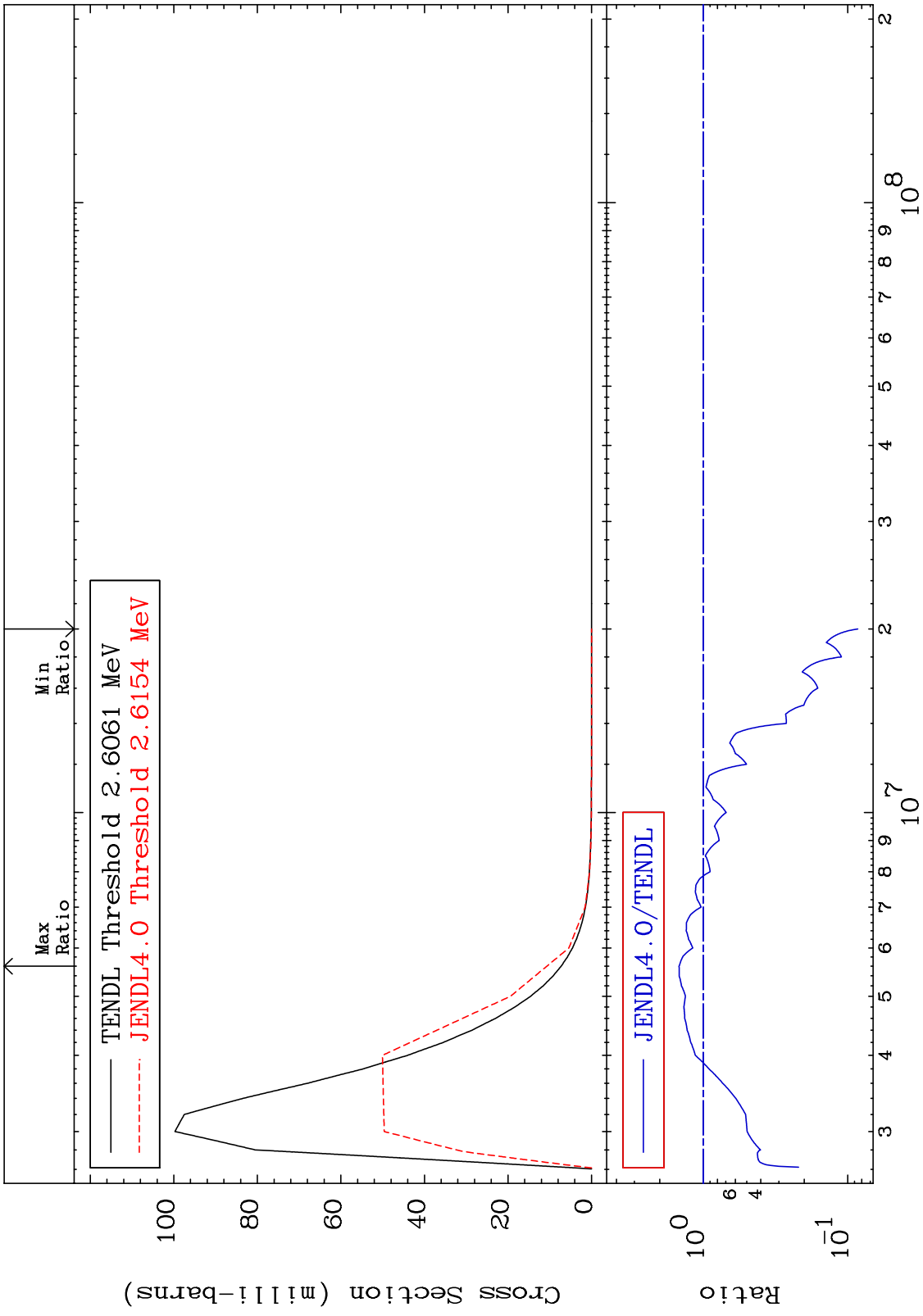
MAT 4425 MT= 59 (n,n') Level Cross Section -100.0 To 23.87 % 44-Ru-96



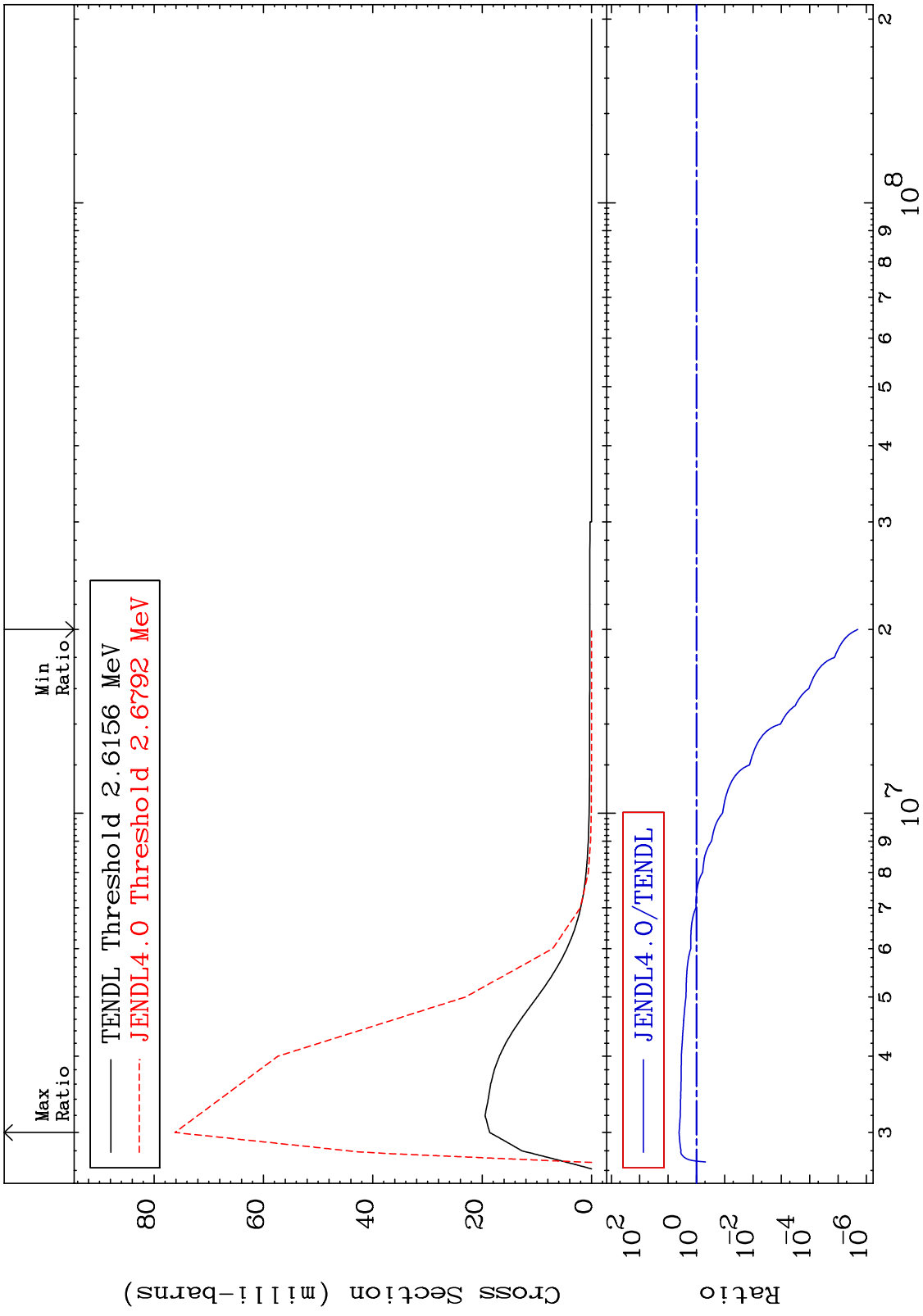
MAT 4425 MT= 60 (n,n') Level Cross Section -100.0 To 23.01 % 44-Ru-96



MAT 4425 MT= 61 (n,n') Level Cross Section -91.48 To 47.29 % 44-Ru-96



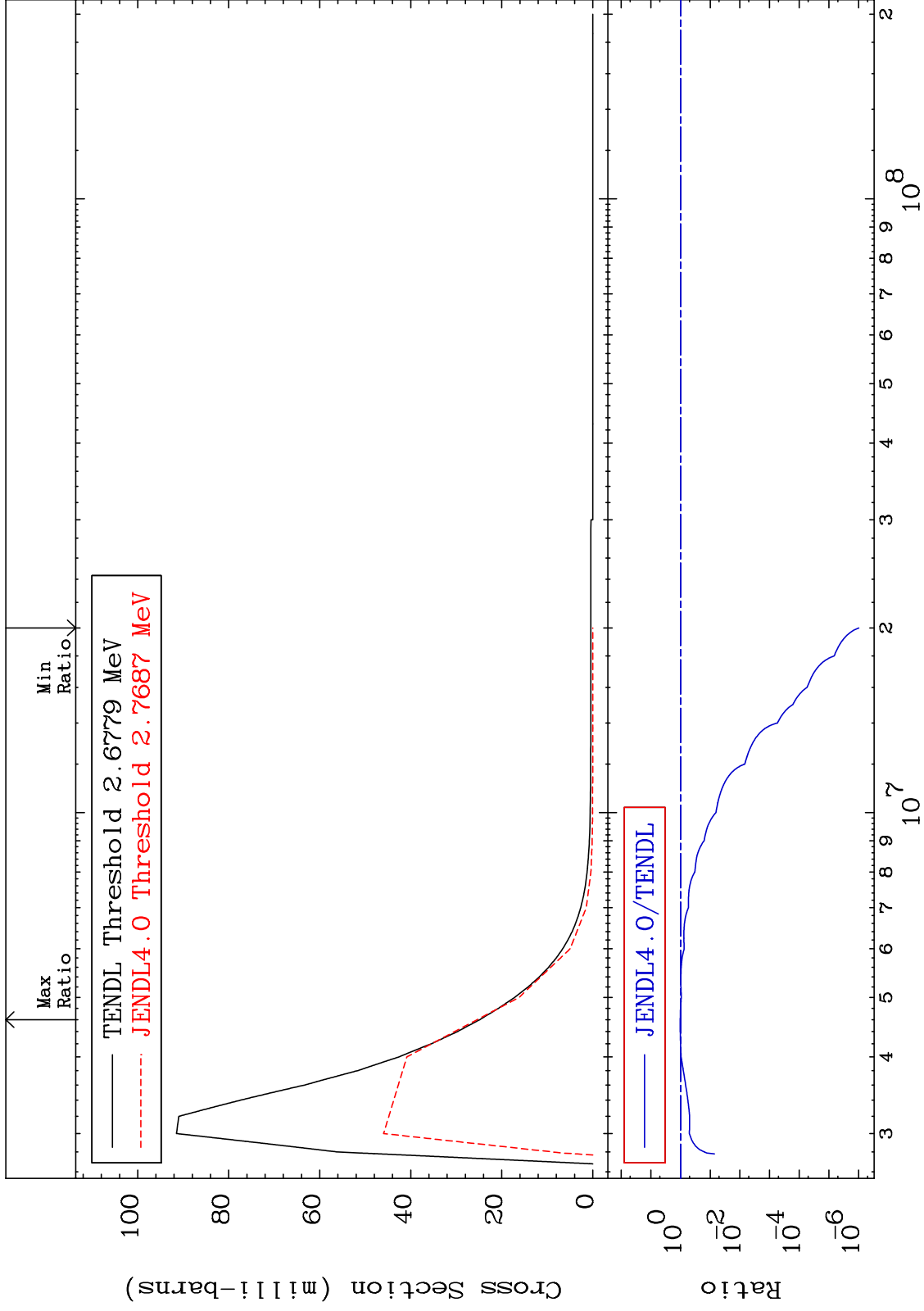
MAT 4425 MT= 62 (n,n') Level Cross Section -100.0 To 308.7 % 44-Ru-96



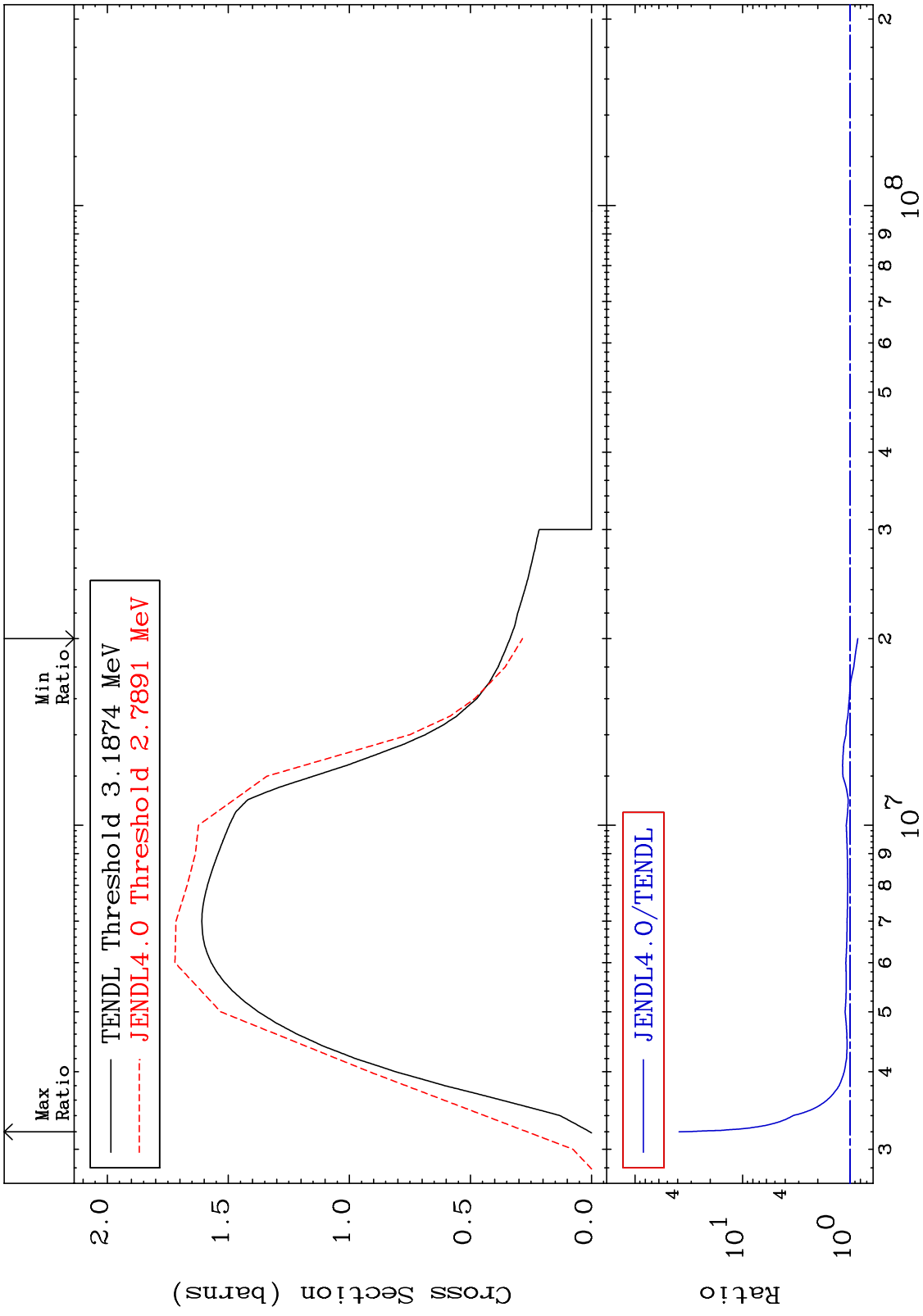
MAT 4425

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

44-Ru-96
-100.0 To 2.361 %



MAT 4425 (n, n') Continuum Cross Section -15.30 To 3792. % 44-Ru-96



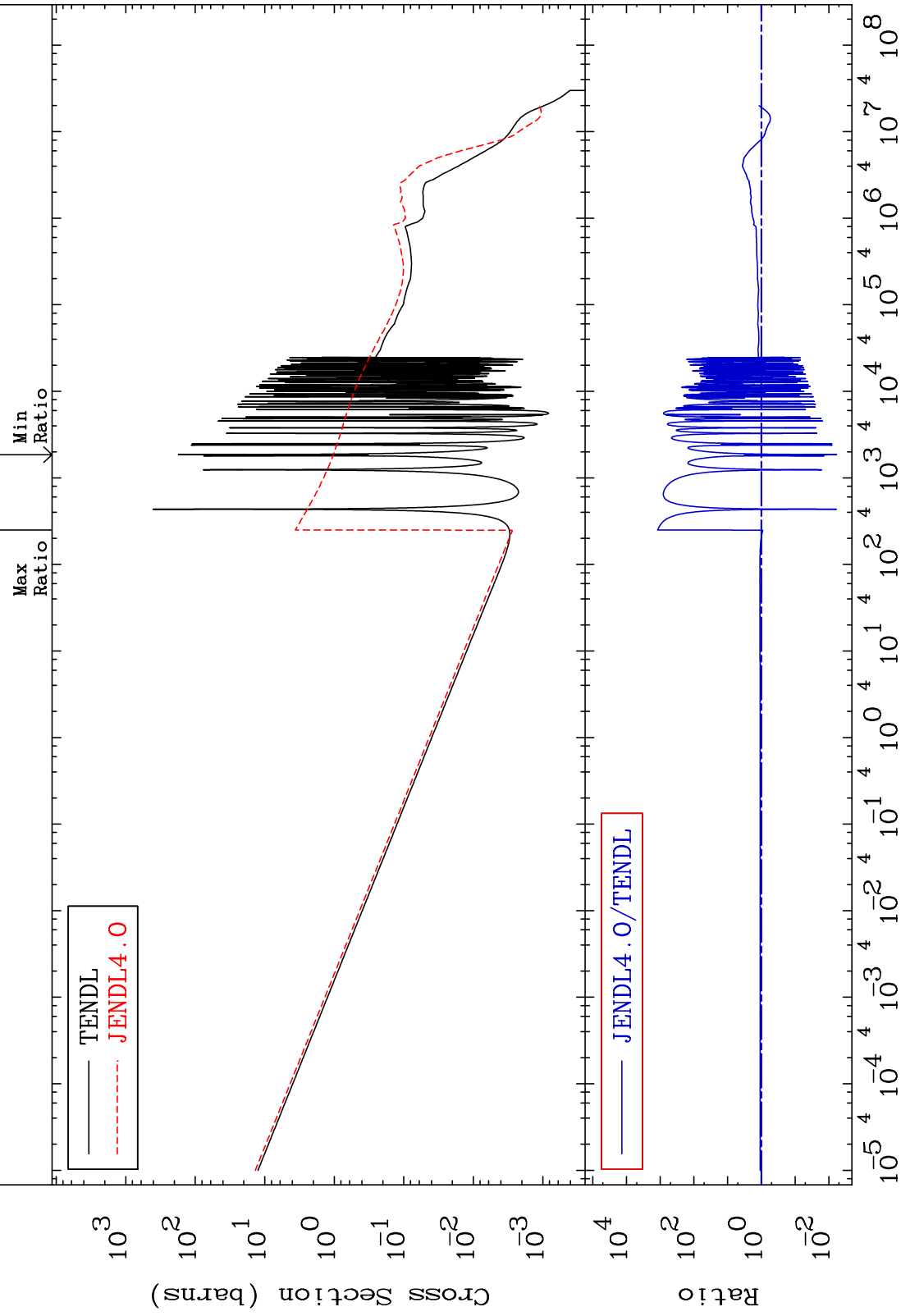
MAT 4425

(n, γ)

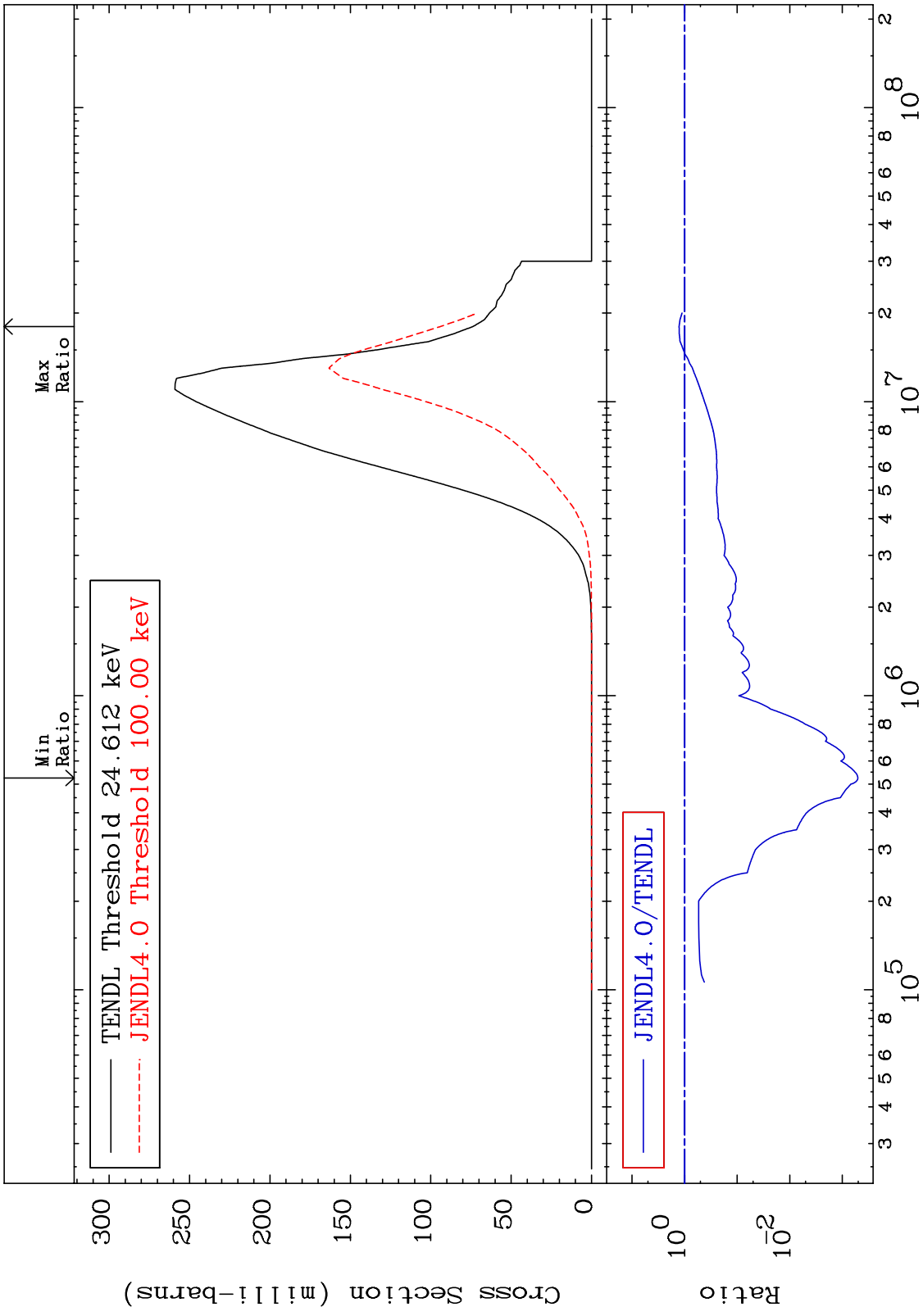
44-Ru-96

-99.41 To 9999. %

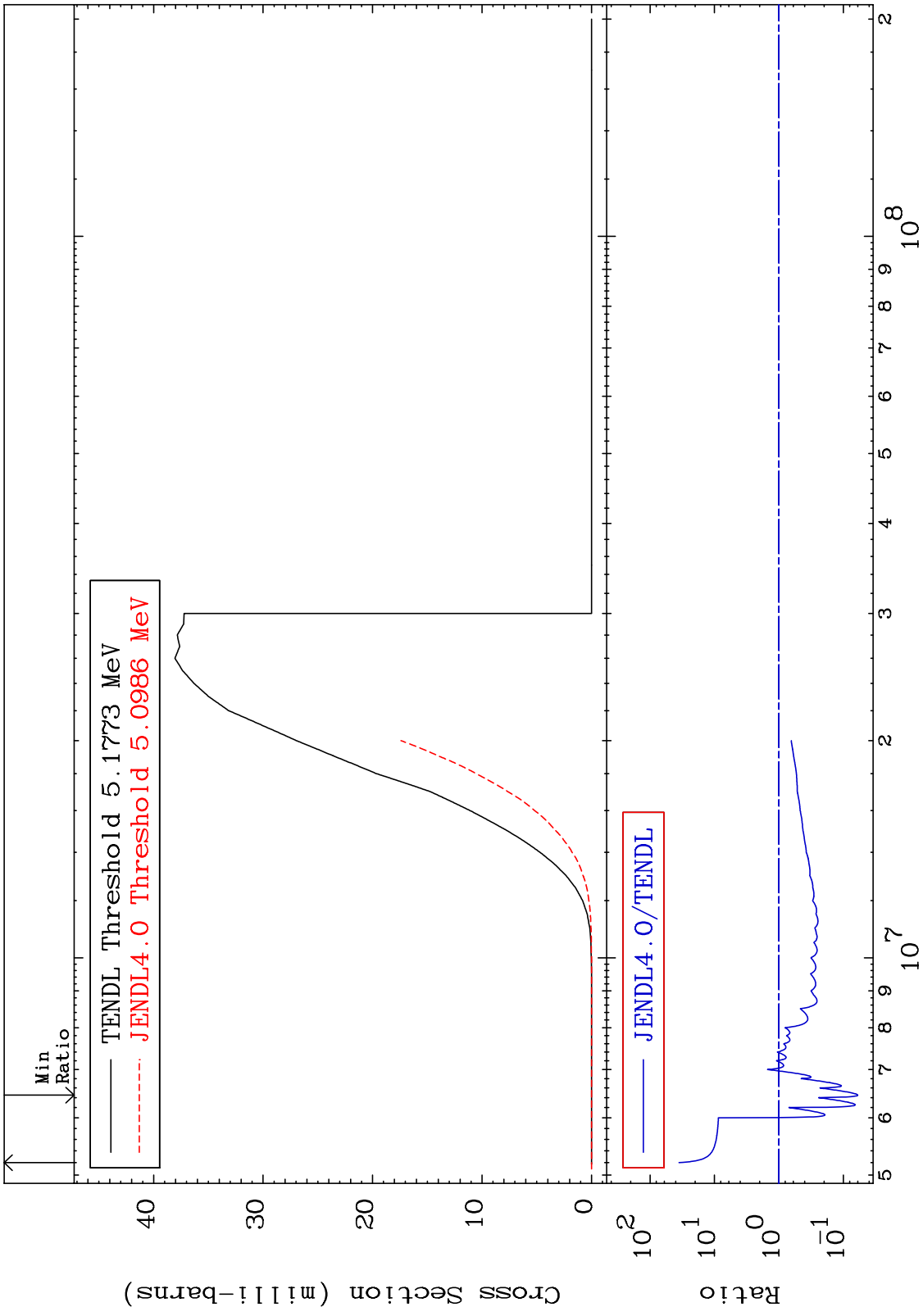
Cross Section

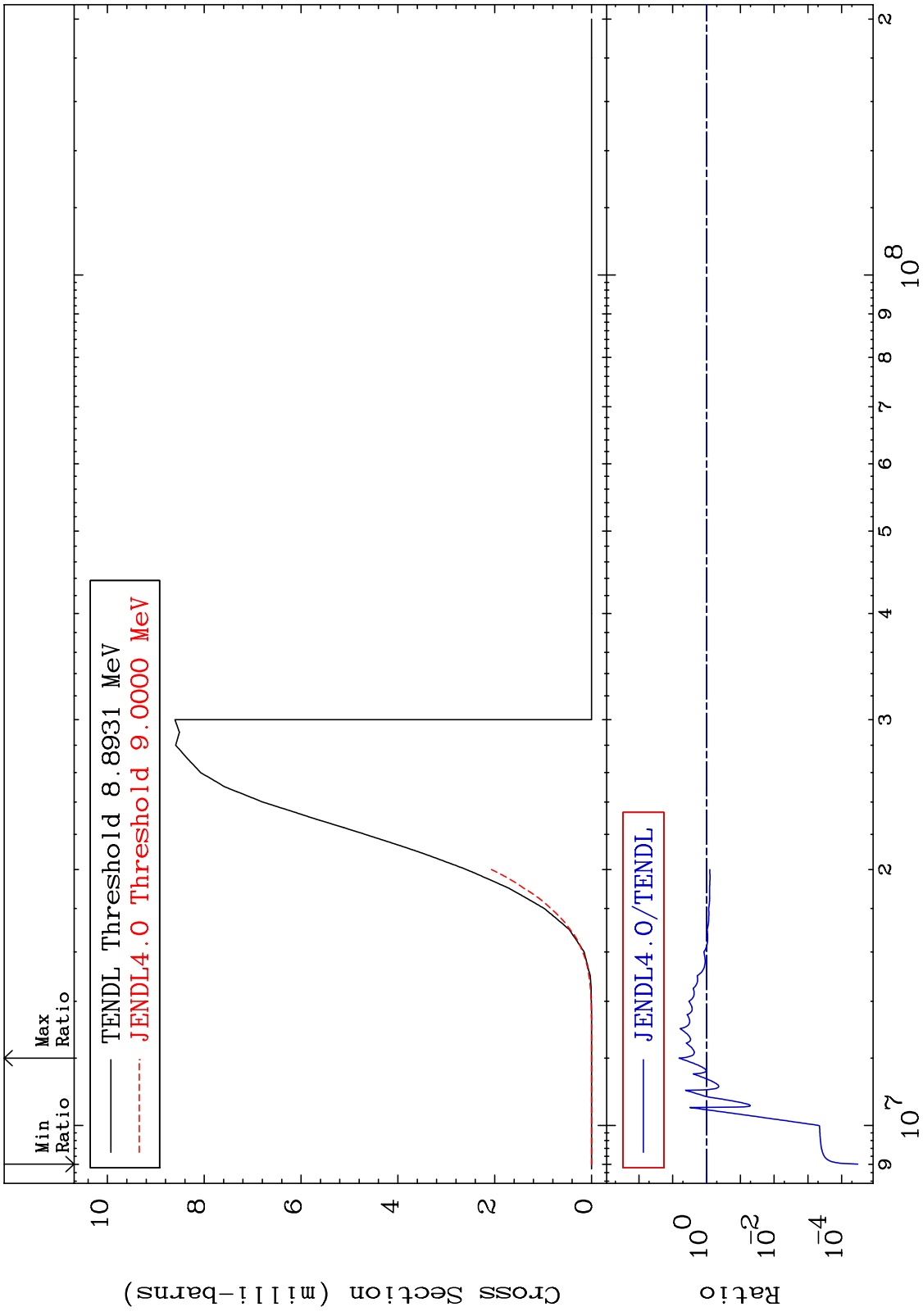


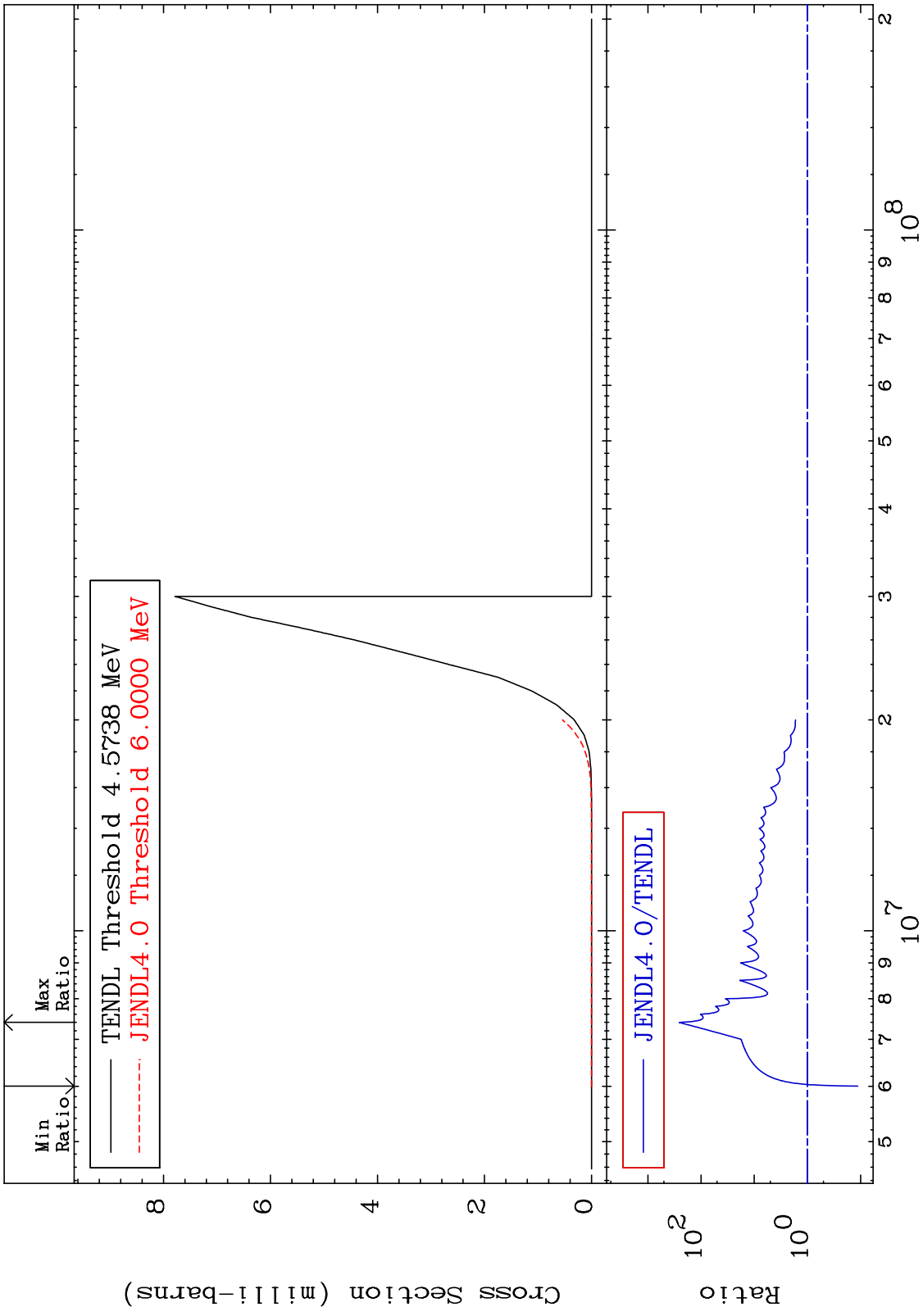
MAT 4425 (n,p) Cross Section 44-Ru-96 -99.95 To 27.65 %



44-Ru-96







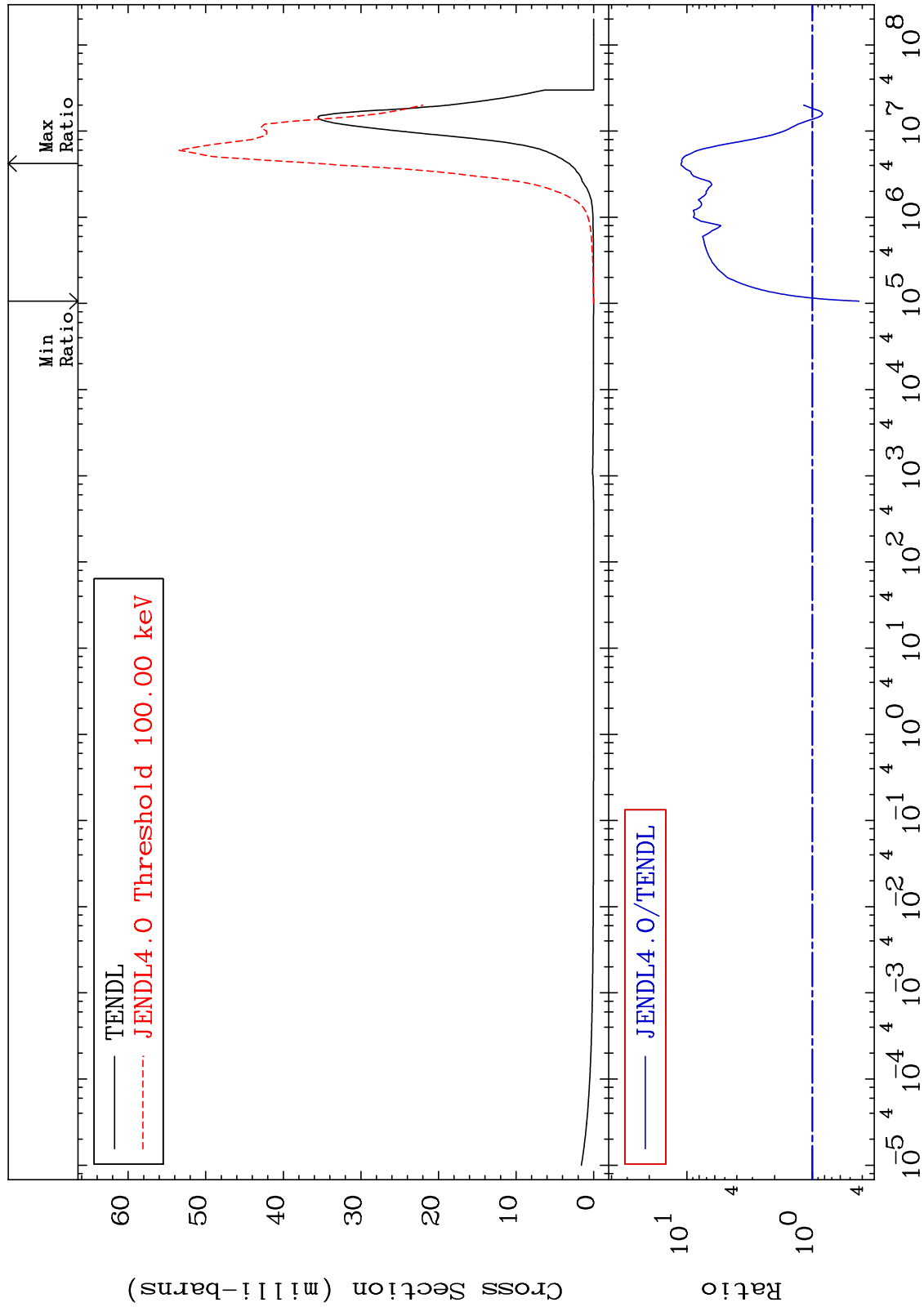
MAT 4425

(n, α)

44-Ru-96

Cross Section

-57.55 To 1019. %



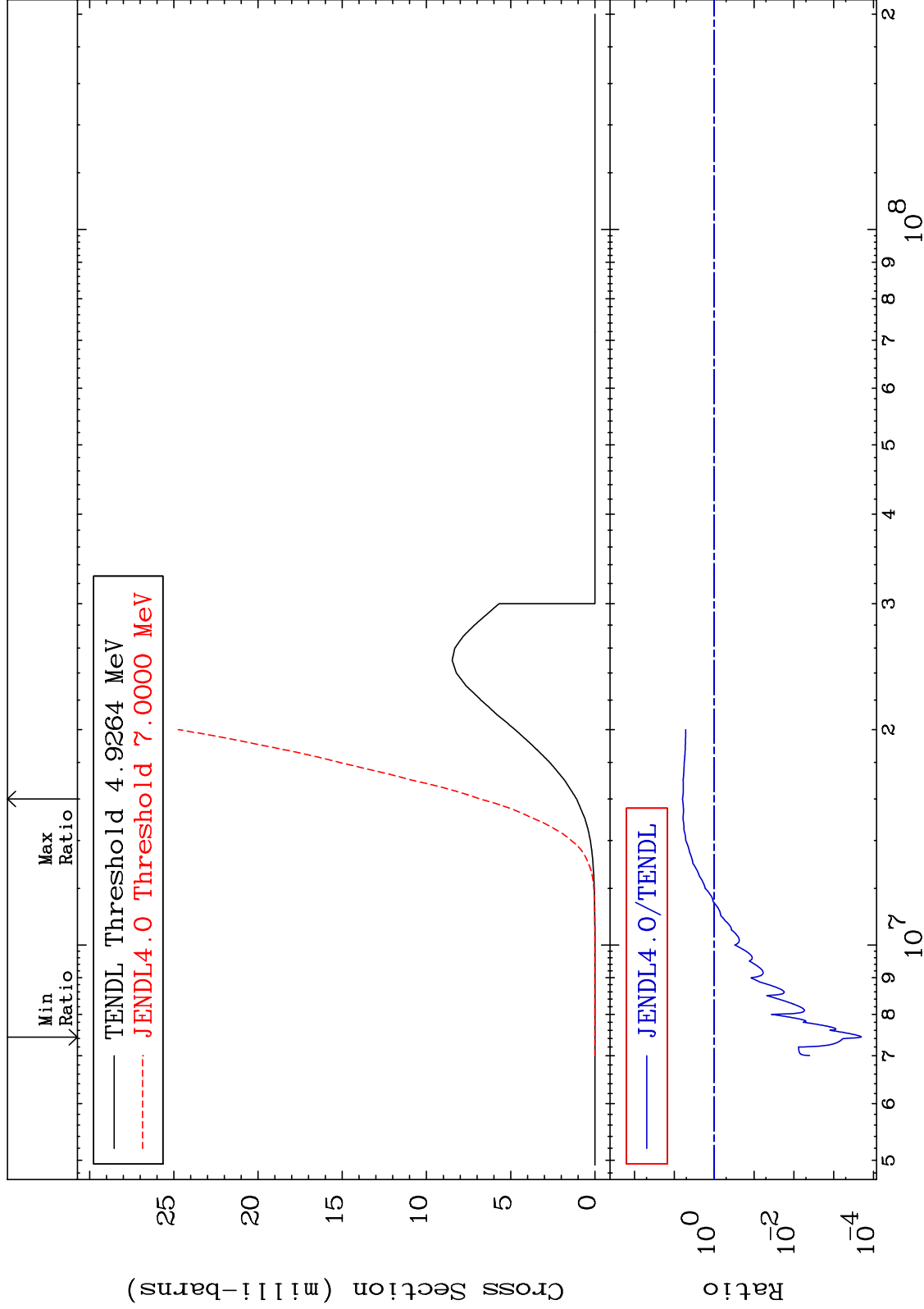
MAT 4425

(n,2p)

44-Ru-96

Cross Section

-99.98 To 526.1 %



28

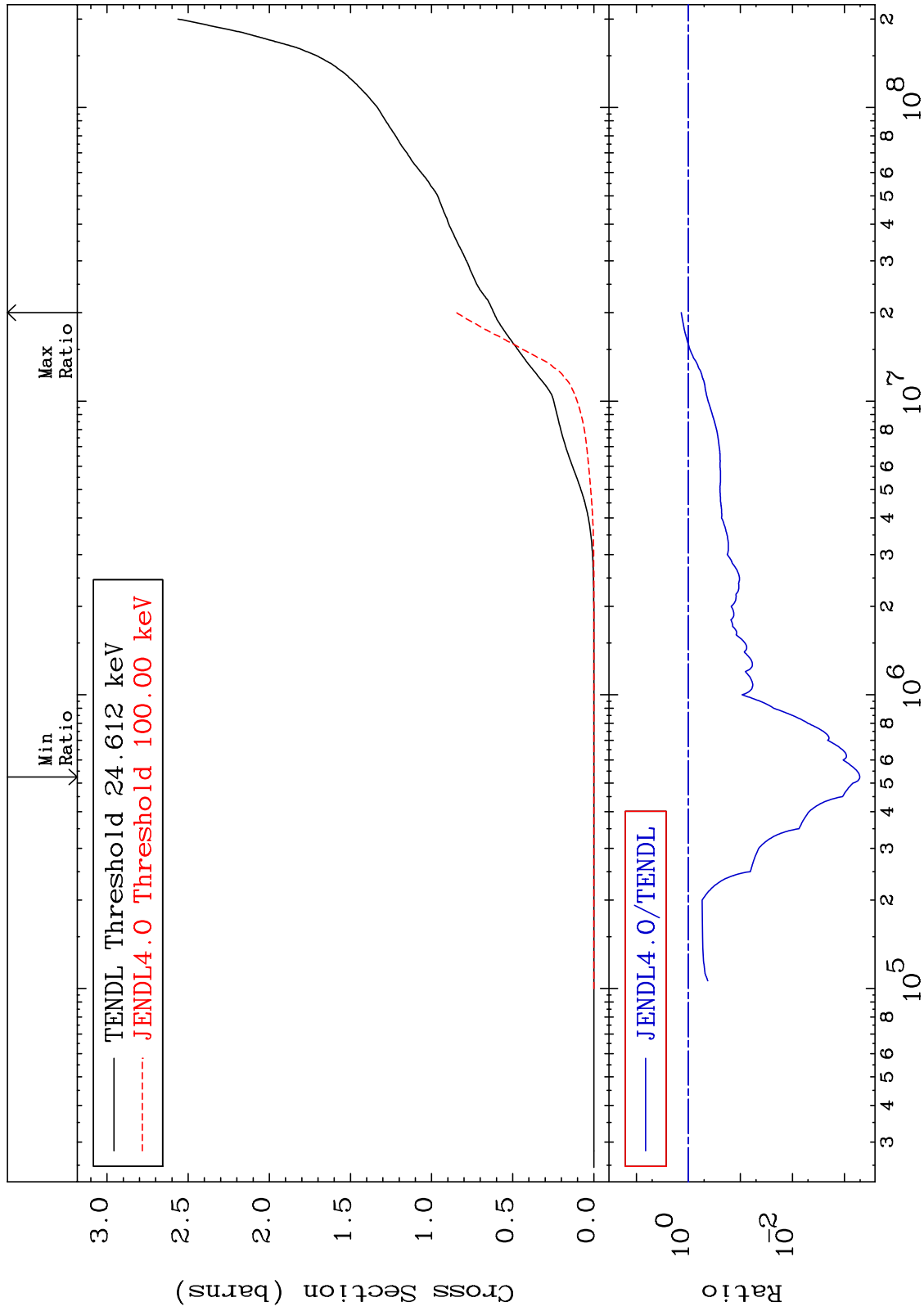
Incident Energy (eV)

44-Ru-96

MAT 4425

Hydrogen Production
Cross Section

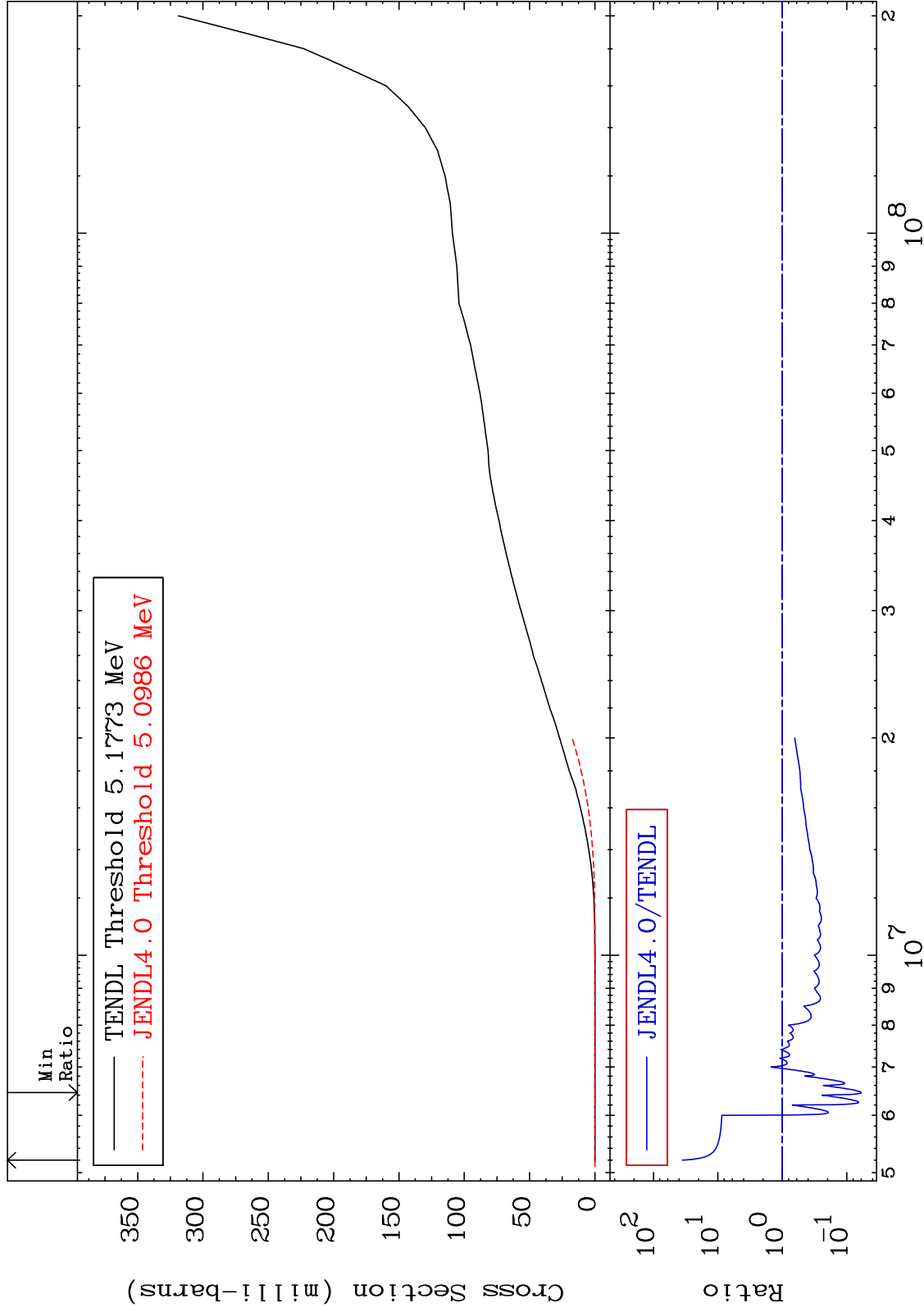
44-Ru-96
-99.95 To 37.24 %



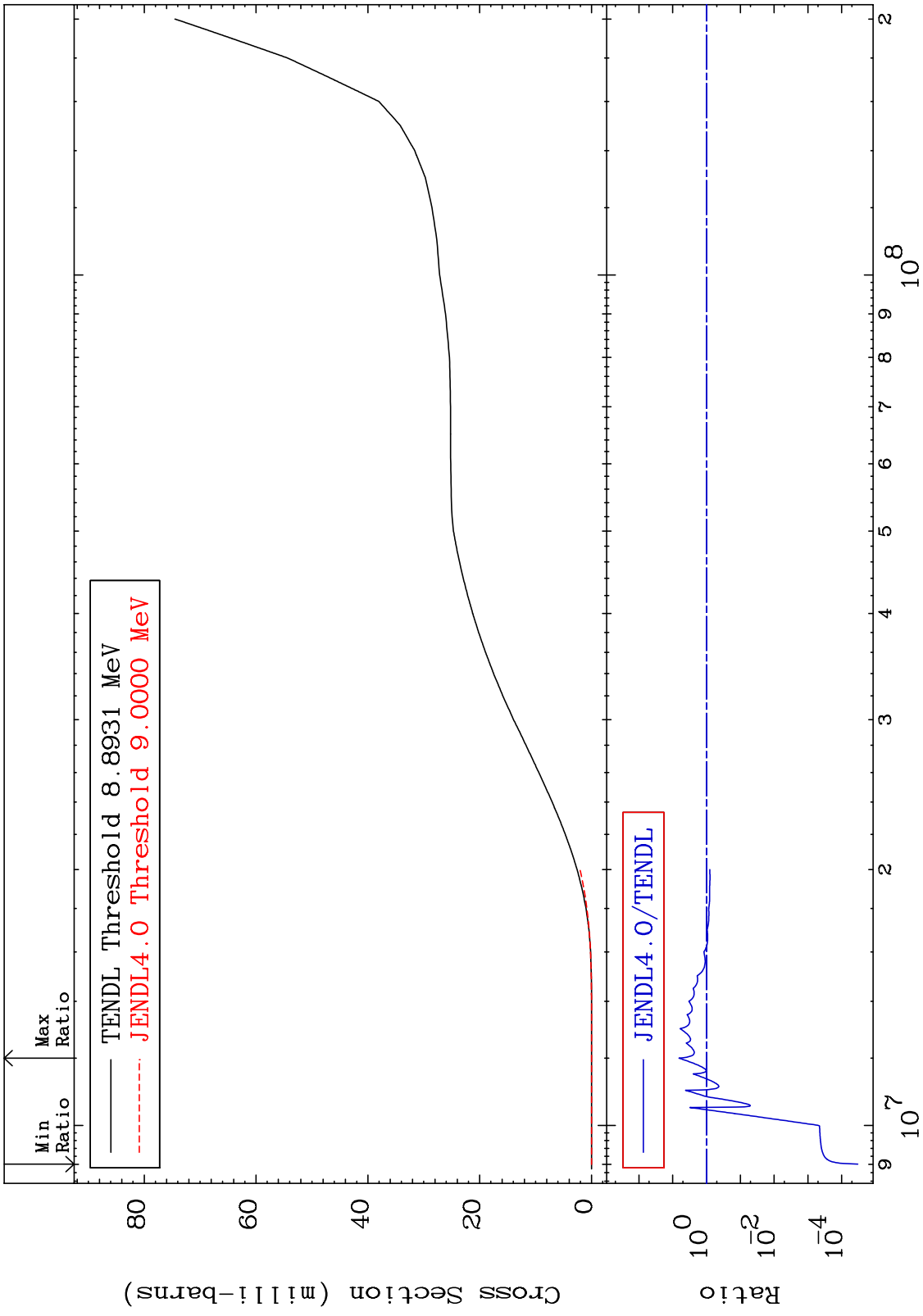
MAT 4425

Deuterium Production
Cross Section

44-Ru-96
-94.02 To 3447. %



MAT 4425 Tritium Production Cross Section 44-Ru-96 -100.0 To 550.8 %

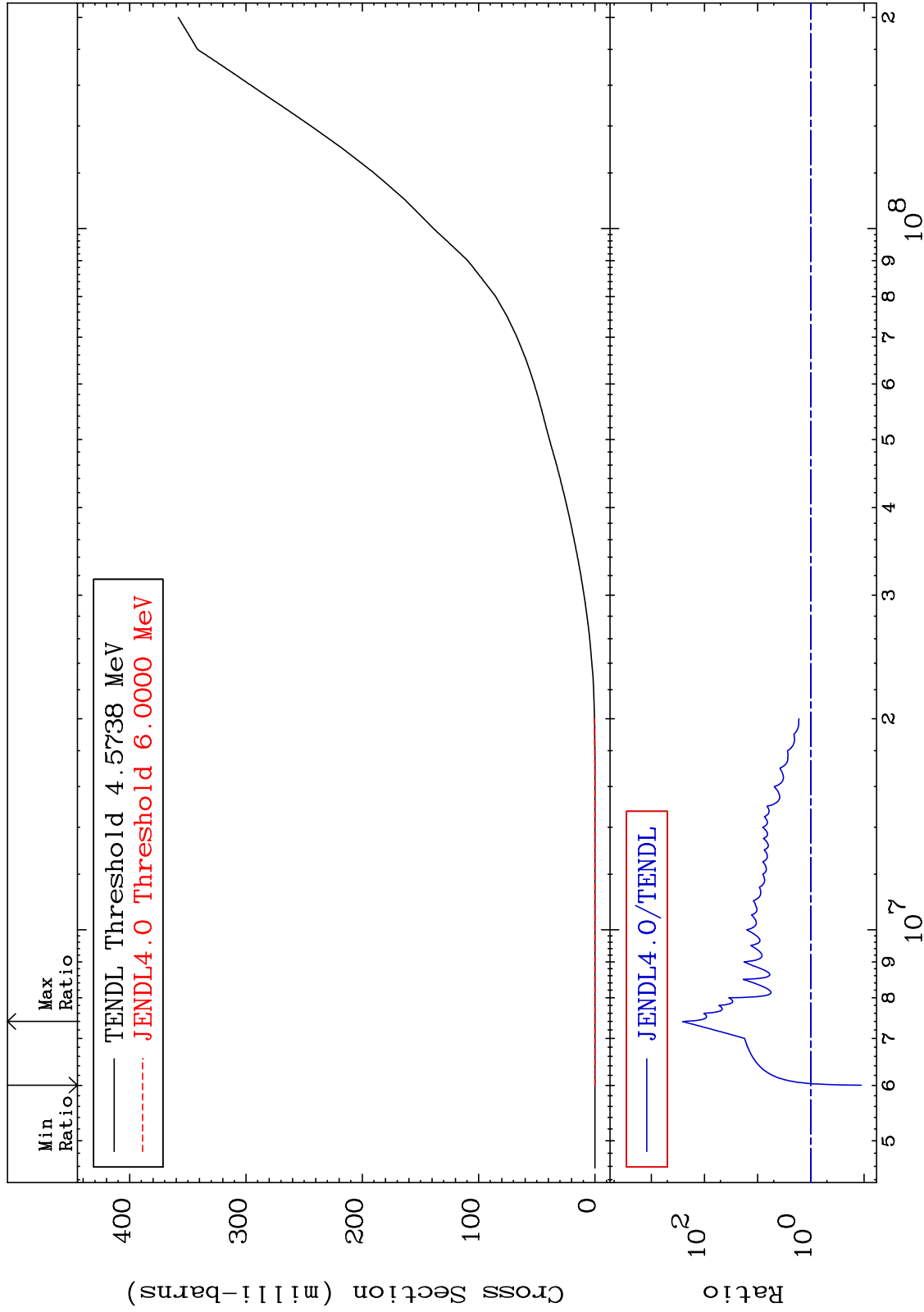


31 44-Ru-96 Incident Energy (eV)

MAT 4425

He-3 Production
Cross Section

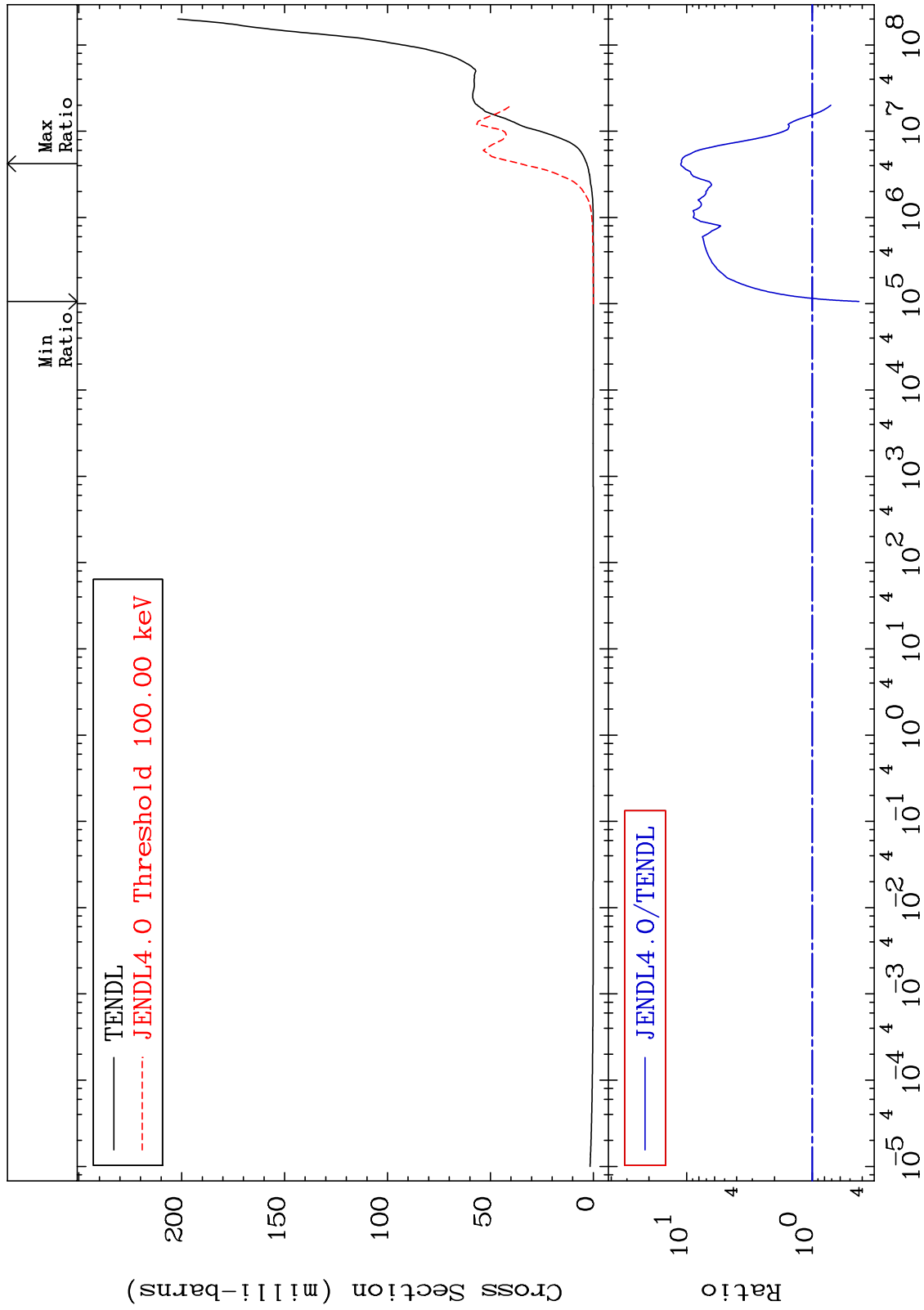
44-Ru-96
-88.76 To 9999. %



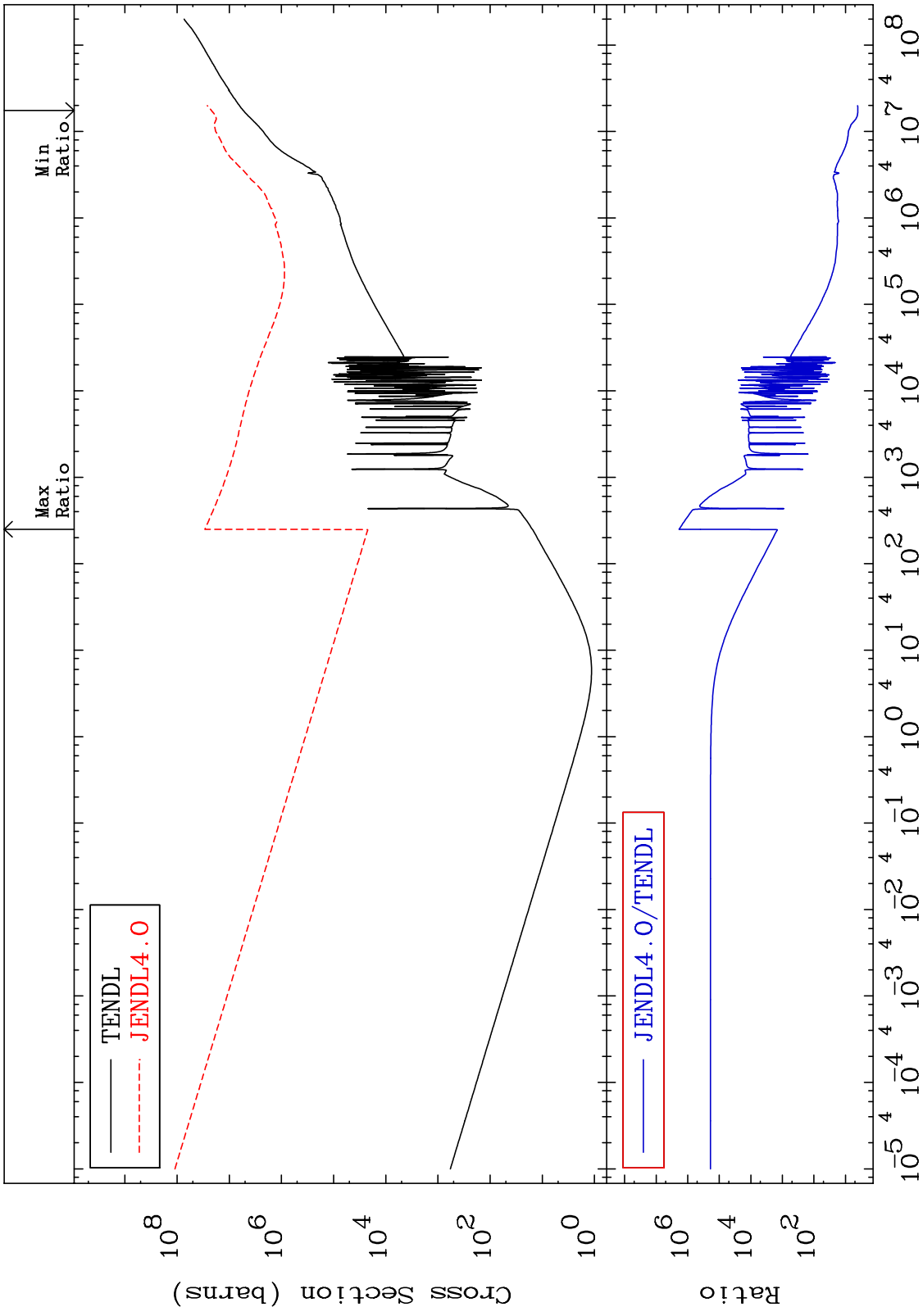
MAT 4425

He-4 Production
Cross Section

44-Ru-96
-57.55 To 1019. %



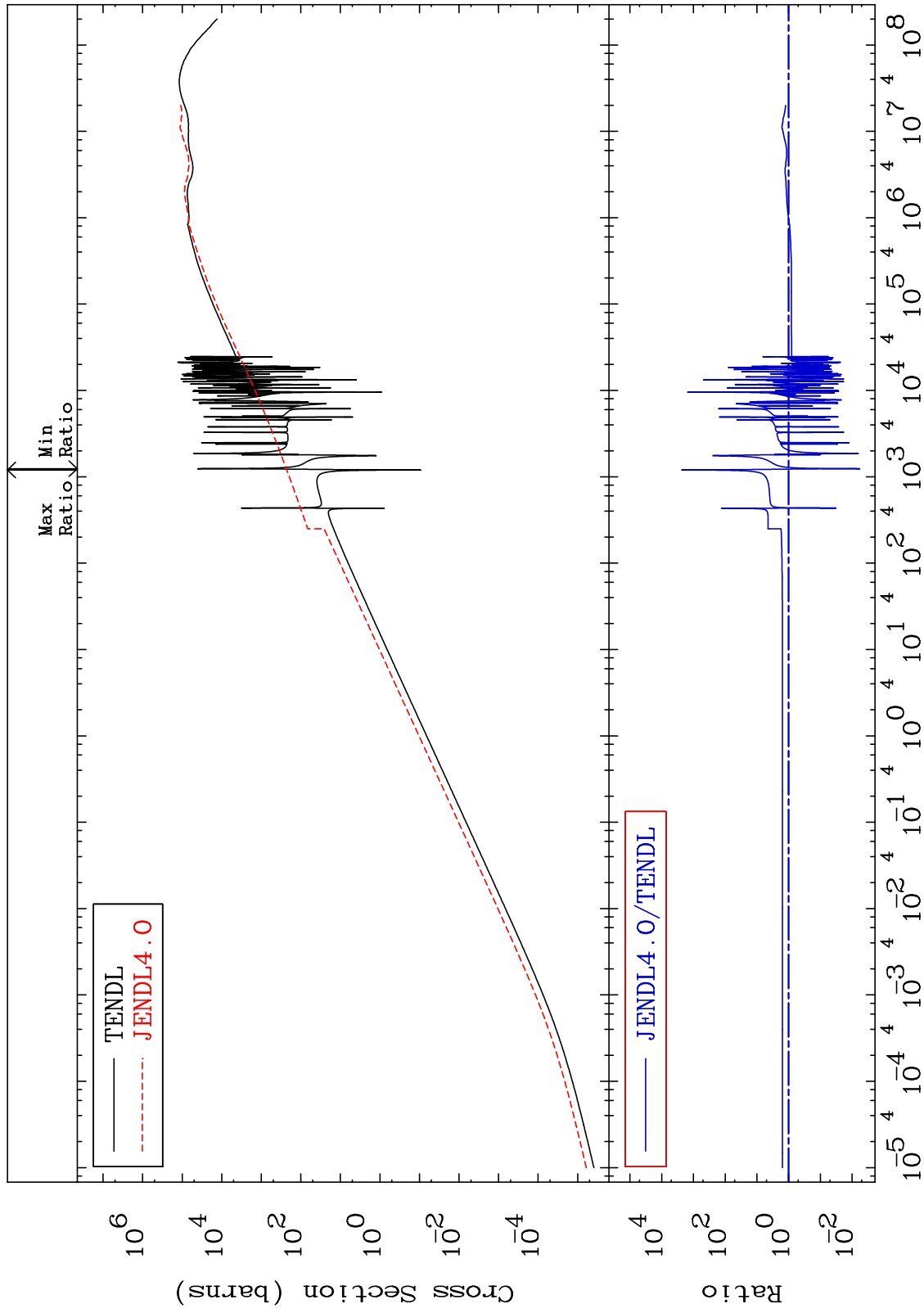
MAT 4425 Kerma total (eV-barns) Cross Section 44-Ru-96 306.9 To 9999. %



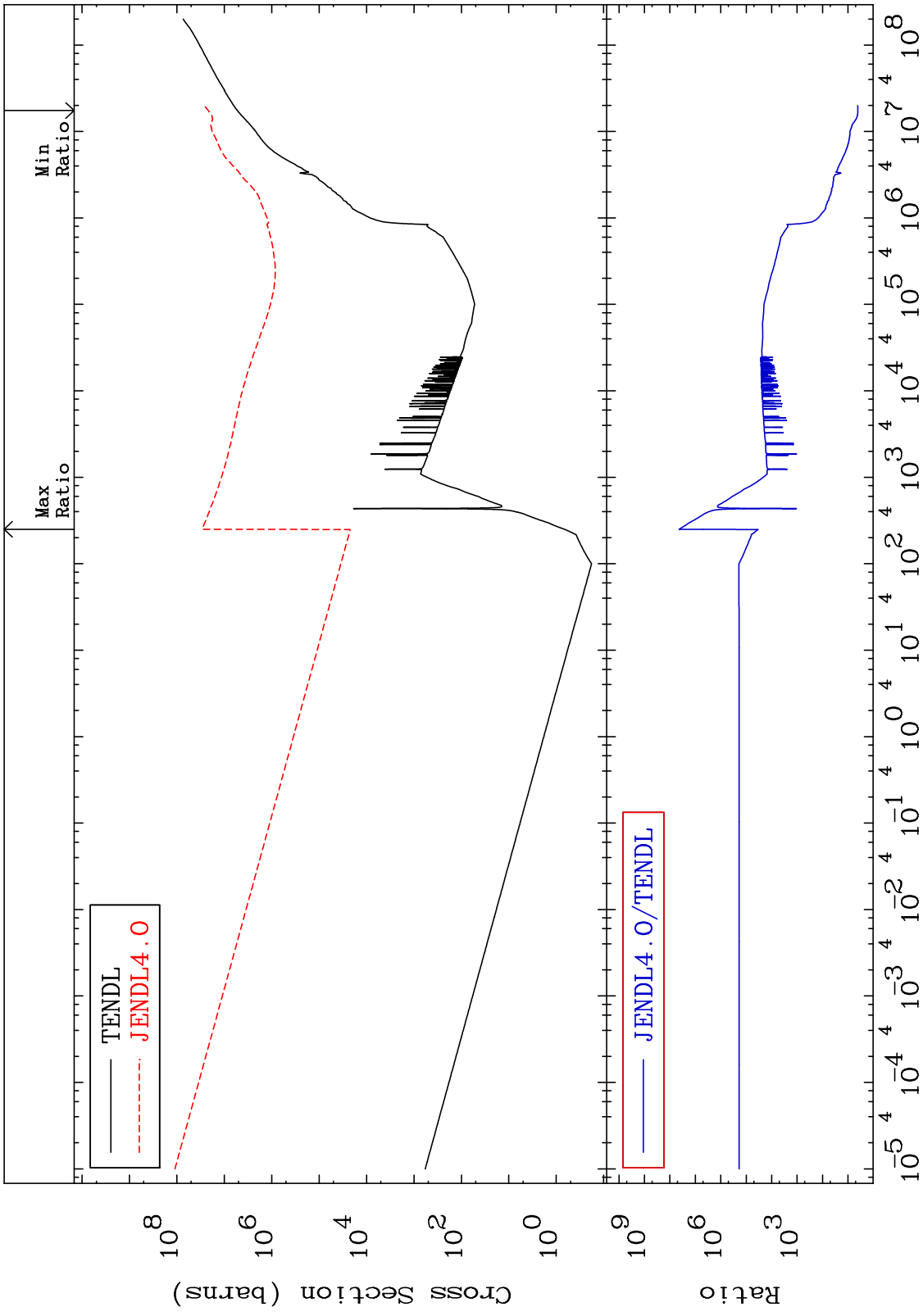
MAT 4425

Kerma elastic
Cross Section

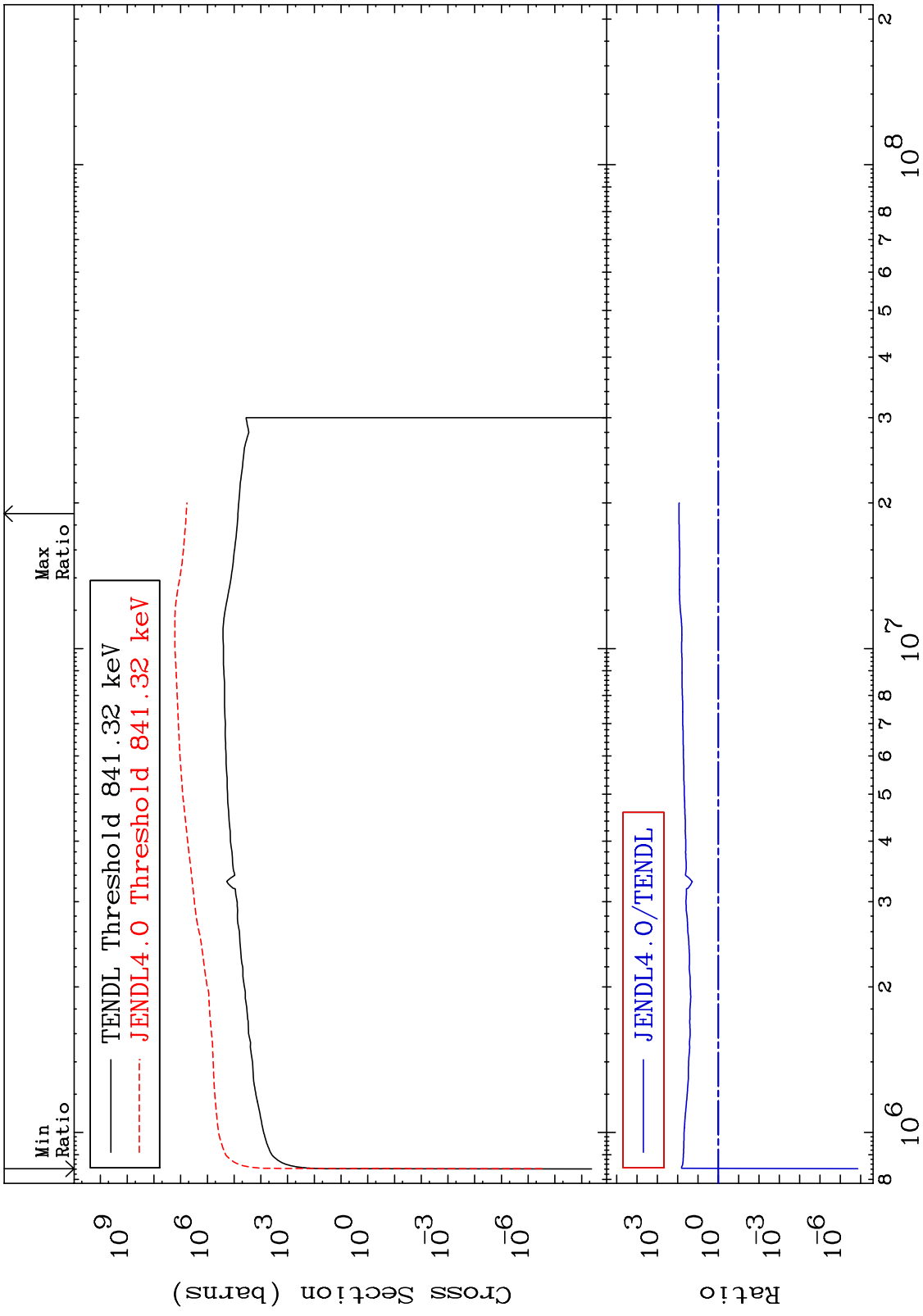
44-Ru-96
-99.43 To 9999. %



MAT 4425 Kerma non-elastic (all but mt2) 44-Ru-96
 Cross Section 311.0 To 9999. %



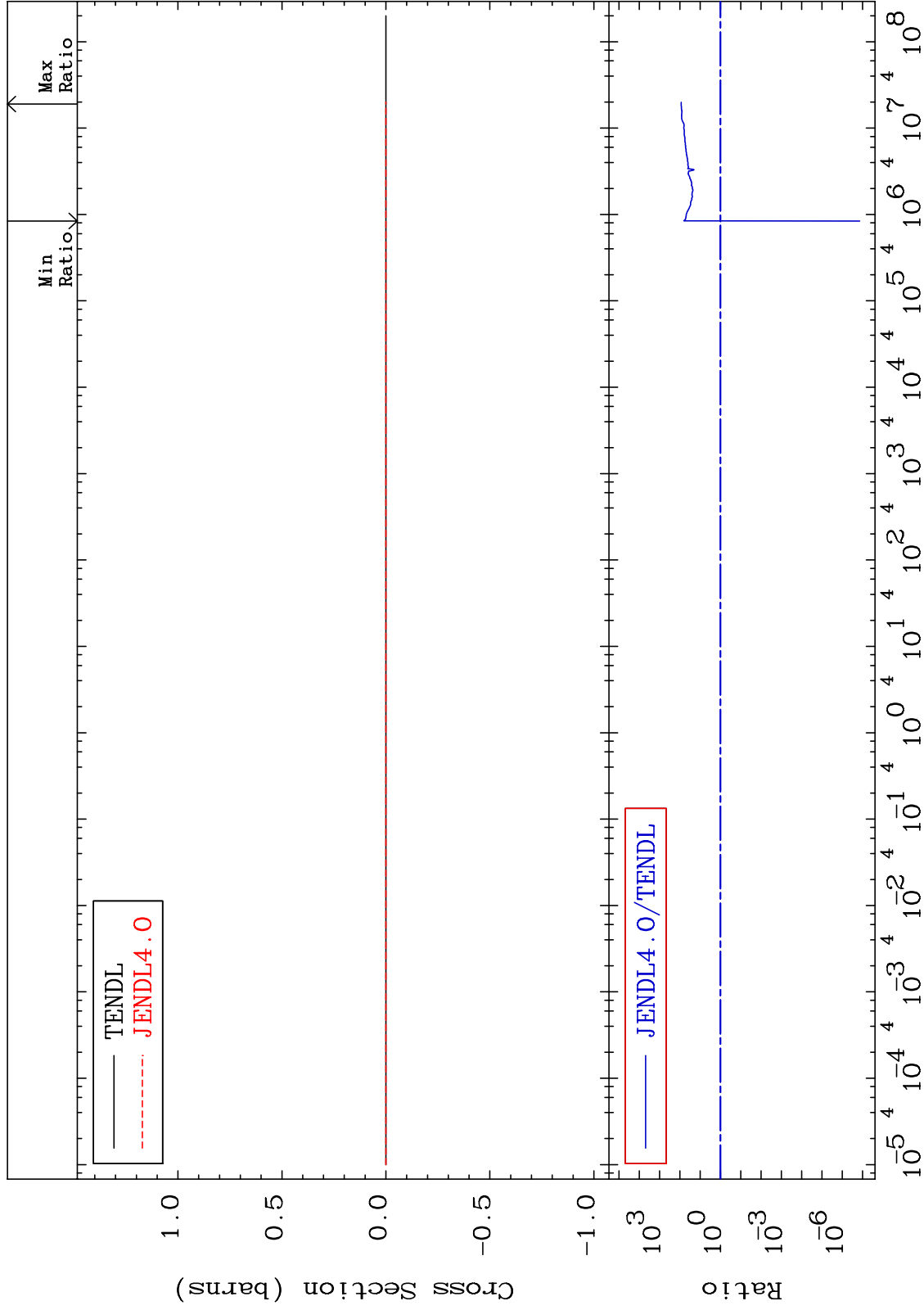
MAT 4425 Kerma inelastic (mt51-91) 44-Ru-96
 -100.0 To 8527. %



MAT 4425

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

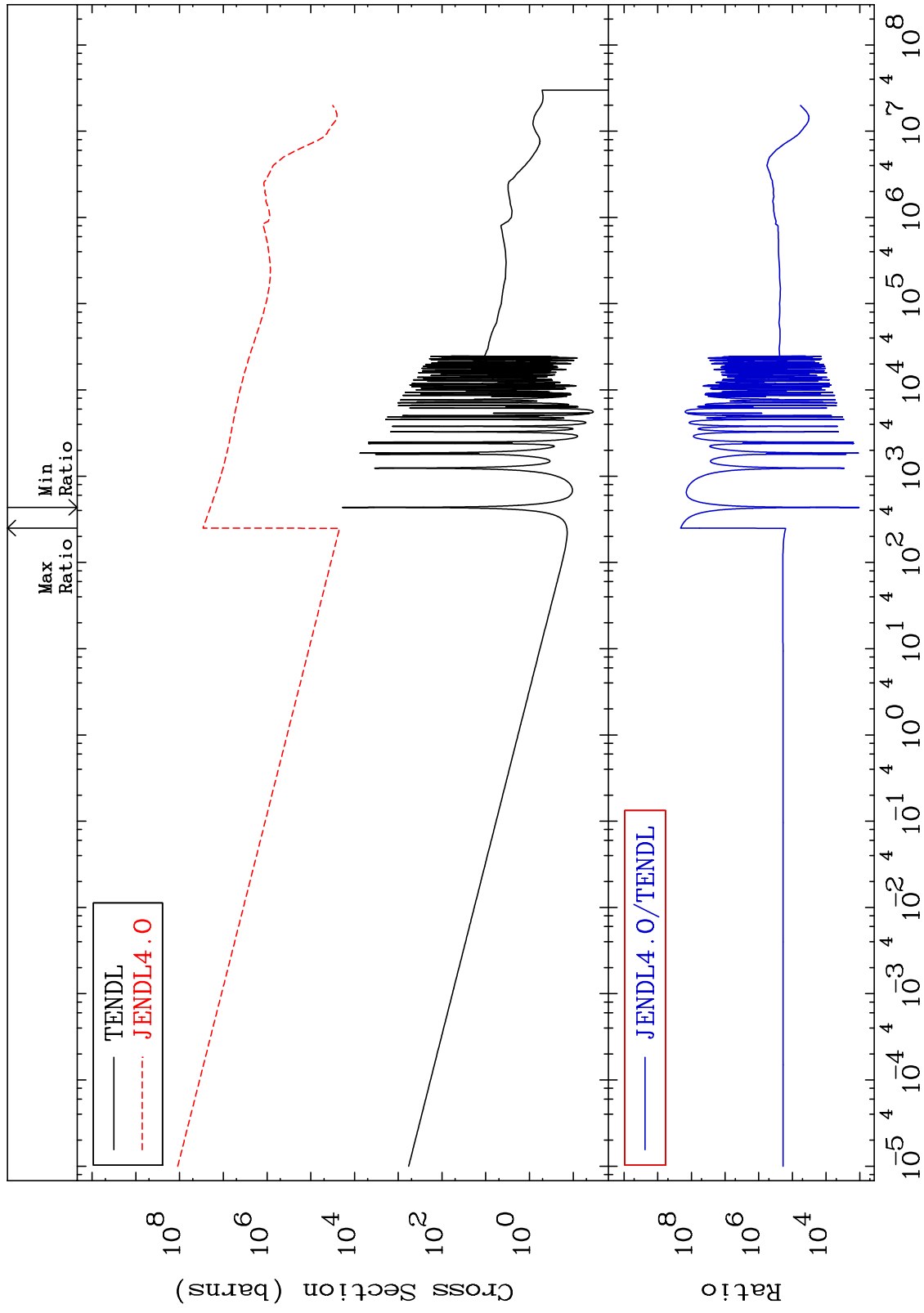
44-Ru-96
-100.0 To 8527. %



MAT 4425

Kerma capture (mt102)
Cross Section

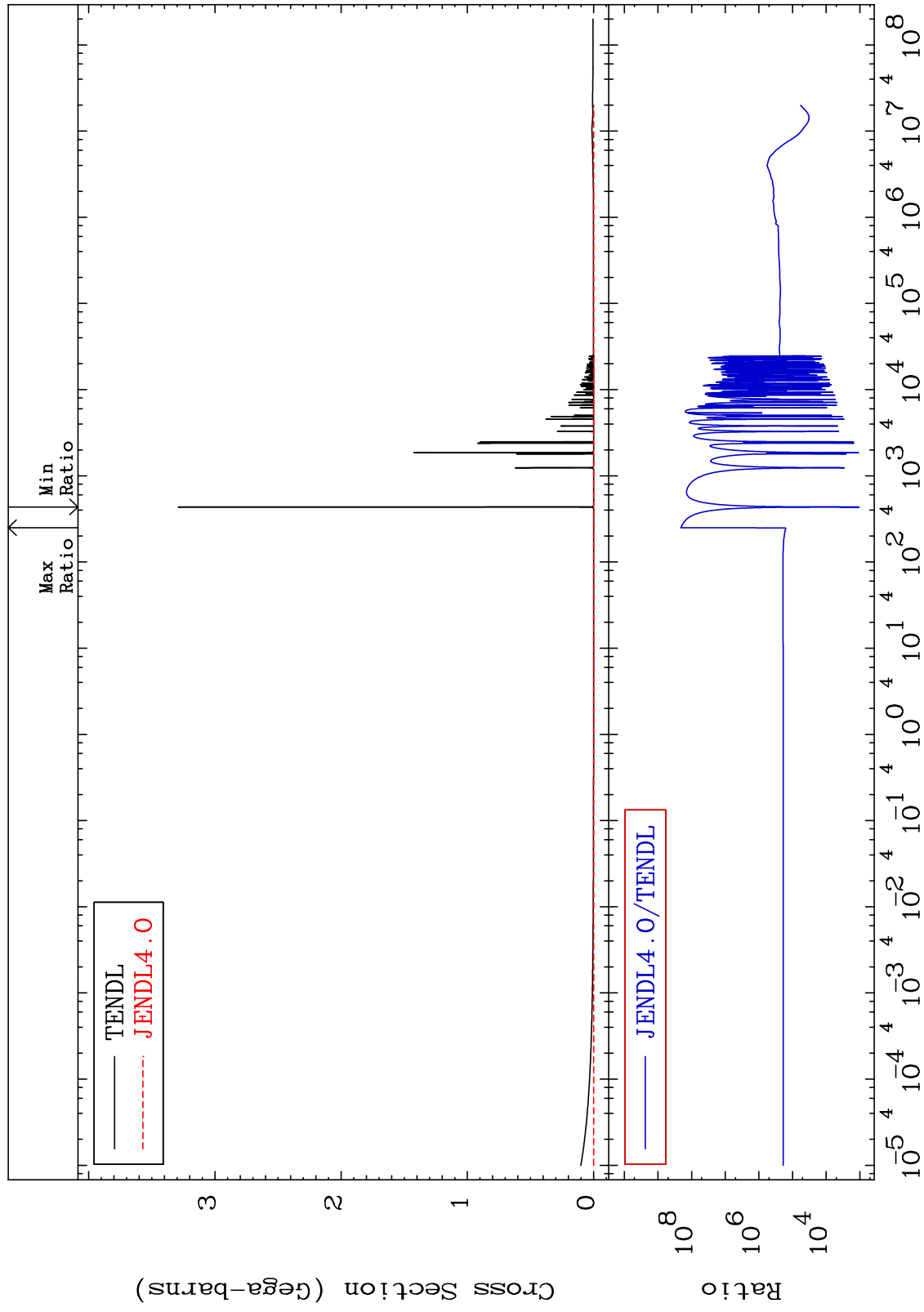
44-Ru-96
9999. To 9999. %



MAT 4425

Total photon (eV-barns)
Cross Section

44-Ru-96
9999. To 9999. %

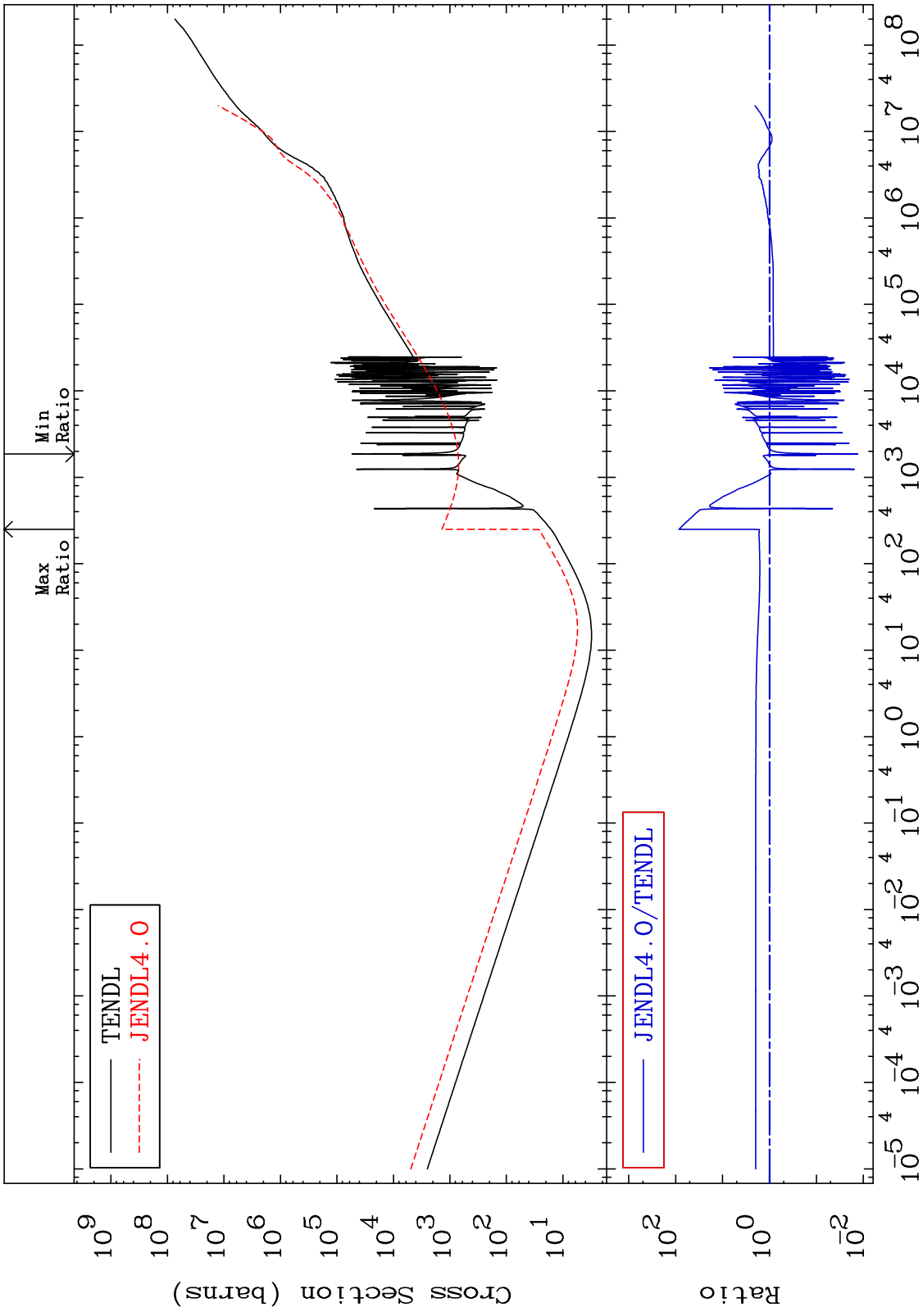


40

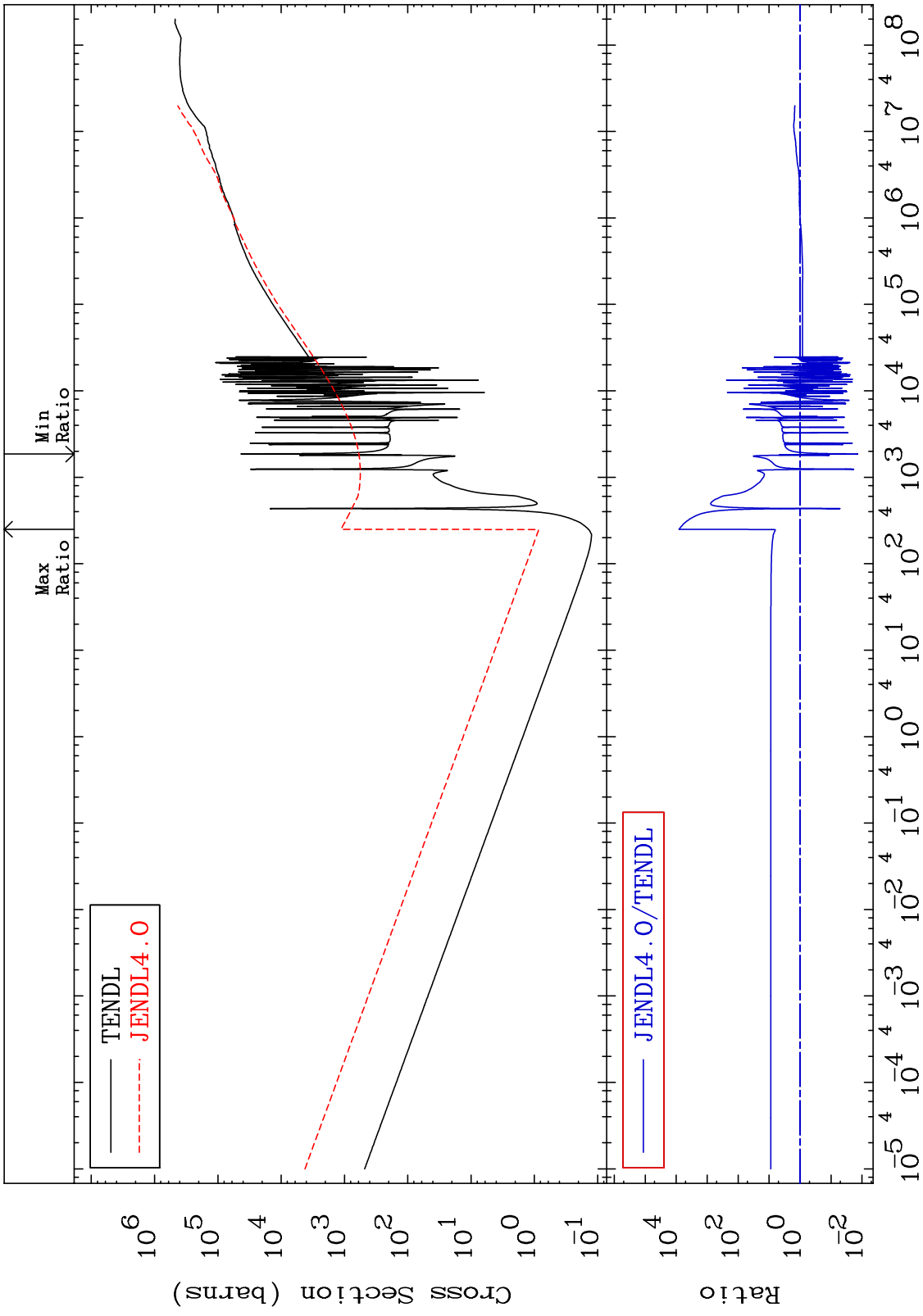
Incident Energy (eV)

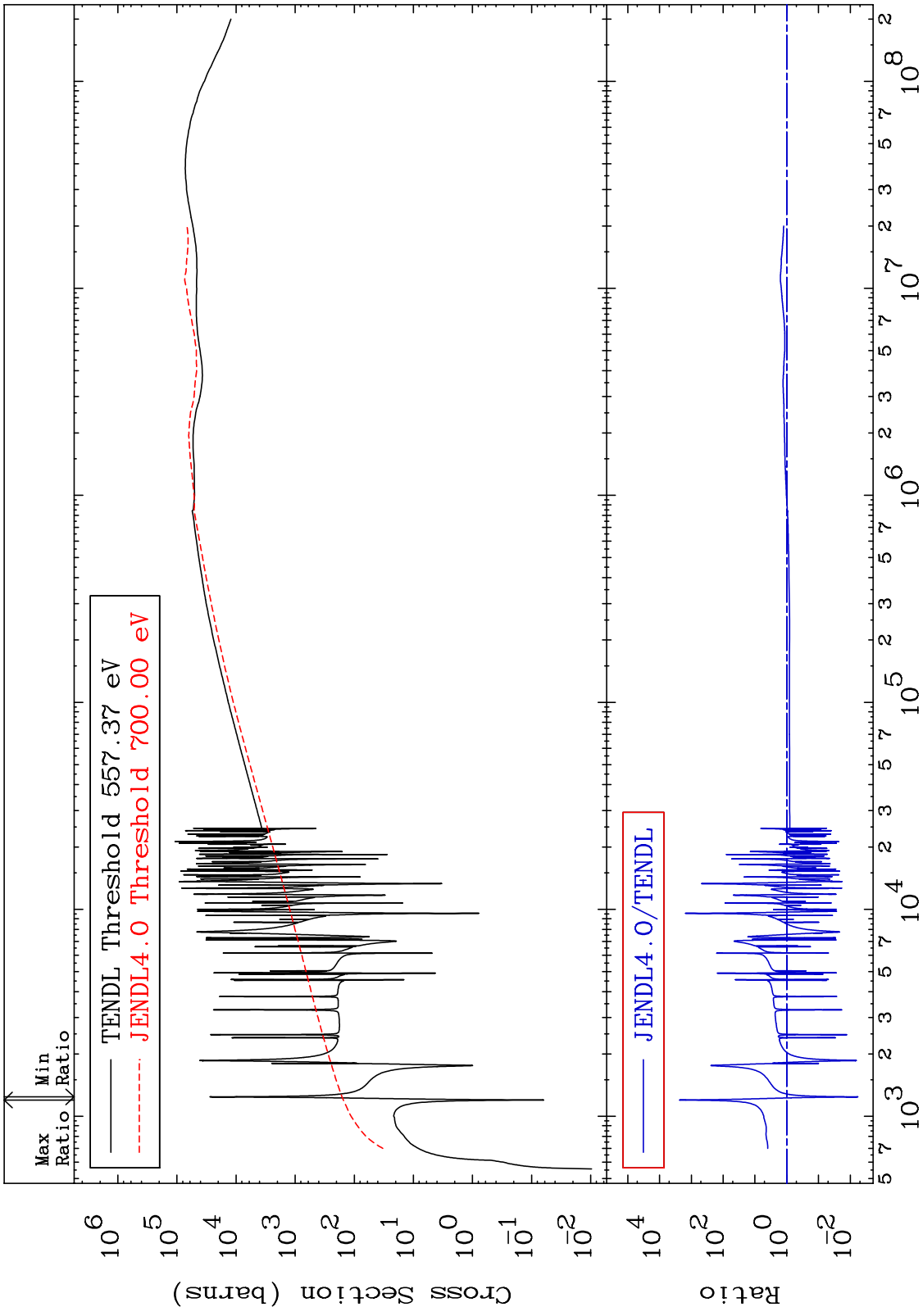
44-Ru-96

MAT 4425 Total kinematic kerma (high limit) Cross Section 44-Ru-96 -98.69 To 8363. %

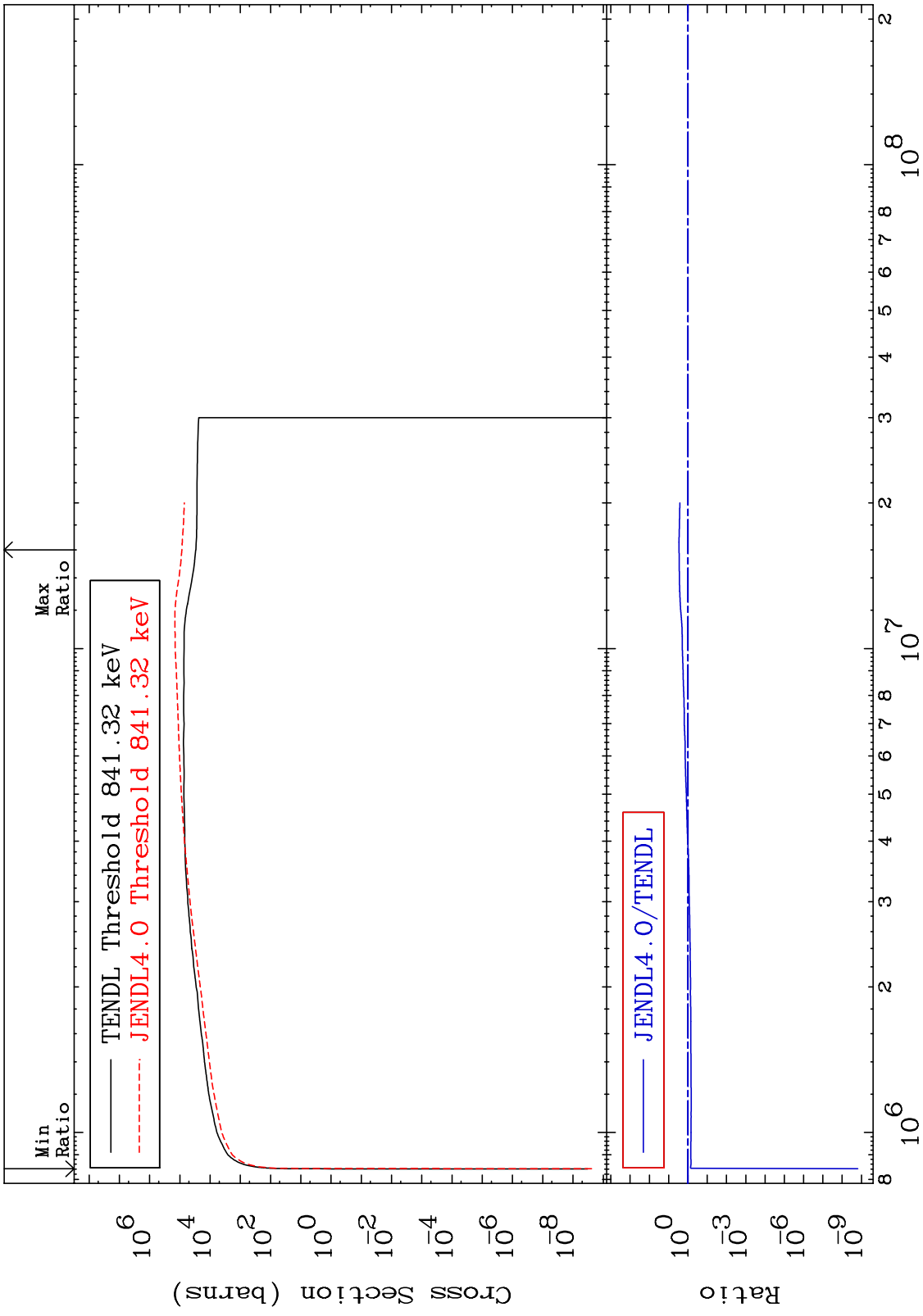


MAT 4425 Dpa total (eV-barns) 44-Ru-96
 -98.64 To 9999. %





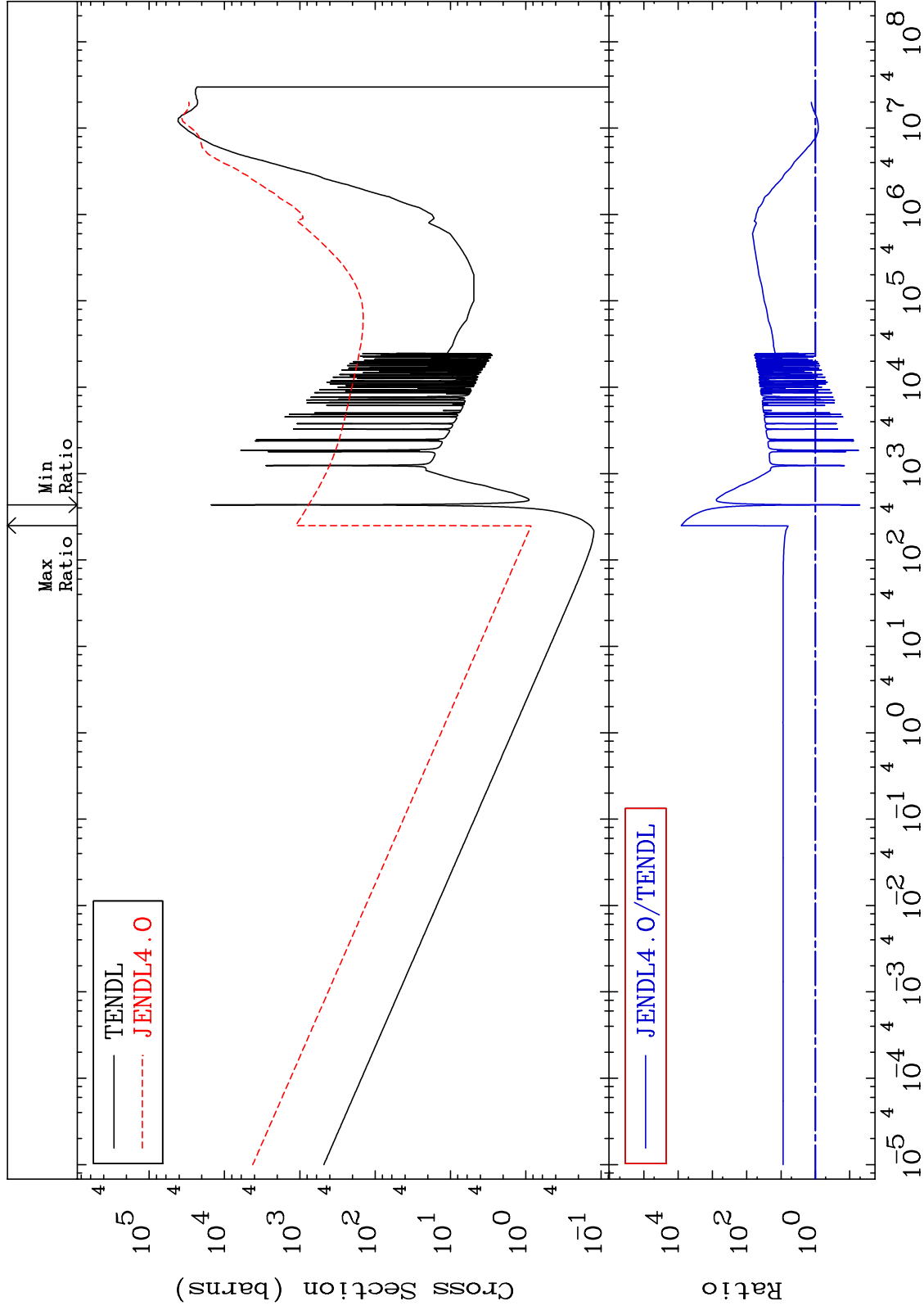
MAT 4425 Dpa inelastic (mt51-91) 44-Ru-96
 Cross Section -100.0 To 189.1 %



MAT 4425

Dpa disappearance (mt102 -120)
Cross Section

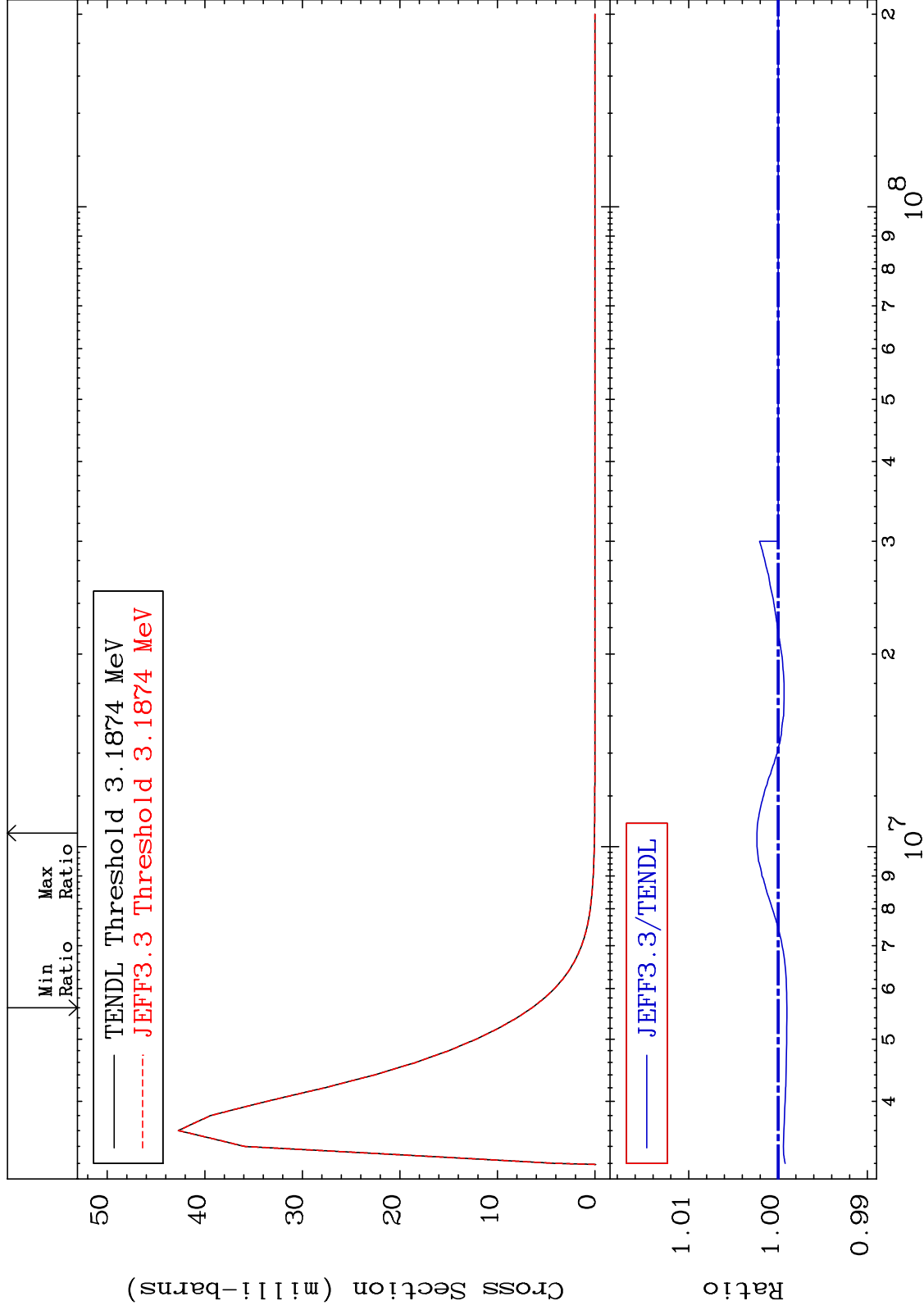
44-Ru-96
-94.90 To 9999. %



MAT 4425

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

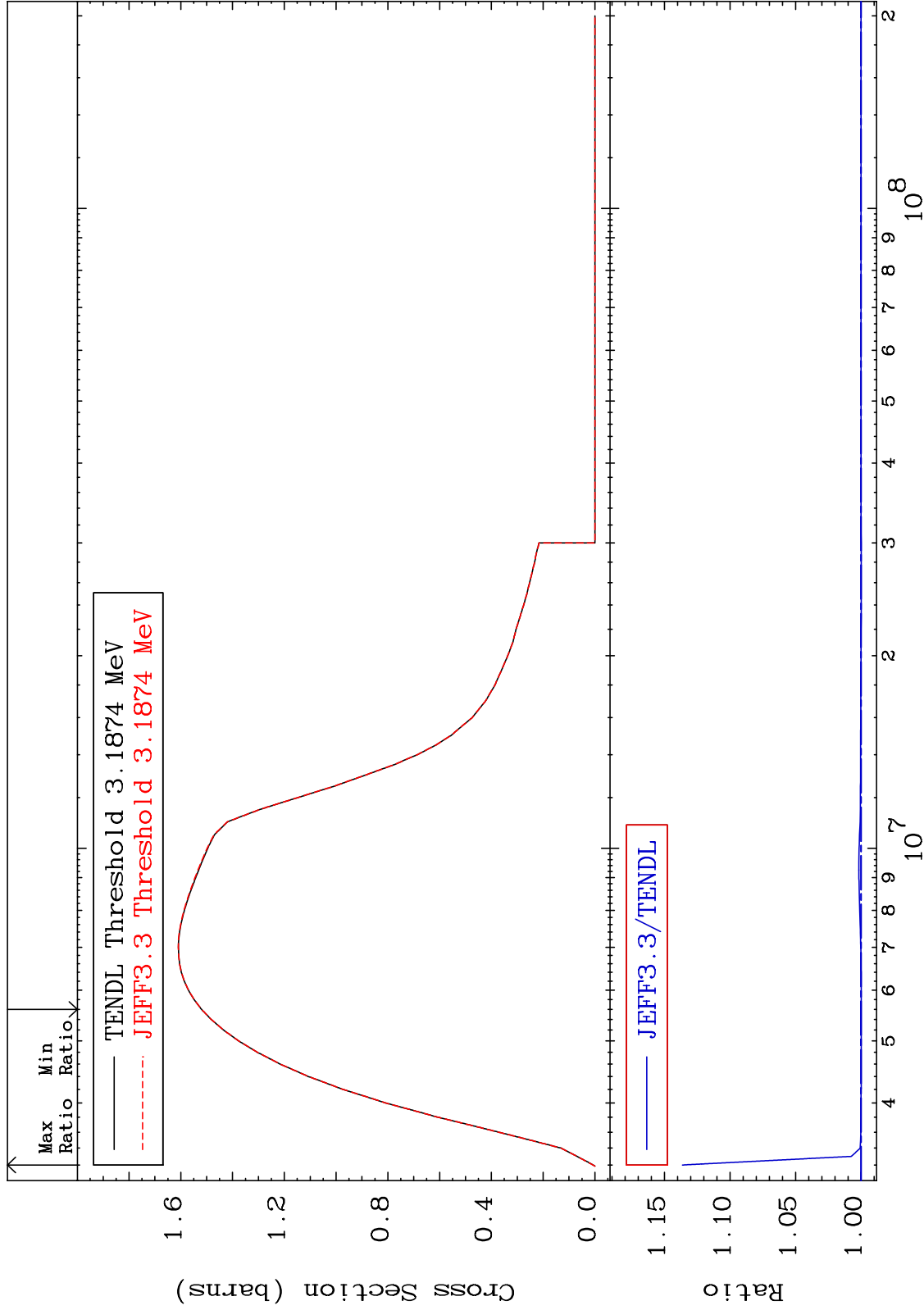
44-Ru-96
-0.098 To 0.237 %



MAT 4425

(n,n') Continuum
Cross Section

44-Ru-96
-0.012 To 13.62 %



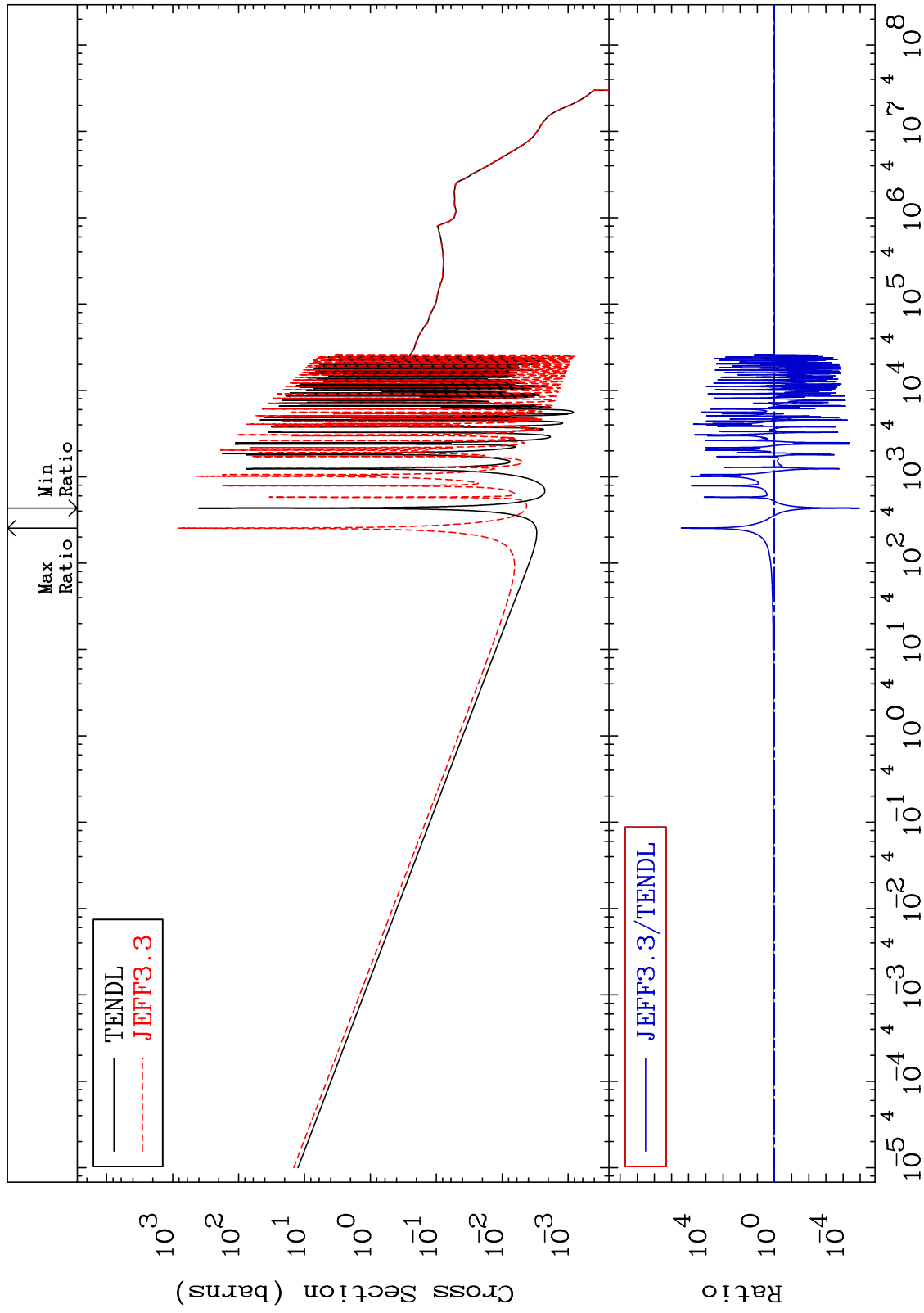
47

Incident Energy (eV)

44-Ru-96

MAT 4425

(n, γ) Cross Section
44-Ru-96
-100.0 To 9999. %

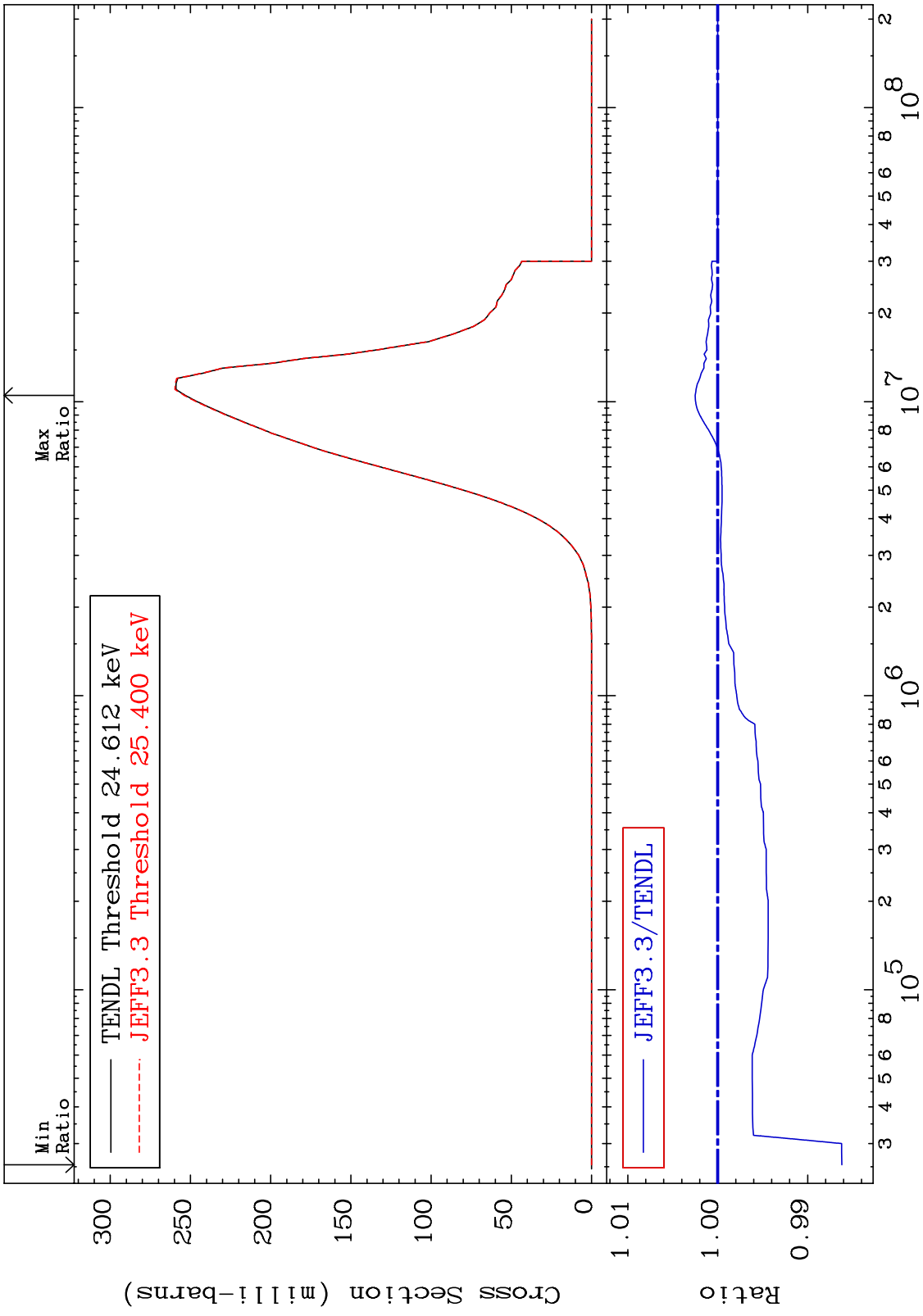


48

Incident Energy (eV)

44-Ru-96

MAT 4425 (n,p) Cross Section 44-Ru-96
 -1.381 To 0.252 %



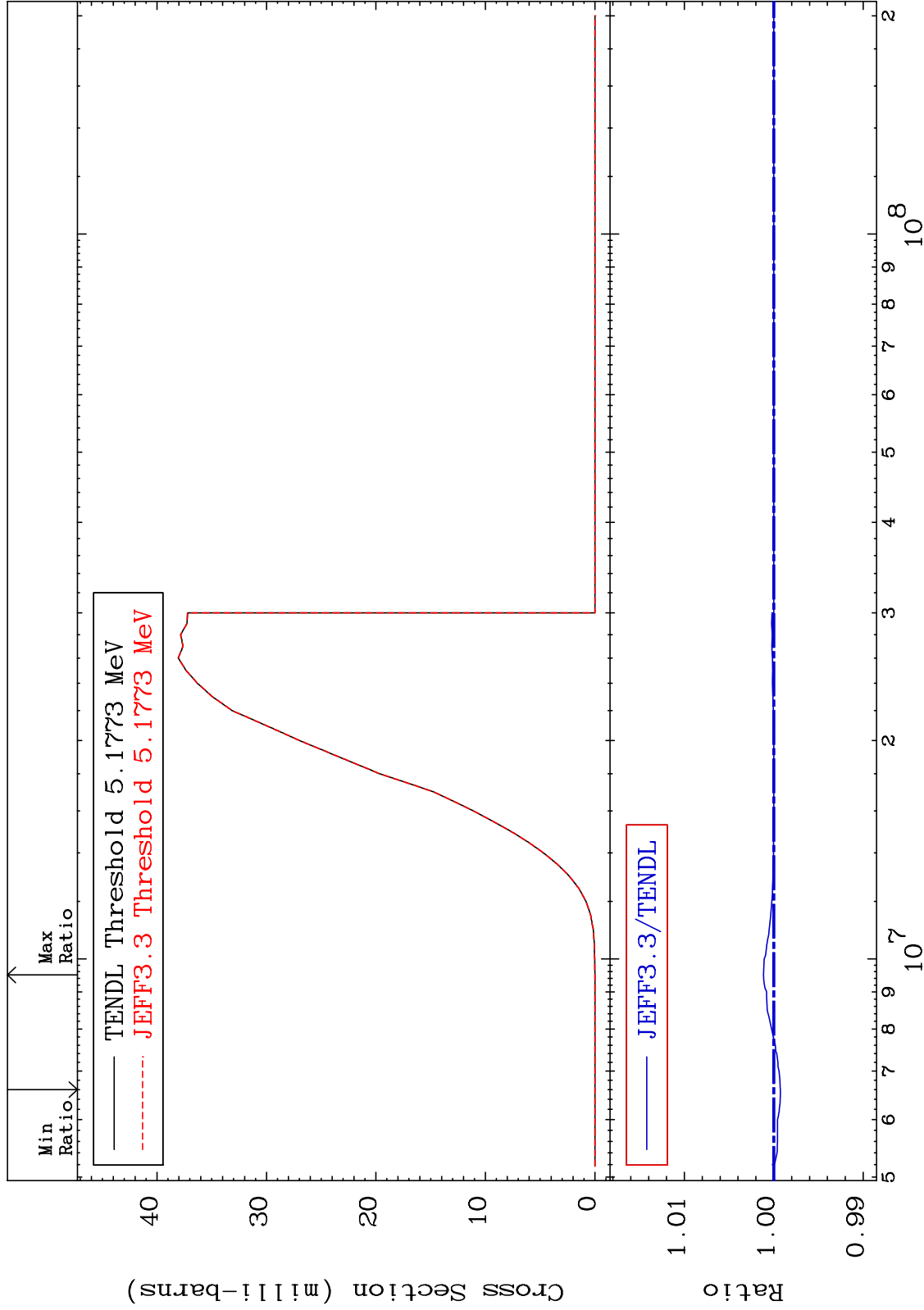
MAT 4425

(n,d)

44-Ru-96

Cross Section

-0.073 To 0.115 %

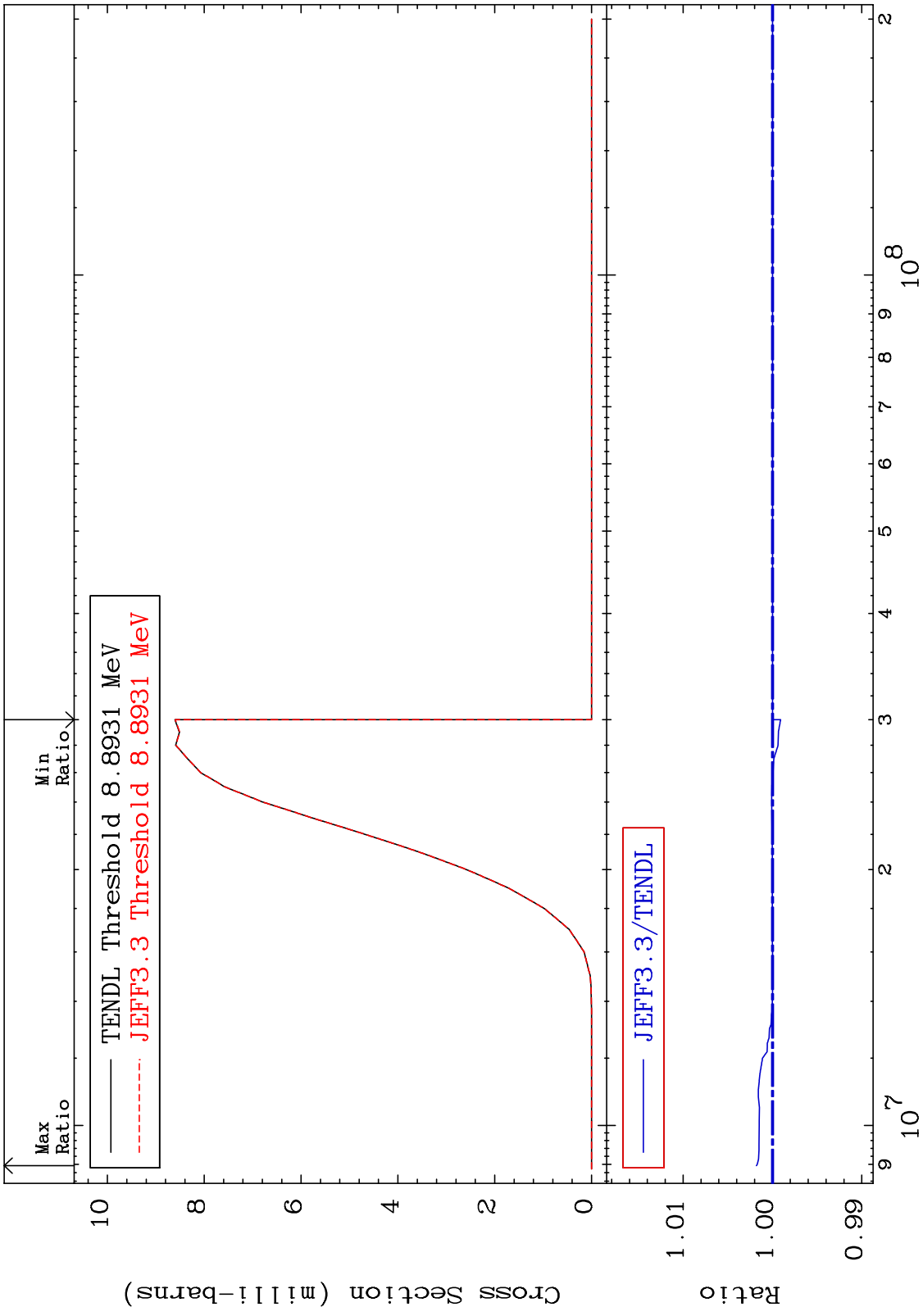


50

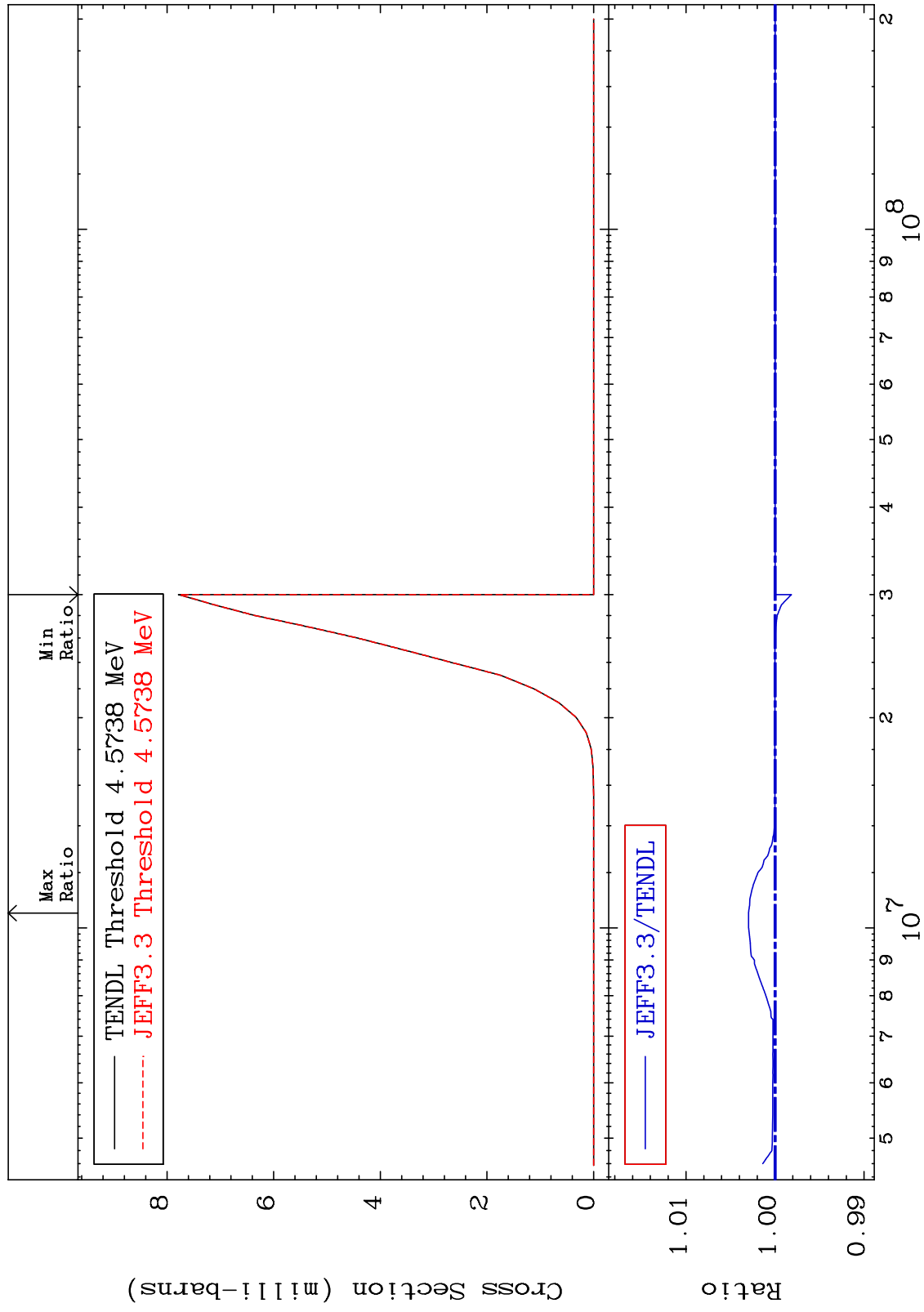
Incident Energy (eV)

44-Ru-96

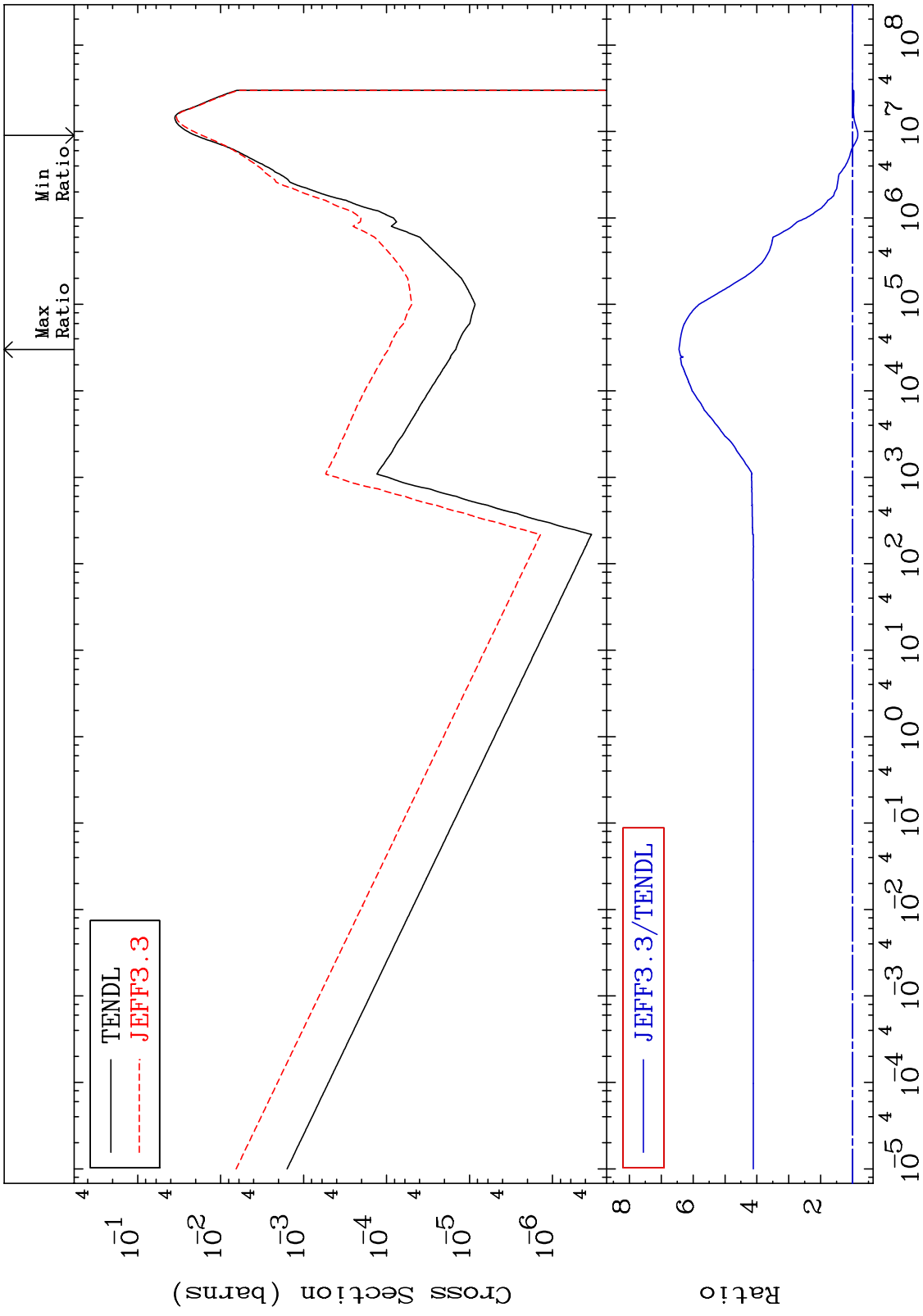
MAT 4425 (n,t) 44-Ru-96
Cross Section -0.090 To 0.180 %



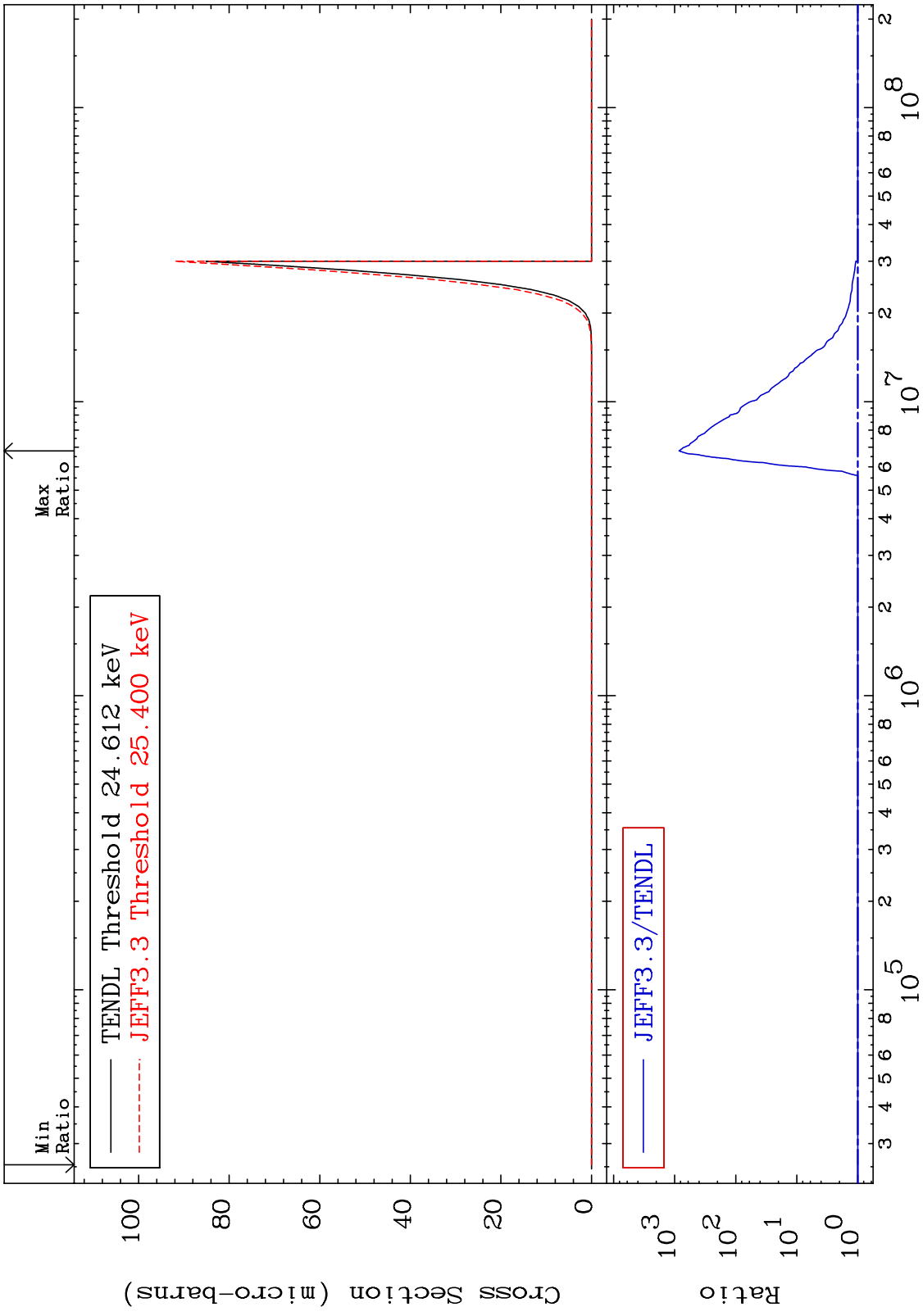
51 44-Ru-96



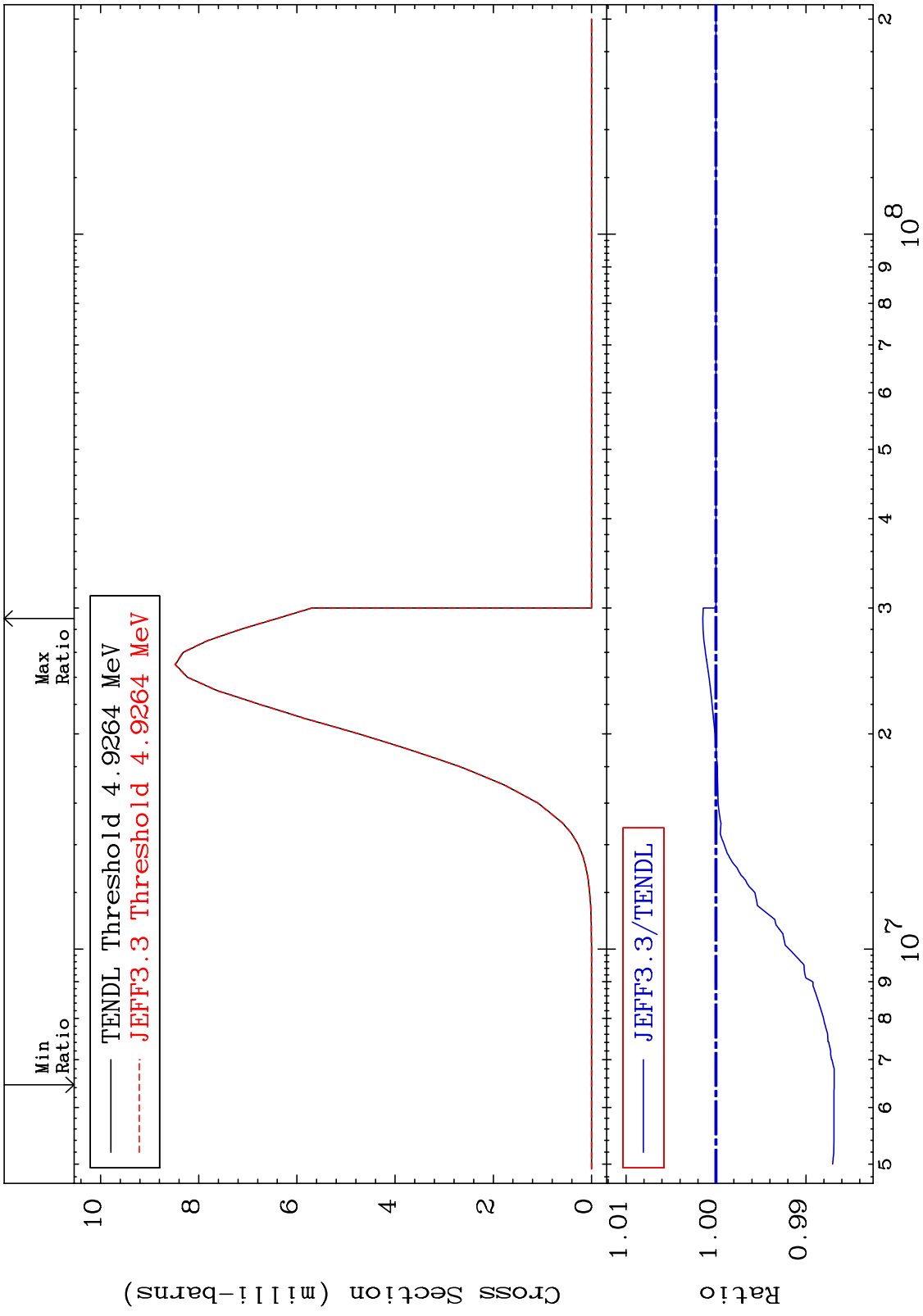
MAT 4425 (n, α) 44-Ru-96
Cross Section -16.68 To 544.1 %



MAT 4425 (n,2α) Cross Section 44-Ru-96 To 9999. %



MAT 4425 (n,2p) 44-Ru-96
Cross Section -1.314 To 0.147 %



55 44-Ru-96

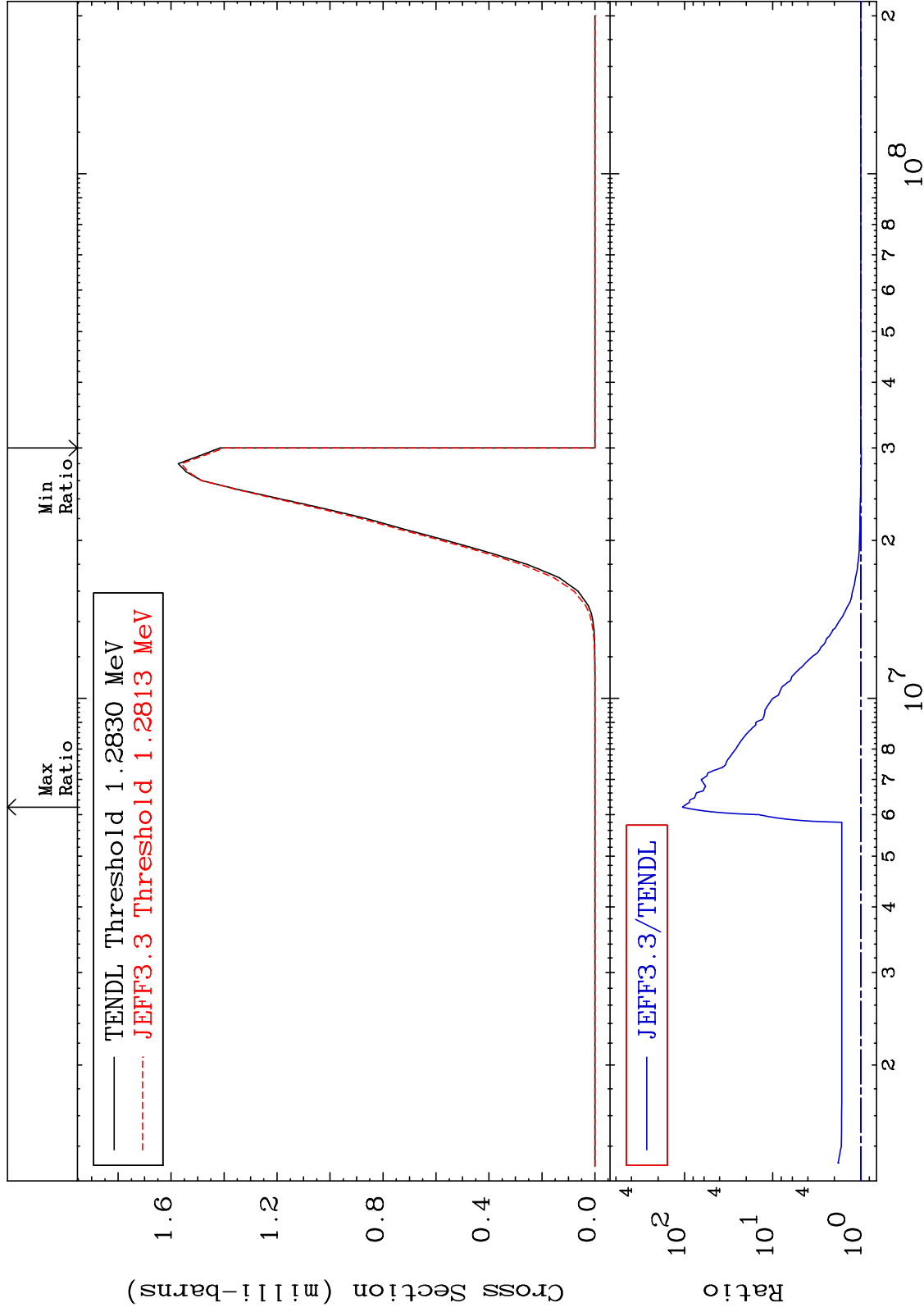
MAT 4425

(n,p) α

44-Ru-96

Cross Section

-1.125 To 9999. %

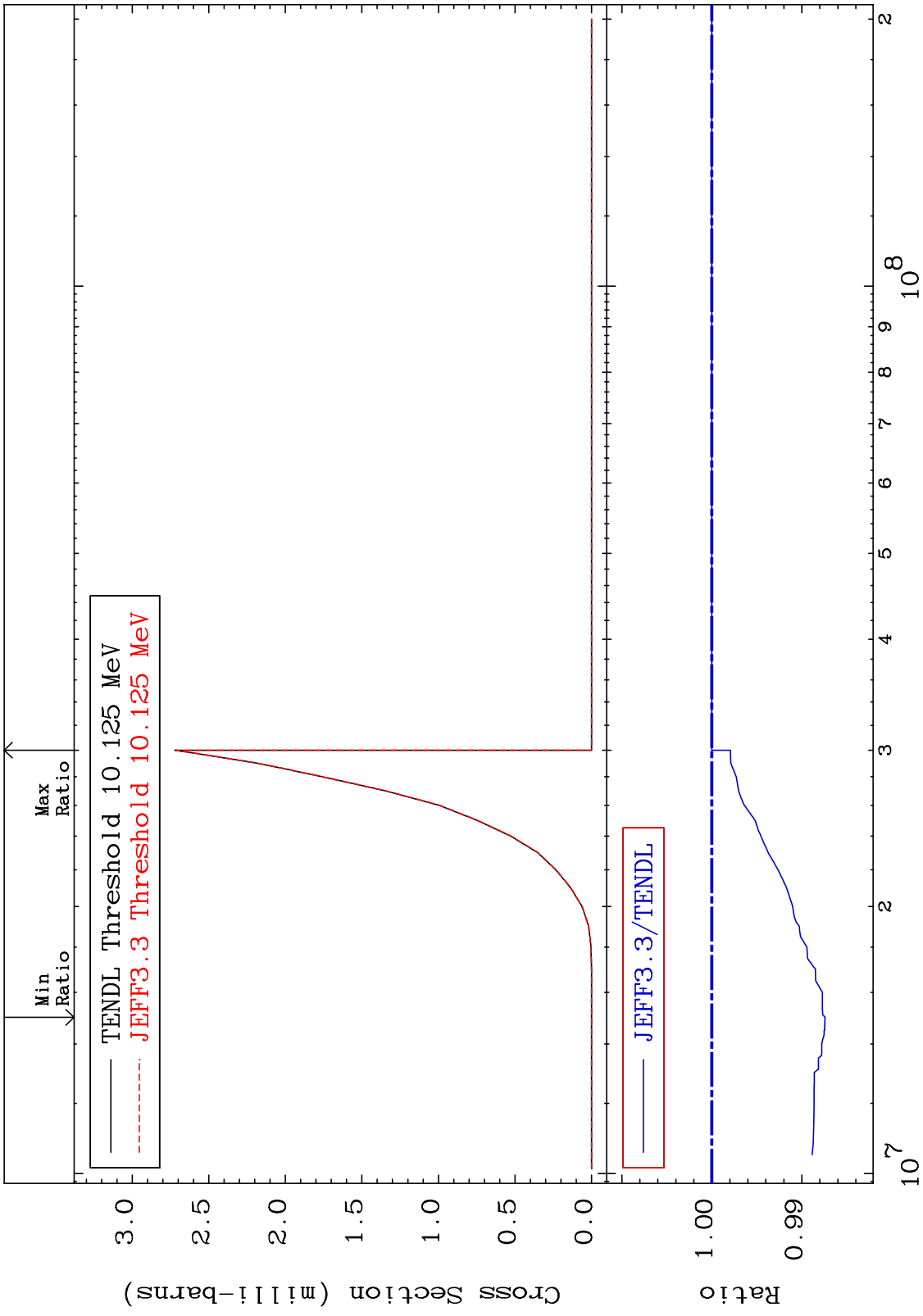


56

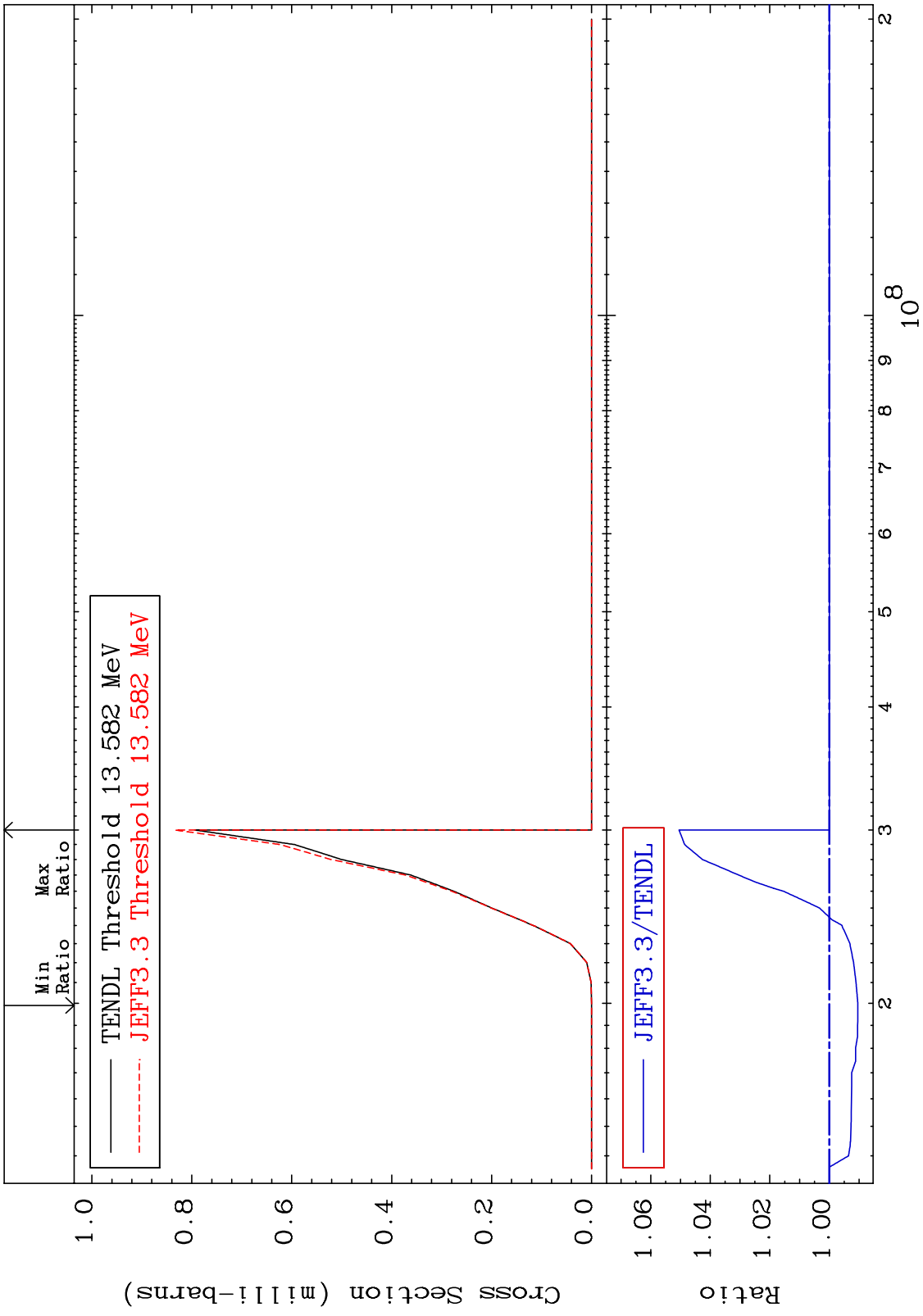
Incident Energy (eV)

44-Ru-96

MAT 4425 (n,p) d 44-Ru-96
 Cross Section -1.258 To 0.000 %



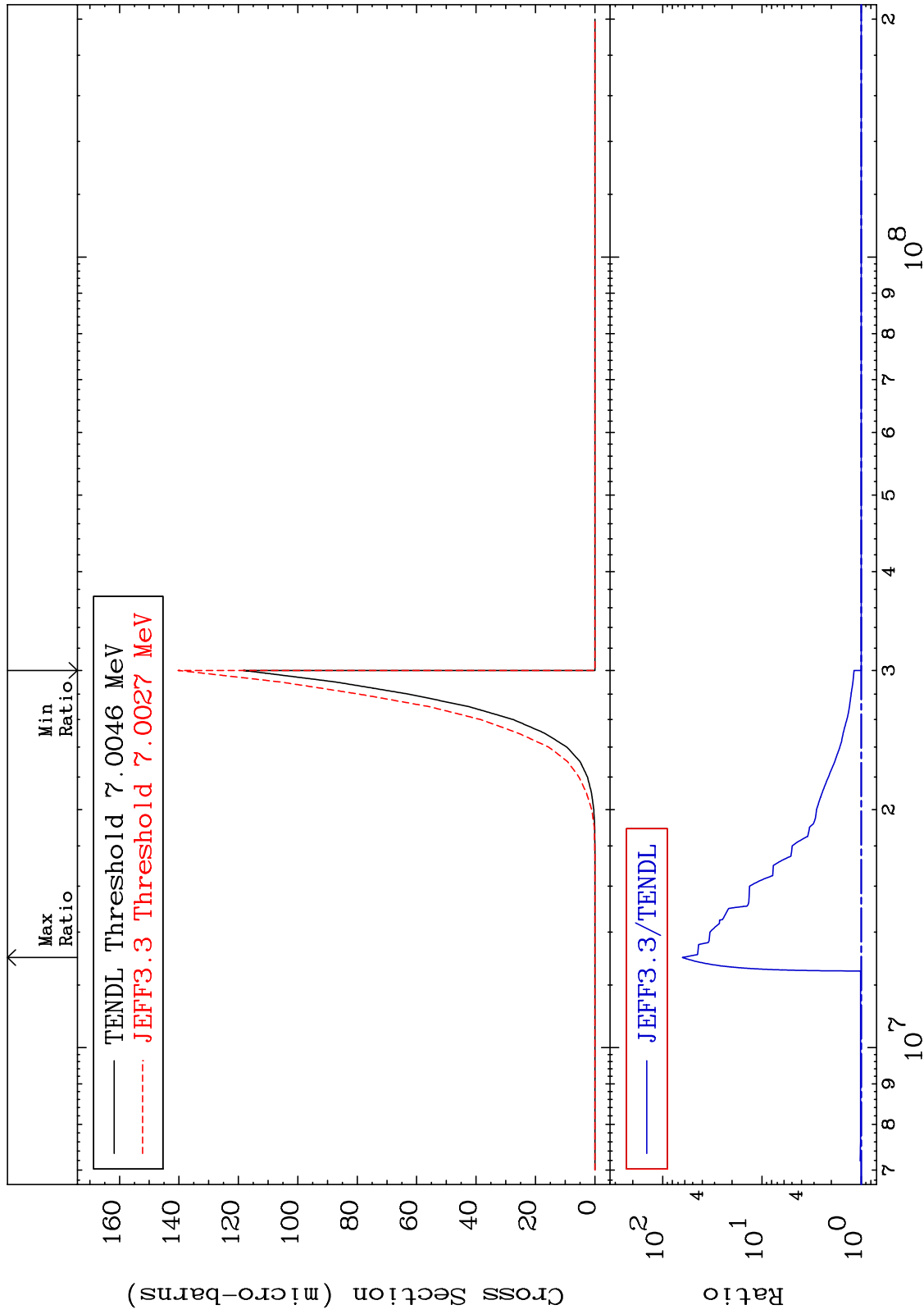
MAT 4425 (n,p) t 44-Ru-96
 Cross Section -0.961 To 5.052 %



MAT 4425

(n,d) α

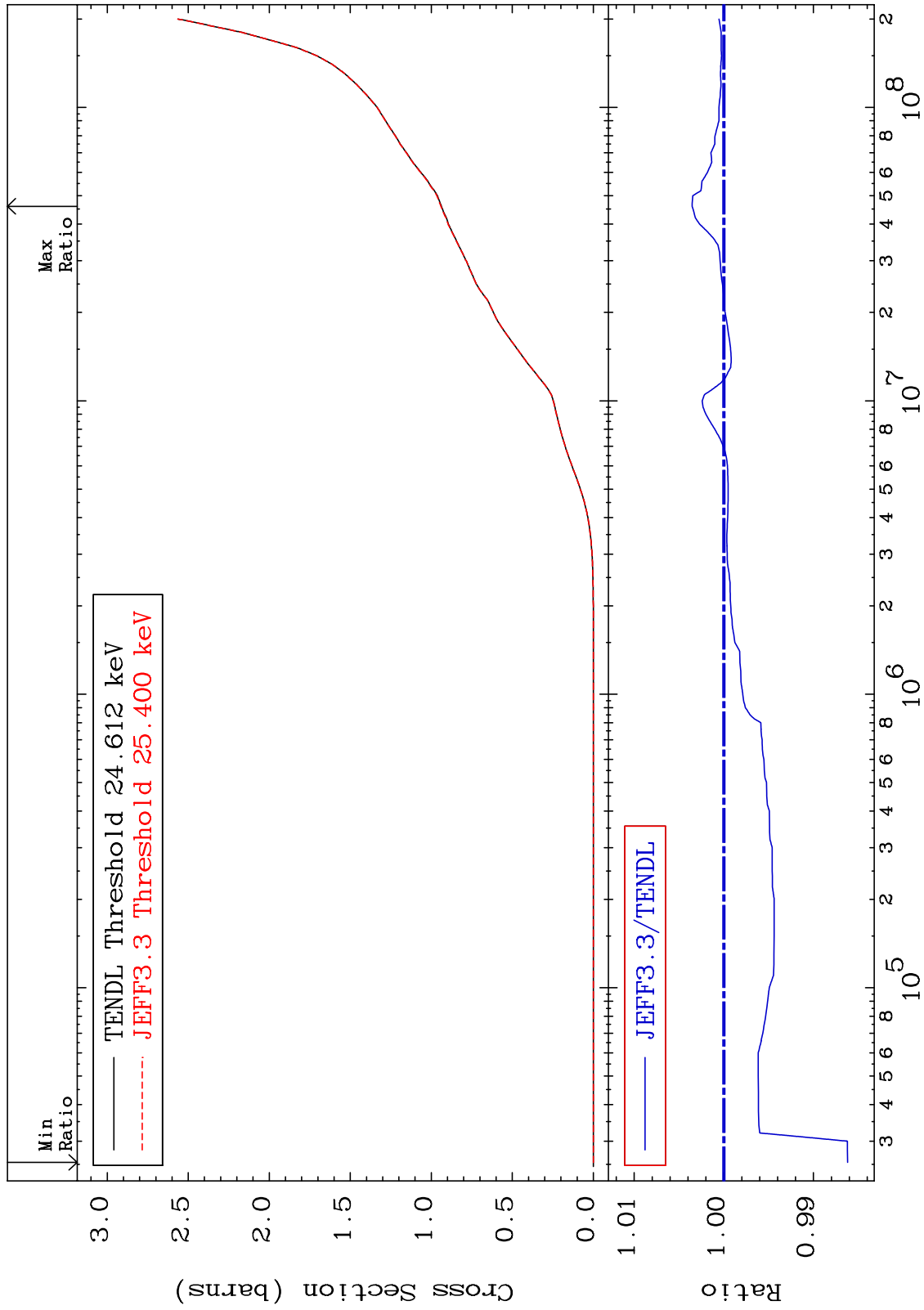
44-Ru-96
0.000 To 6223. %



MAT 4425

Hydrogen Production
Cross Section

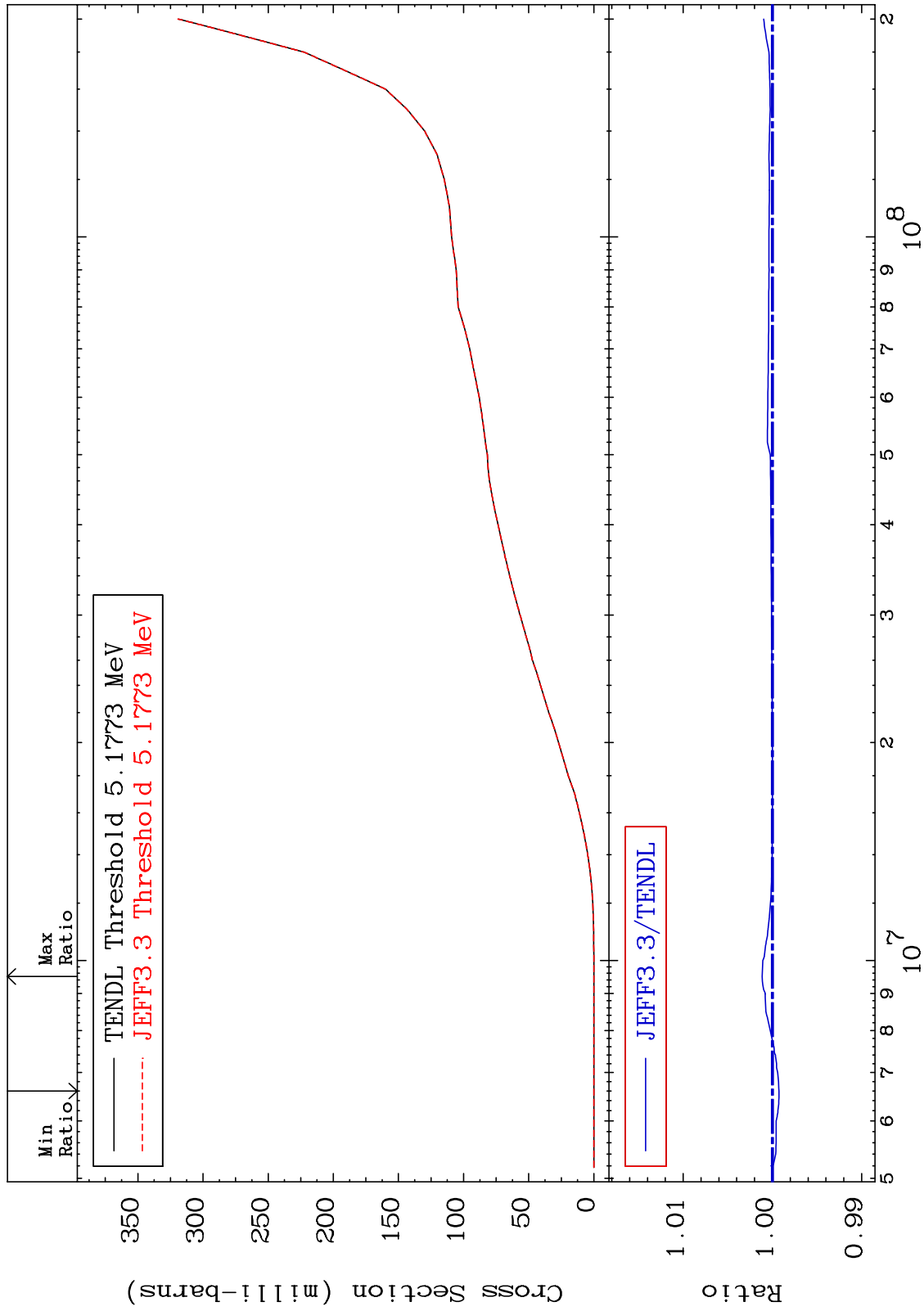
44-Ru-96
-1.381 To 0.355 %



MAT 4425

Deuterium Production
Cross Section

44-Ru-96
-0.073 To 0.115 %

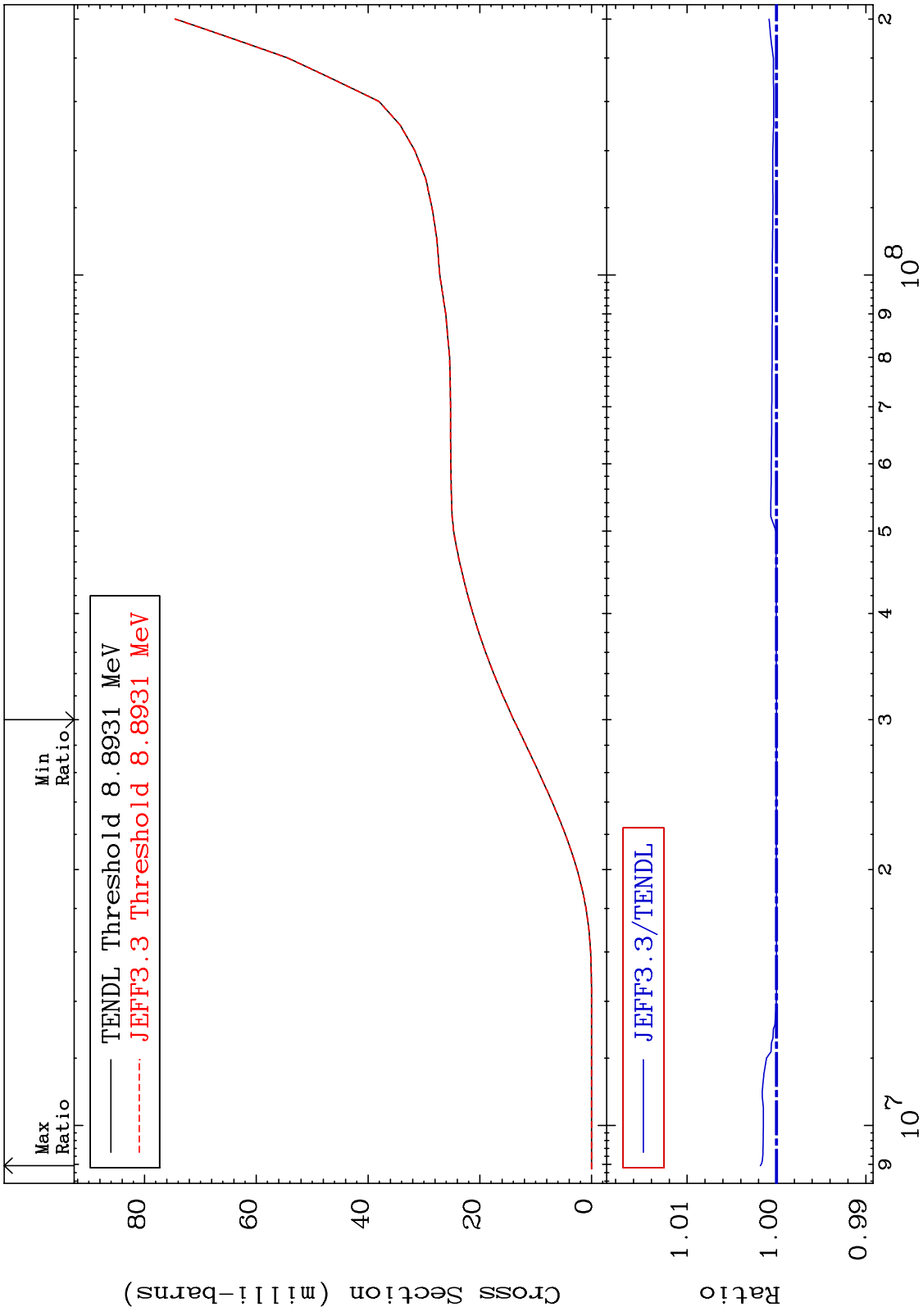


61

Incident Energy (eV)

44-Ru-96

MAT 4425 Tritium Production Cross Section 44-Ru-96 To 0.180 %

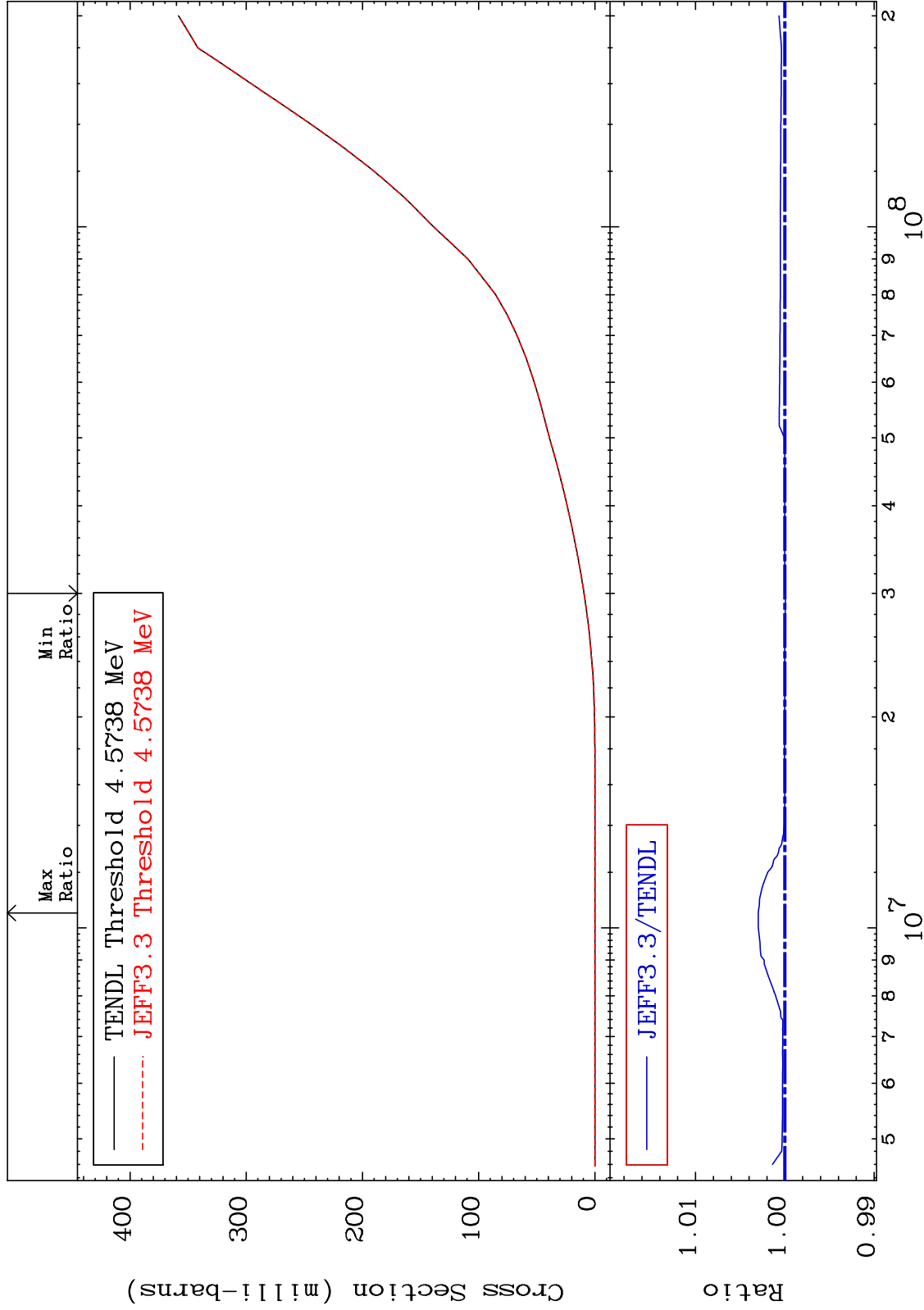


62 44-Ru-96

MAT 4425

He-3 Production
Cross Section

44-Ru-96
-0.008 To 0.299 %



63

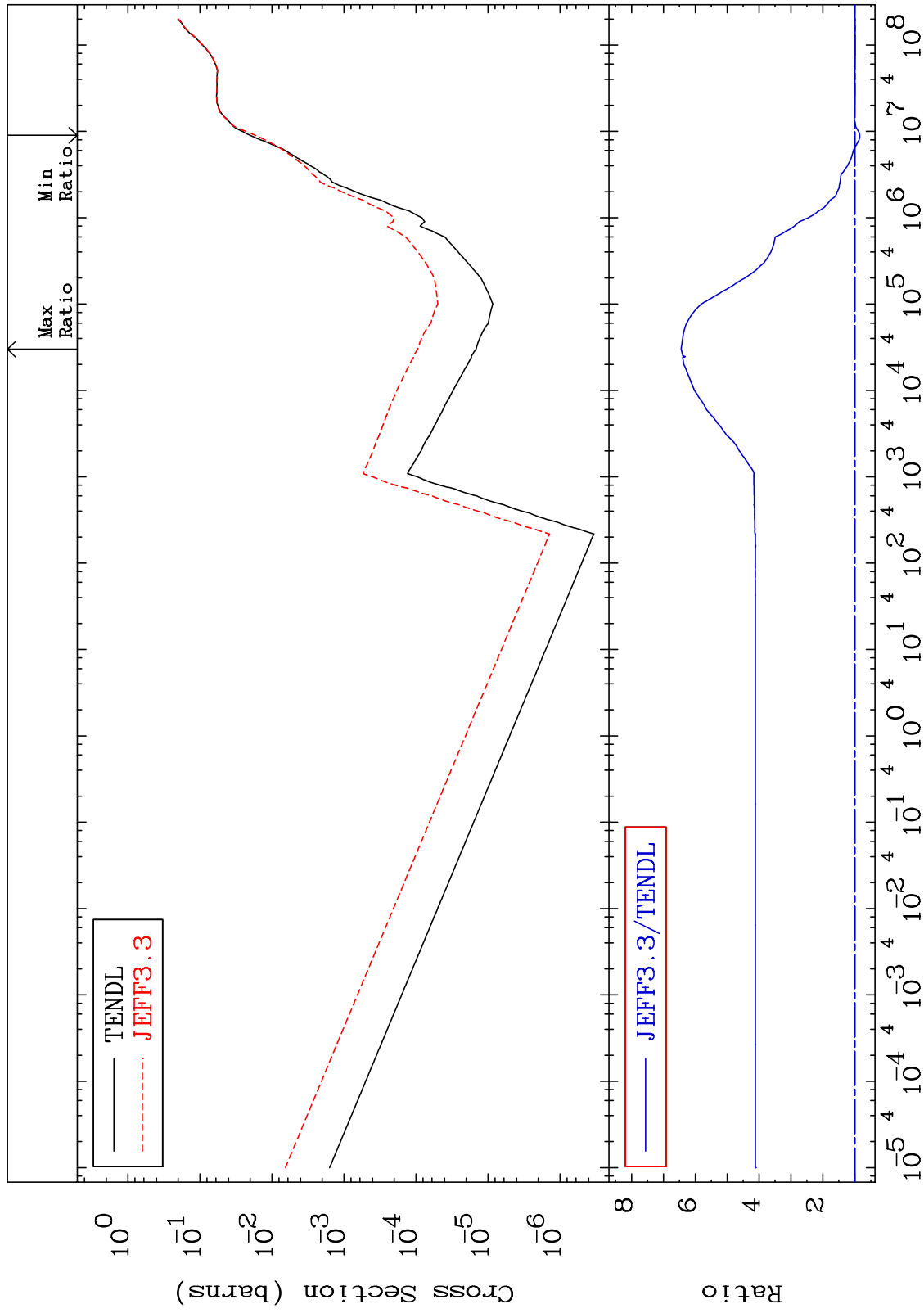
Incident Energy (eV)

44-Ru-96

MAT 4425

He-4 Production
Cross Section

44-Ru-96
-15.54 To 544.1 %



64

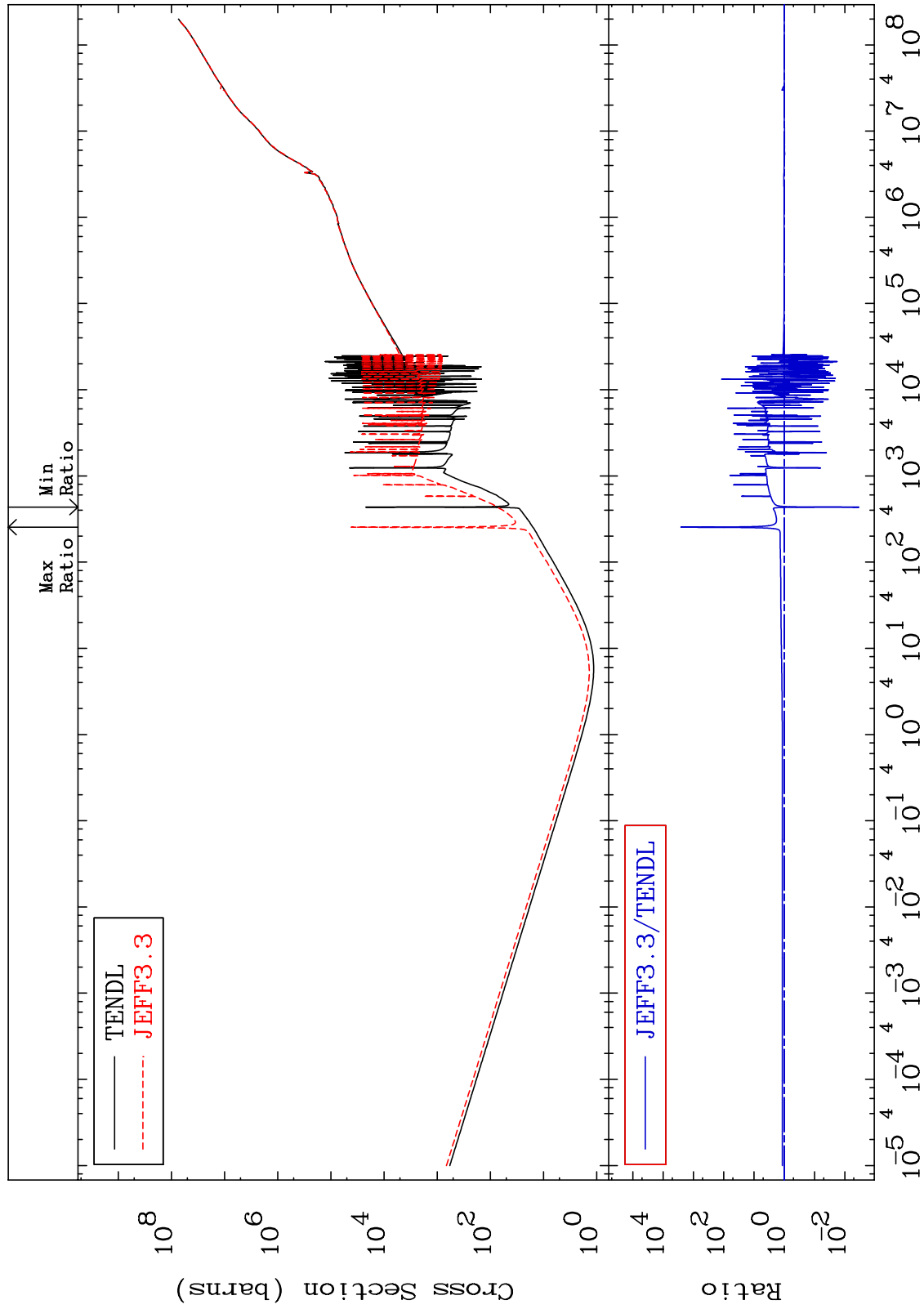
Incident Energy (eV)

44-Ru-96

MAT 4425

Kerma total (eV-barns)
Cross Section

44-Ru-96
-99.66 To 9999. %



65

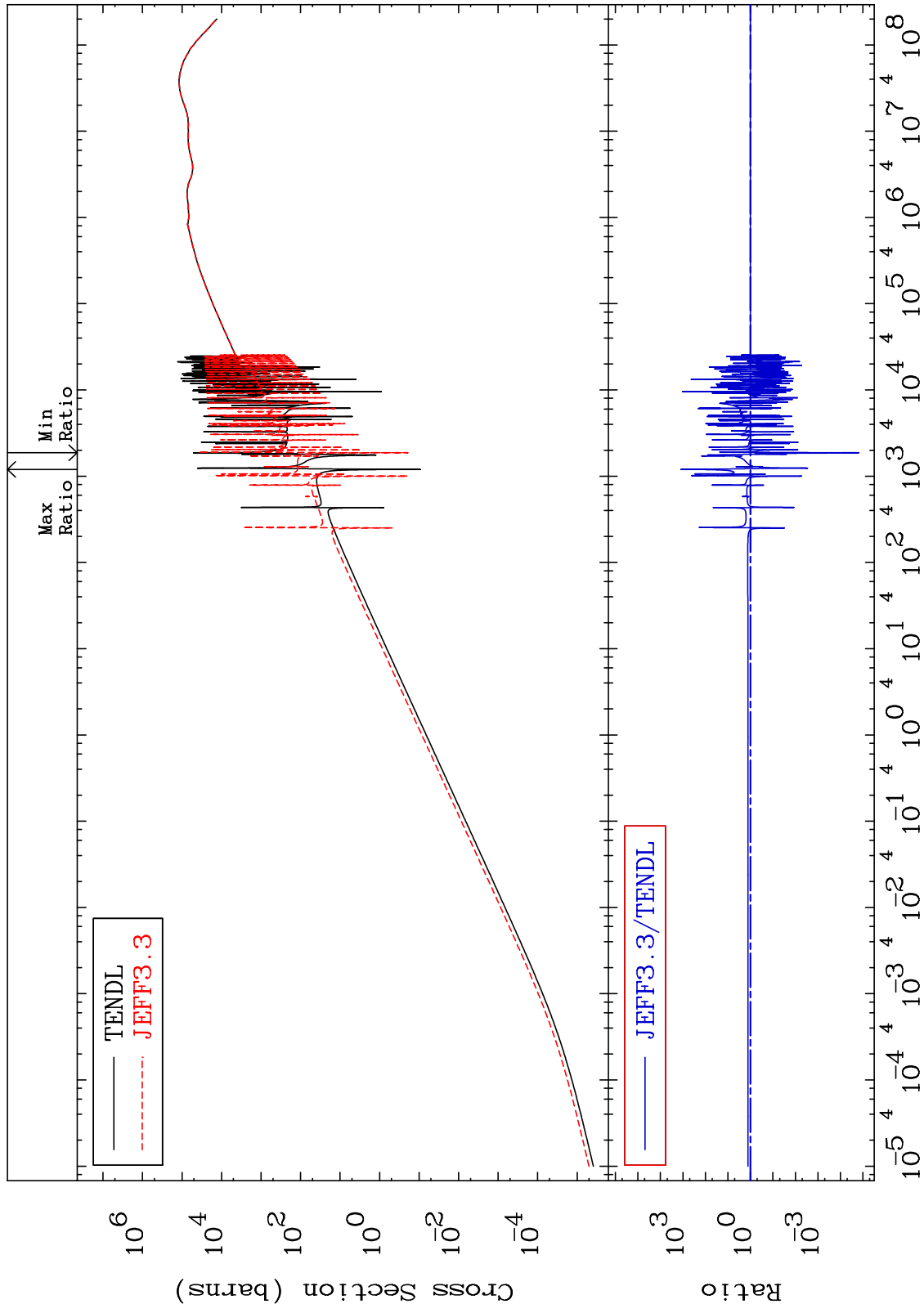
Incident Energy (eV)

44-Ru-96

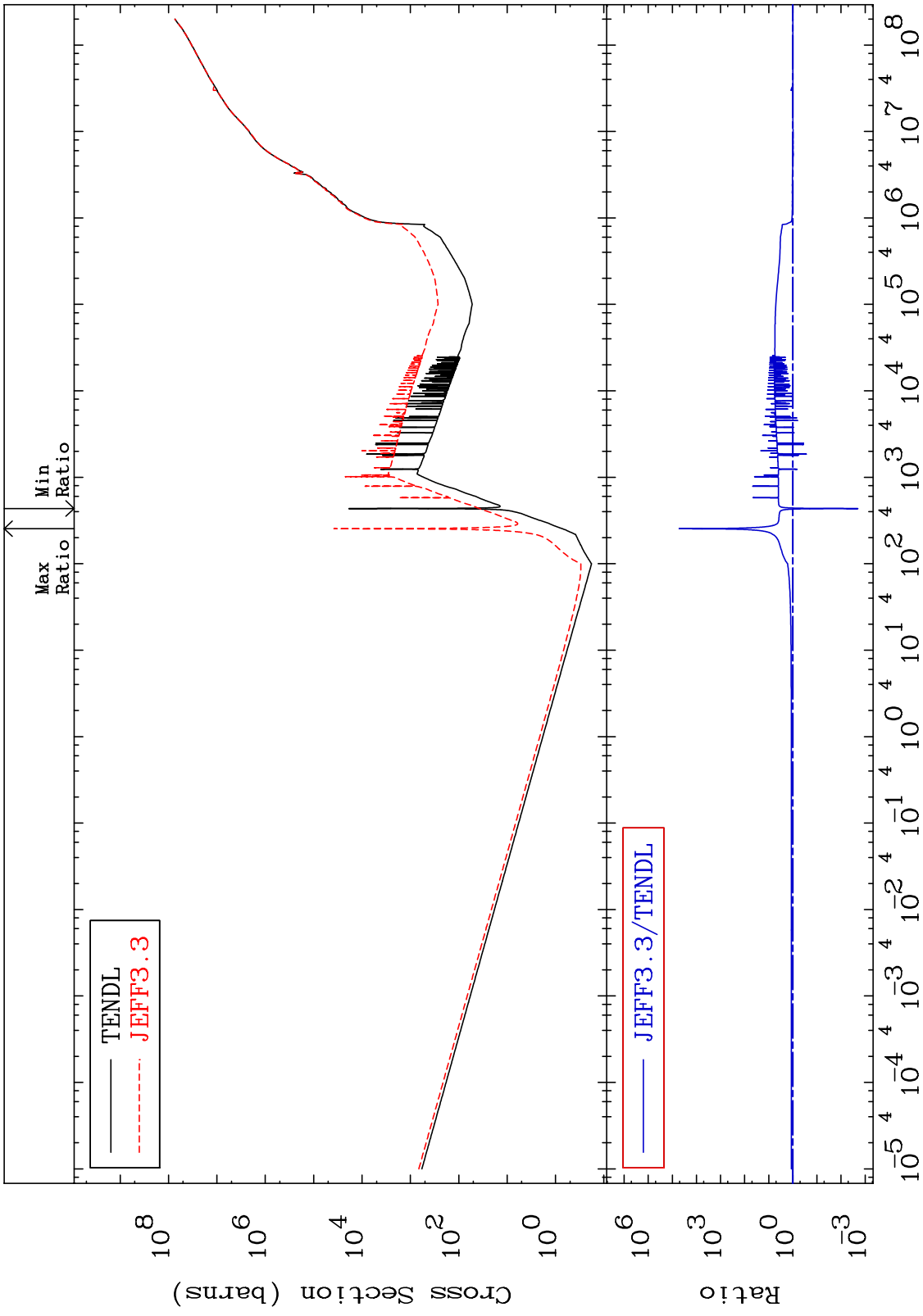
MAT 4425

Kerma elastic
Cross Section

44-Ru-96
-100.0 To 9999. %



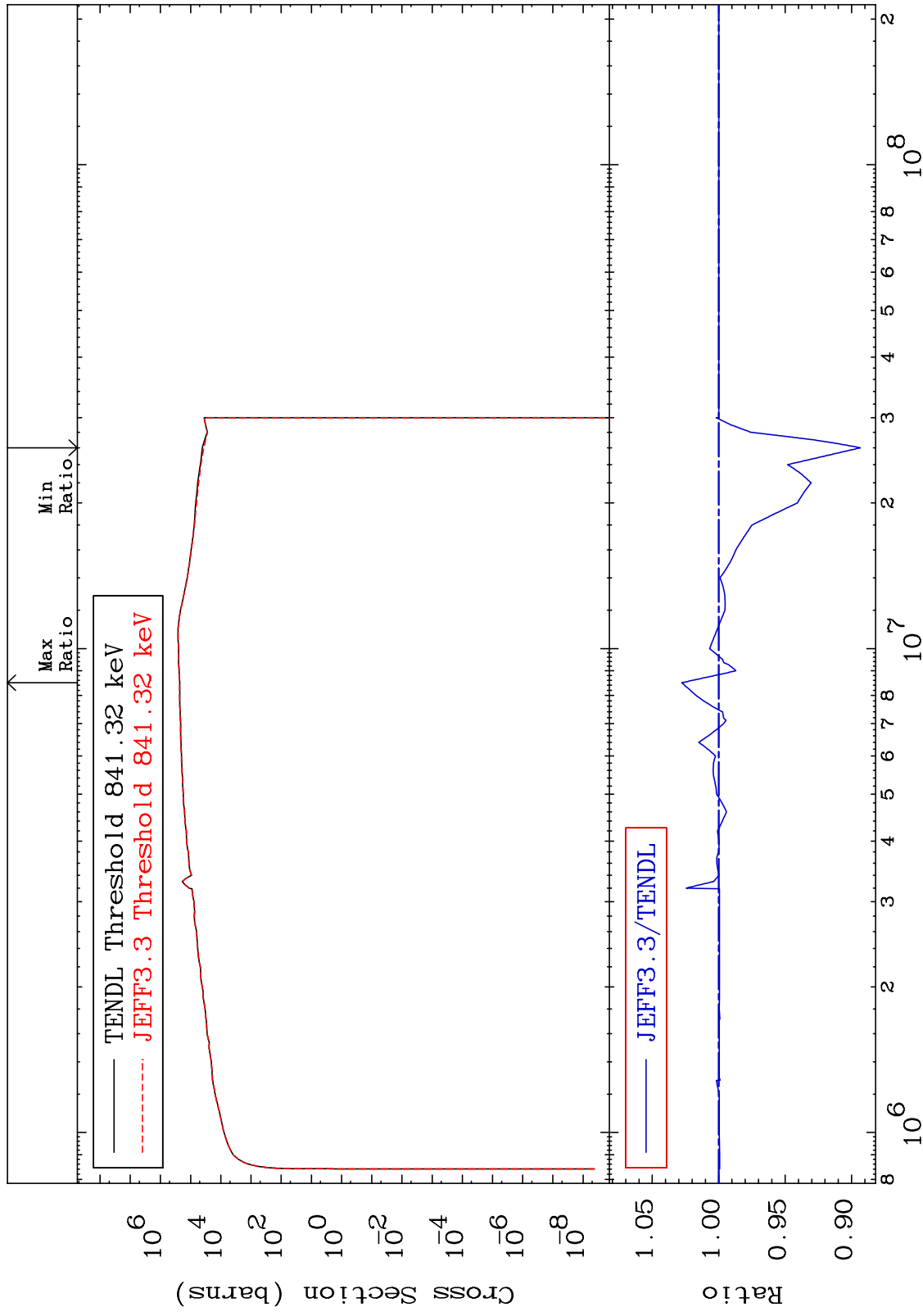
MAT 4425 Kerma non-elastic (all but mt2) 44-Ru-96
 Cross Section -99.80 To 9999. %



MAT 4425

Kerma inelastic (mt51-91)
Cross Section

44-Ru-96
-10.66 To 2.783 %



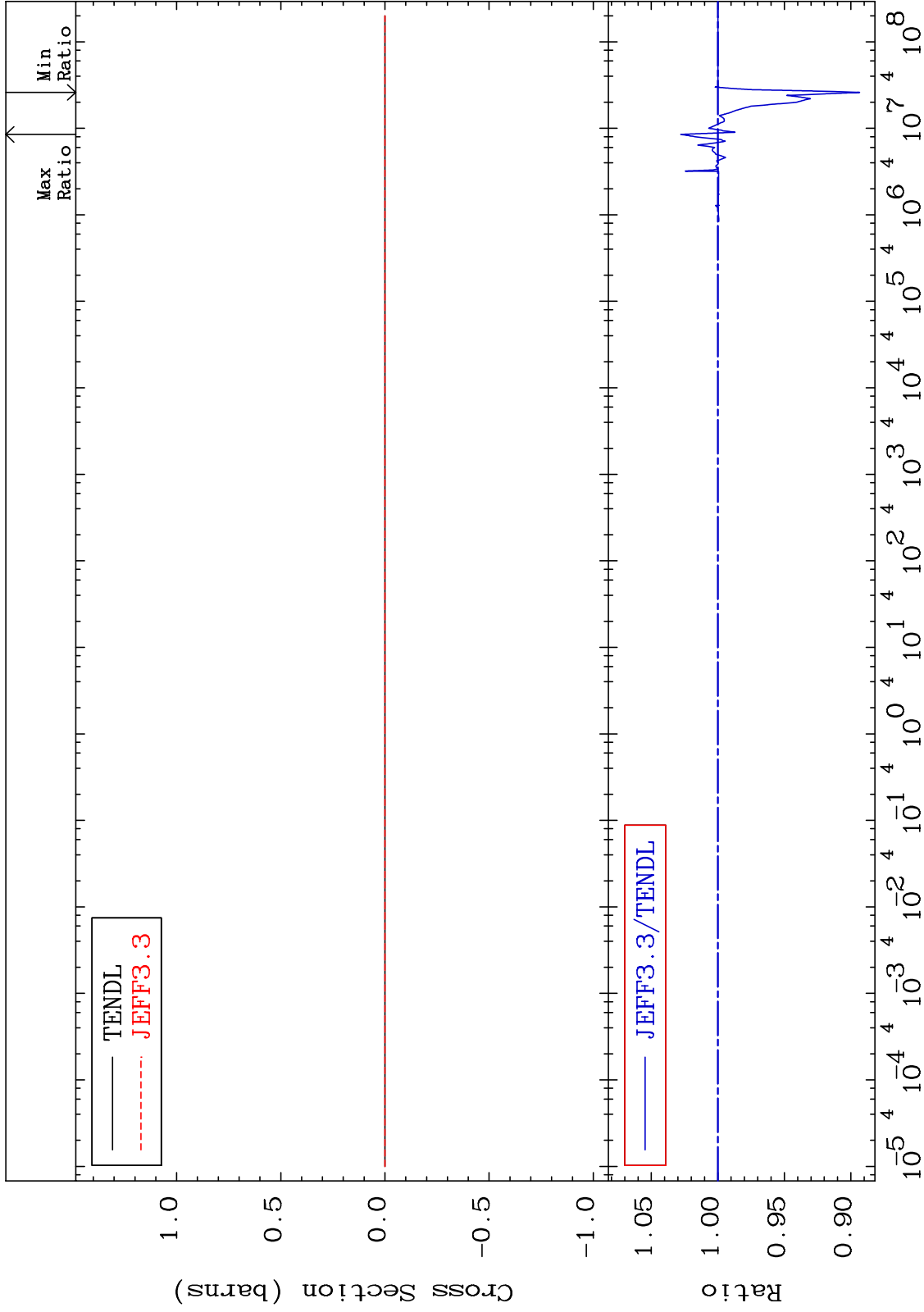
68

44-Ru-96

MAT 4425

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

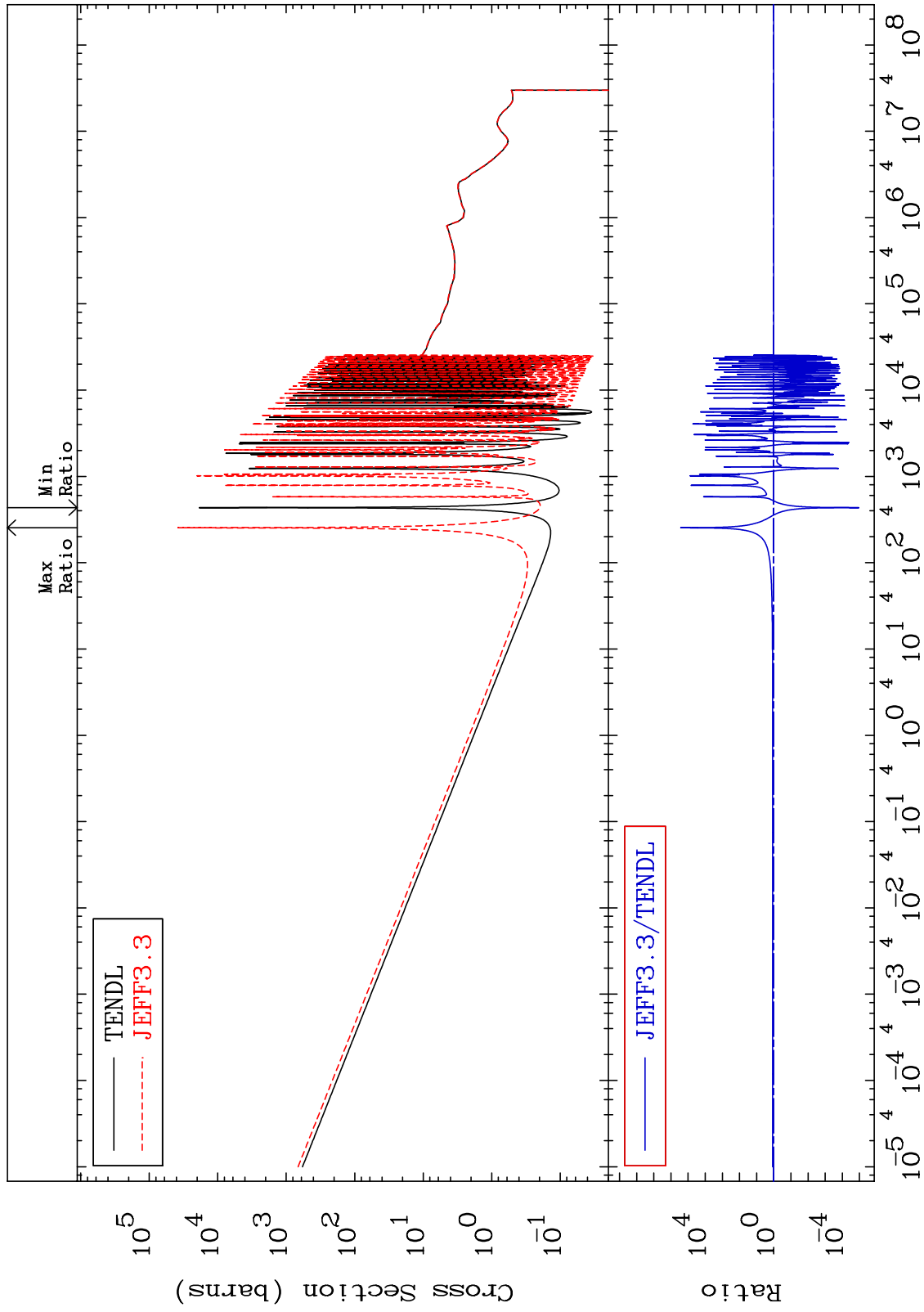
44-Ru-96
-10.66 To 2.783 %



MAT 4425

Kerma capture (mt102)
Cross Section

44-Ru-96
-100.0 To 9999. %

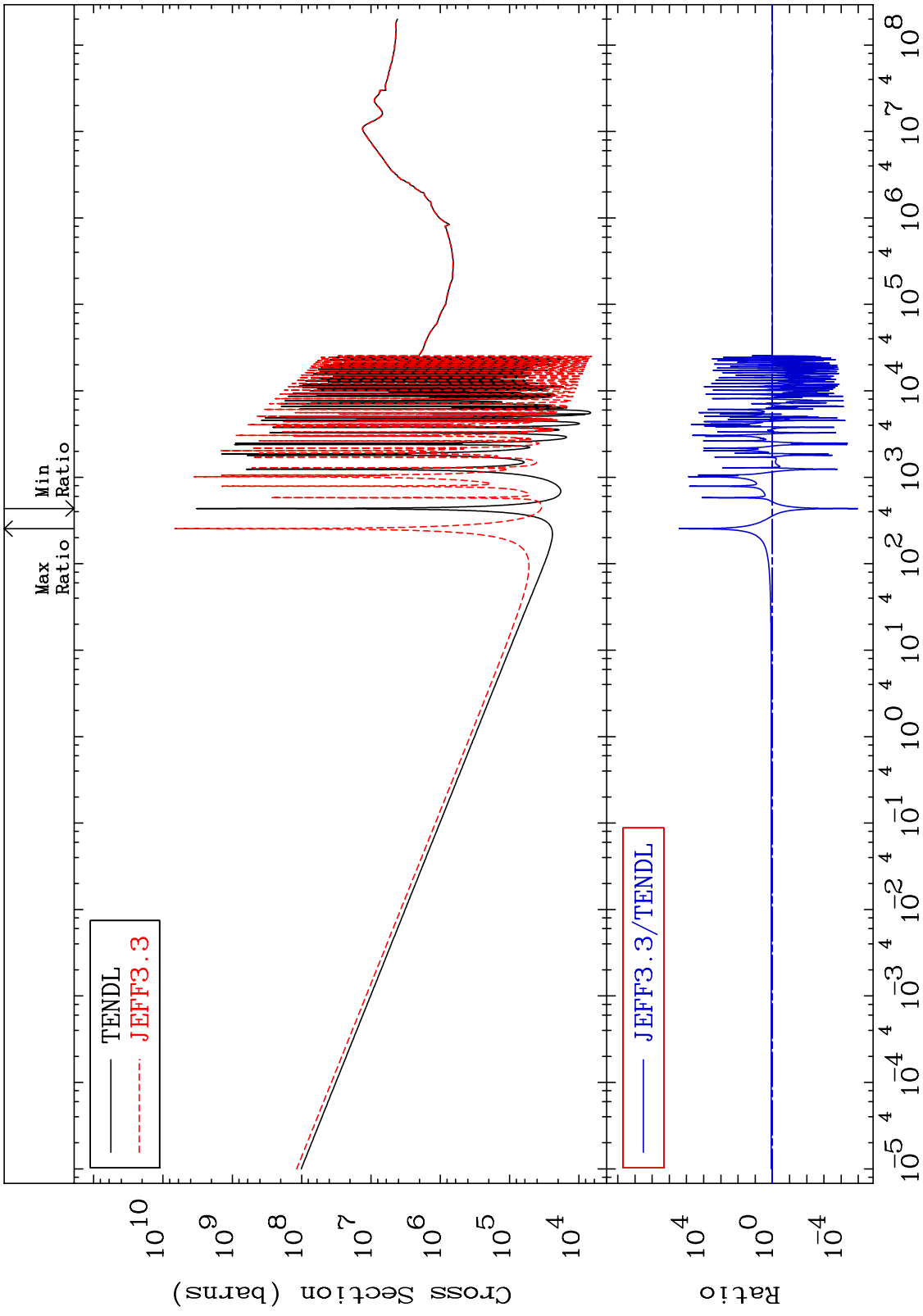


70

Incident Energy (eV)

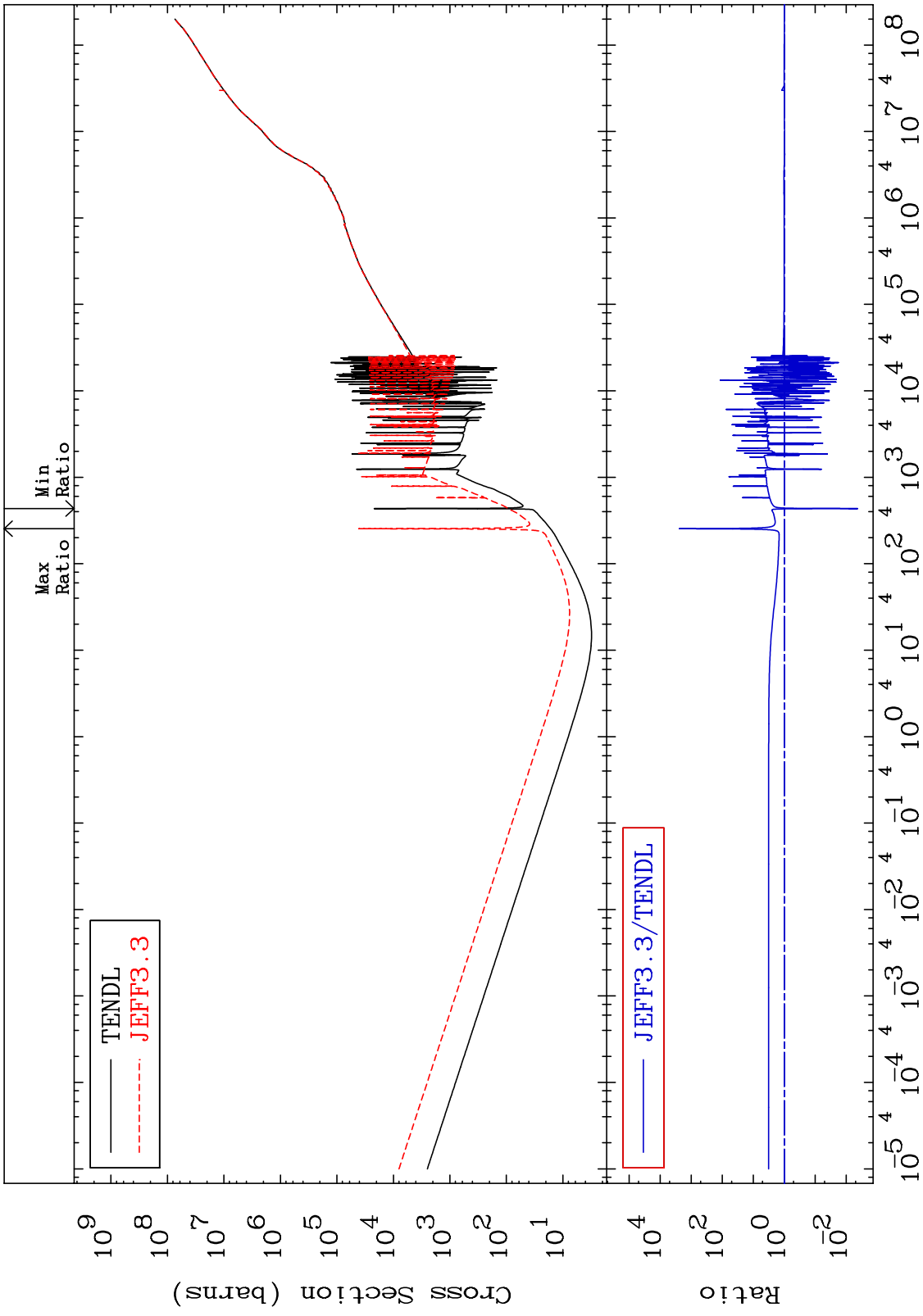
44-Ru-96

MAT 4425 44-Ru-96
Total photon (eV-barns) Cross Section -100.0 To 9999. %



Incident Energy (eV) 44-Ru-96

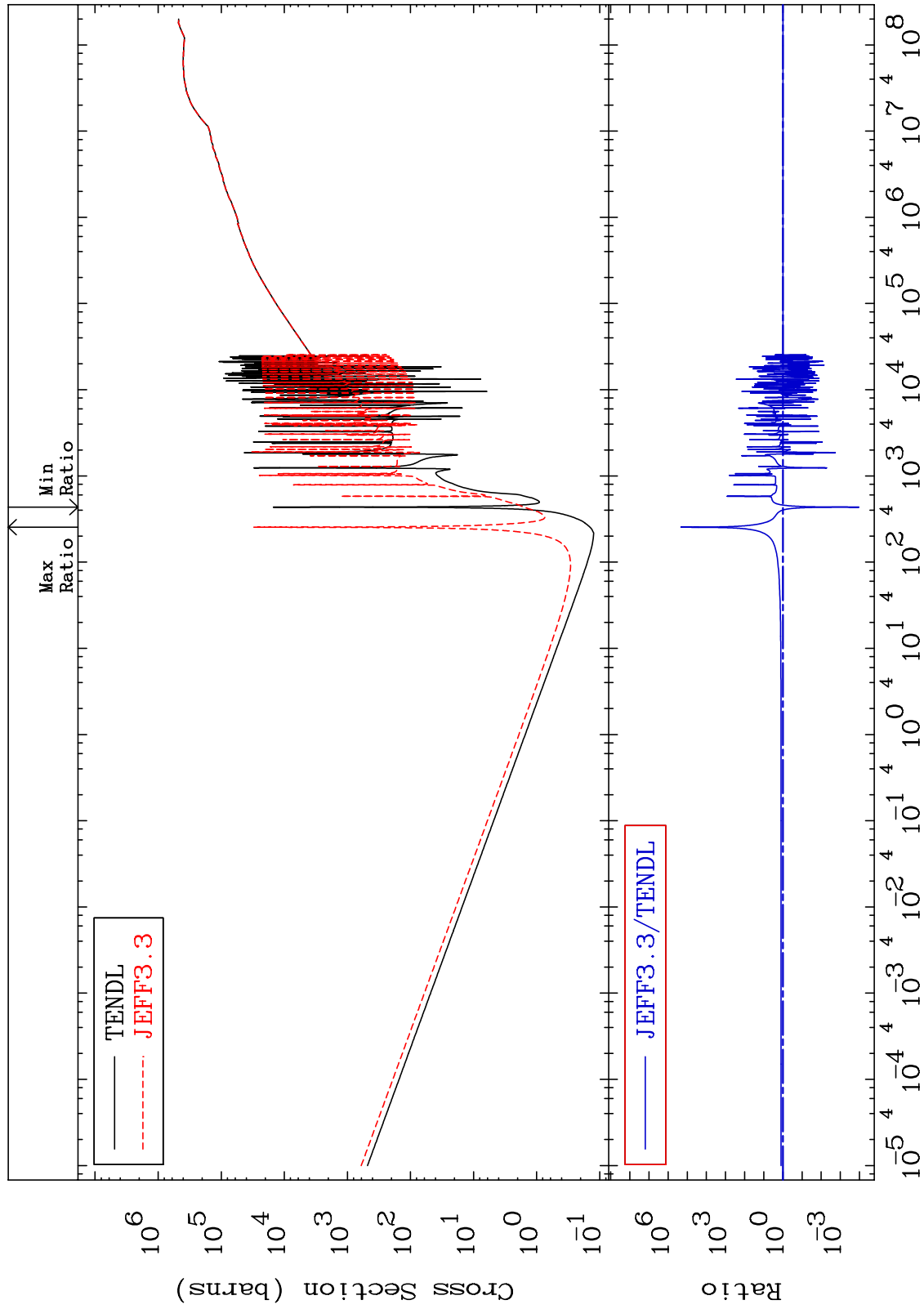
MAT 4425 Total kinematic kerma (high limit) 44-Ru-96
 Cross Section -99.58 To 9999. %



MAT 4425

Dpa total (eV-barns)
Cross Section

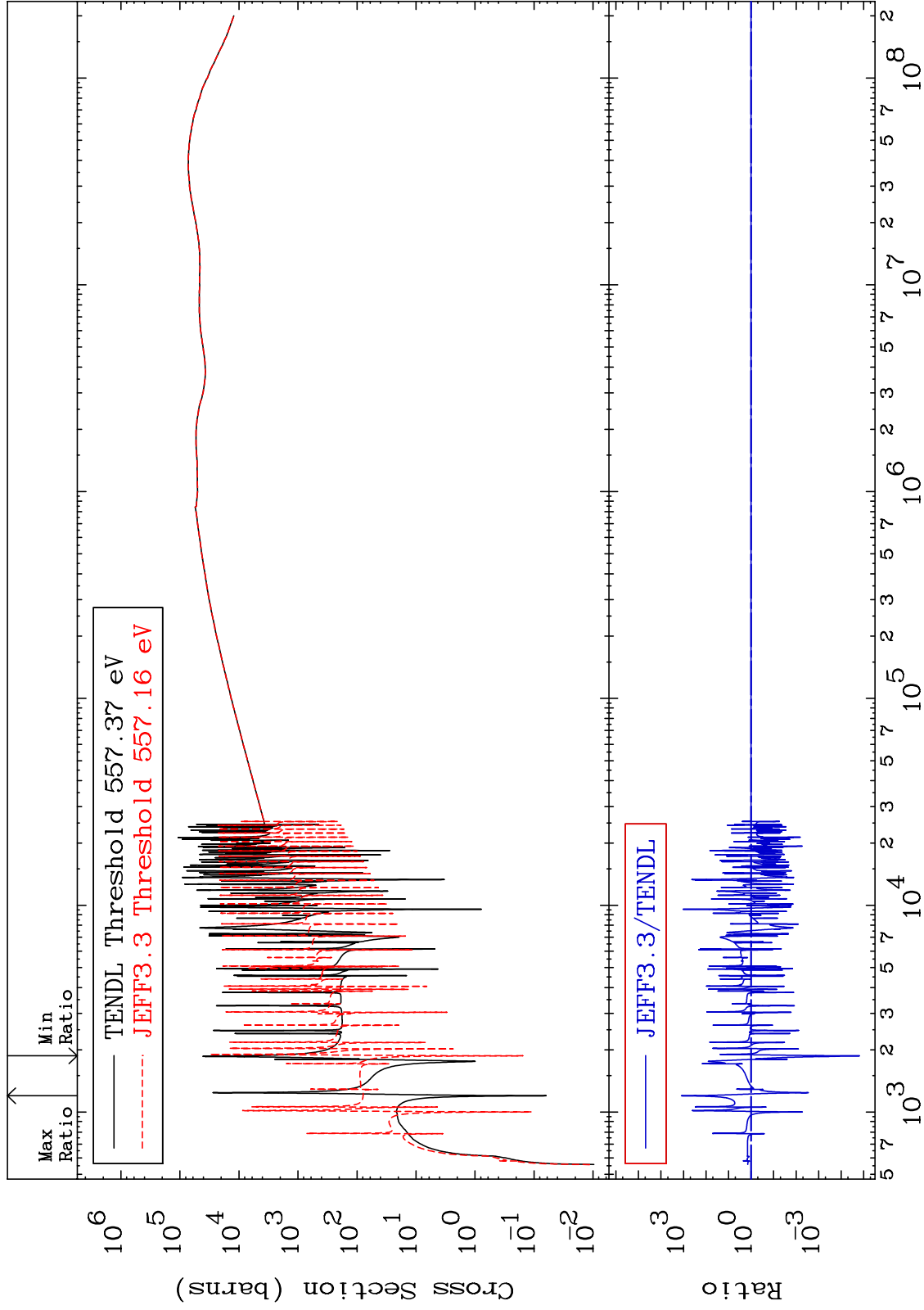
44-Ru-96
-99.99 To 9999. %



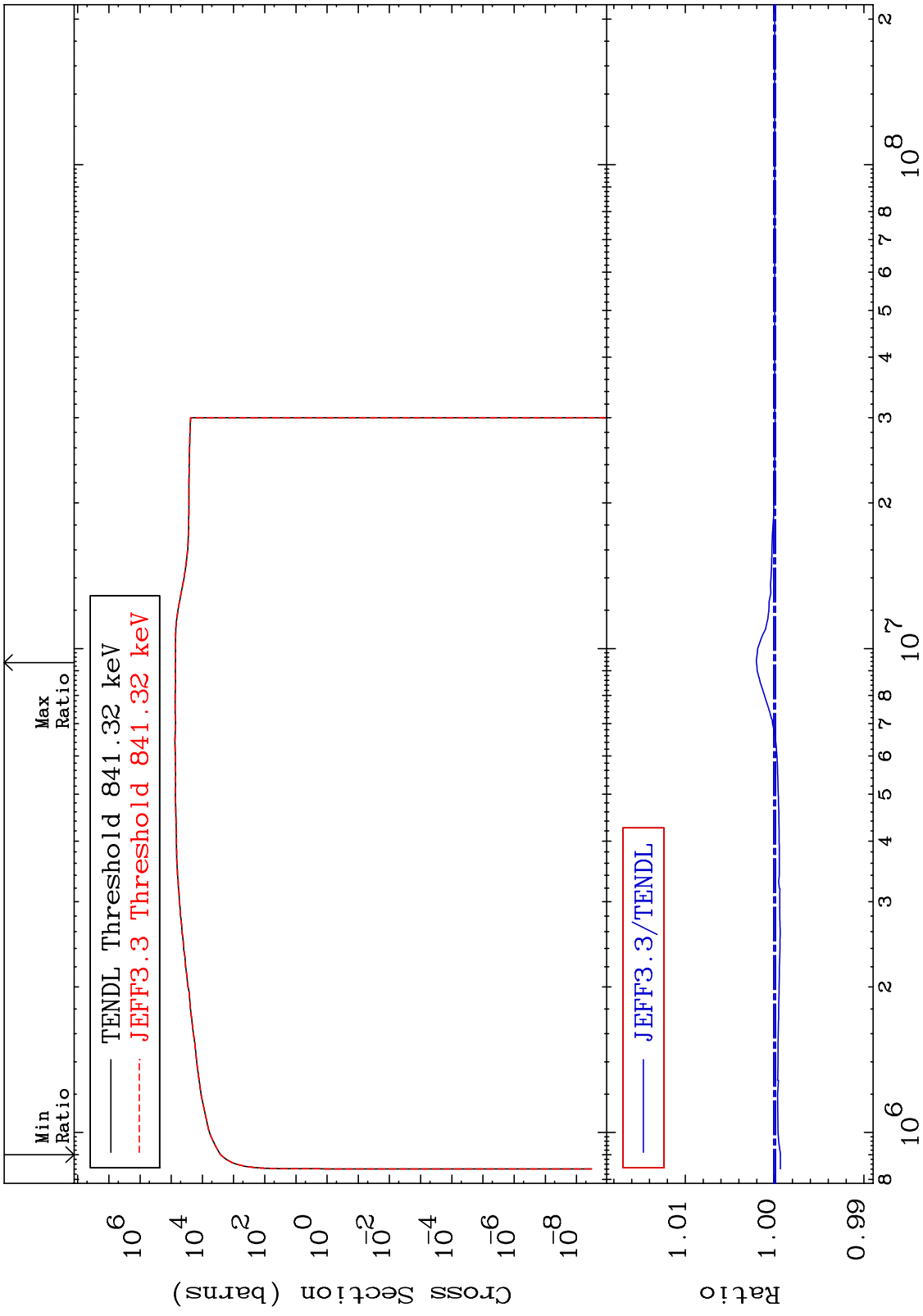
MAT 4425

Dpa elastic (mt2)
Cross Section

44-Ru-96
-100.0 To 9999. %



MAT 4425 Dpa inelastic (mt51-91) 44-Ru-96
Cross Section -0.065 To 0.204 %

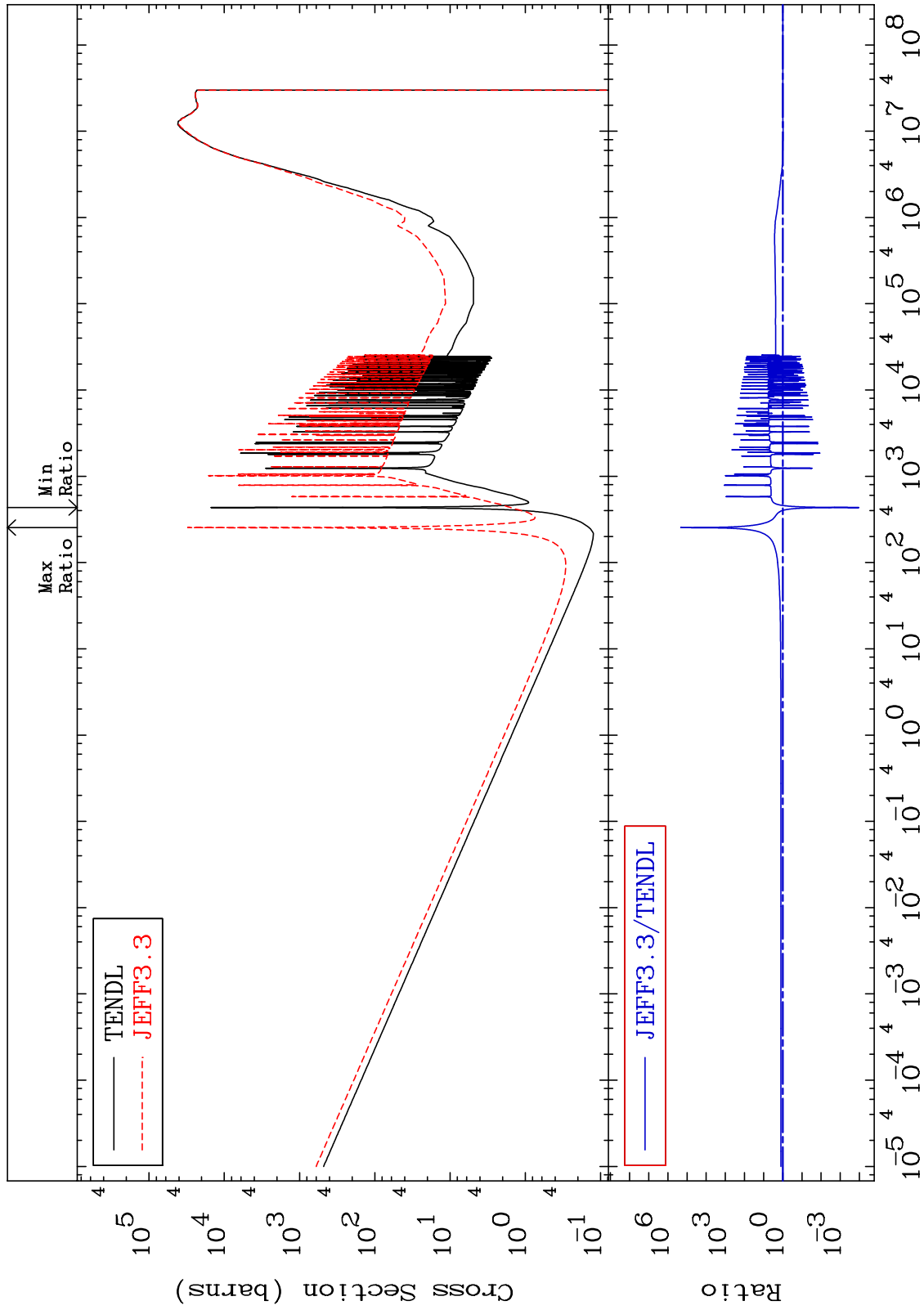


75 Incident Energy (eV) 44-Ru-96

MAT 4425

Dpa disappearance (mt102 -120)
Cross Section

44-Ru-96
-99.99 To 9999. %

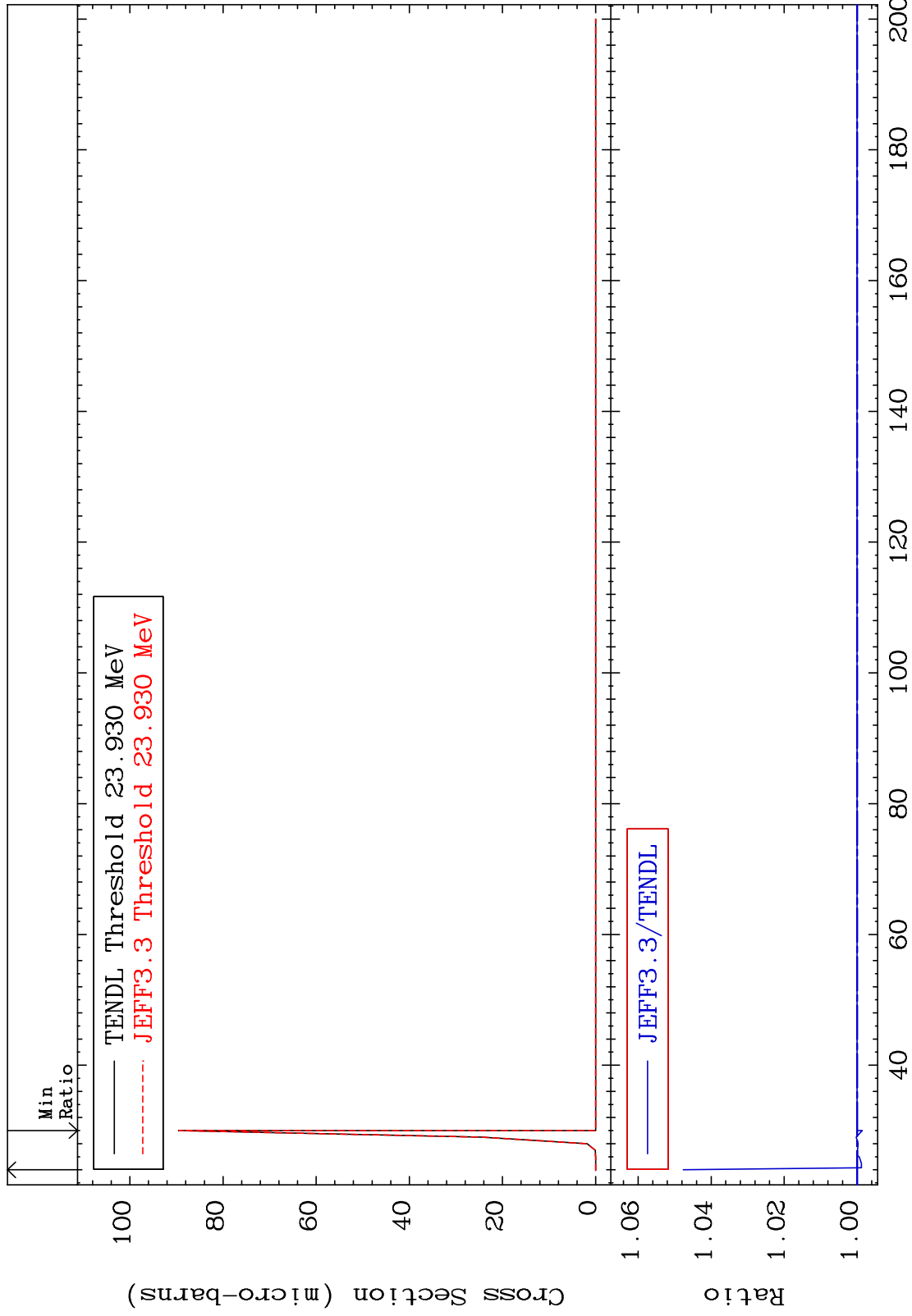


MAT 4425

(n,2n) d:43-Tc-93g

44-Ru-96

Radionuclide Production Cross Section -0.142 To 4.763 %



77

Incident Energy (MeV)

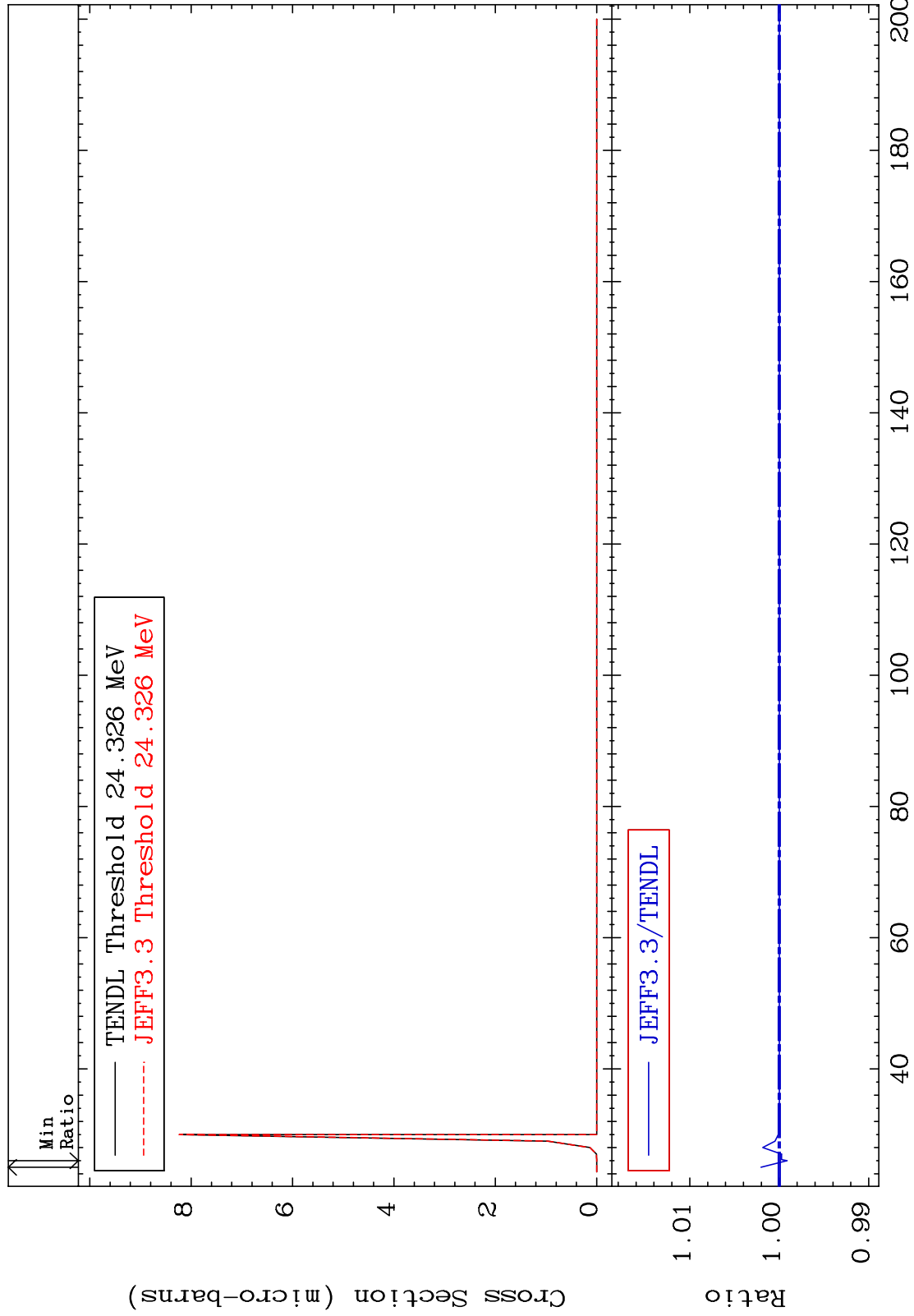
44-Ru-96

MAT 4425

(n,2n) d:43-Tc-93m1

44-Ru-96

Radionuclide Production Cross Section -0.086 To 0.205 %

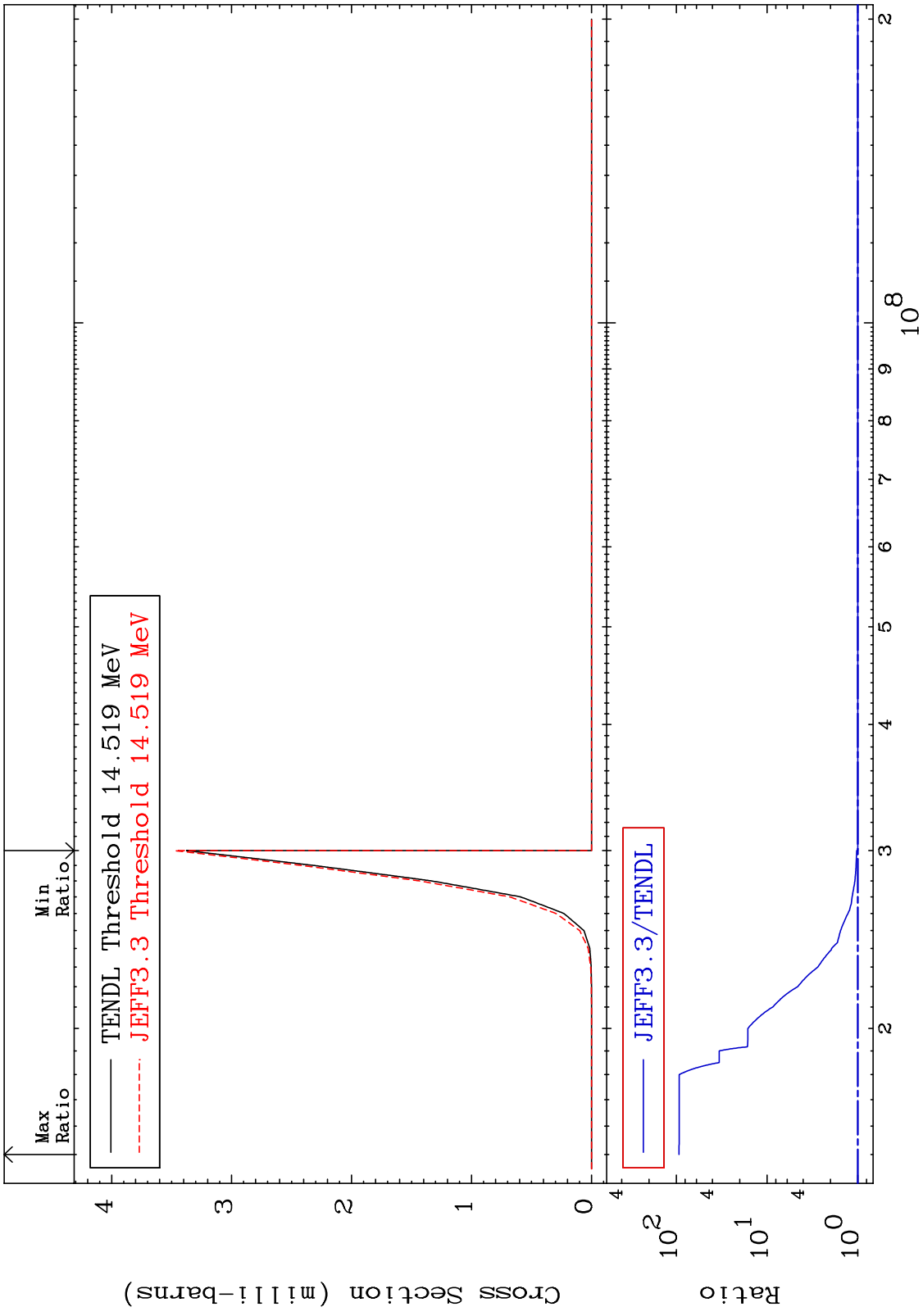


78

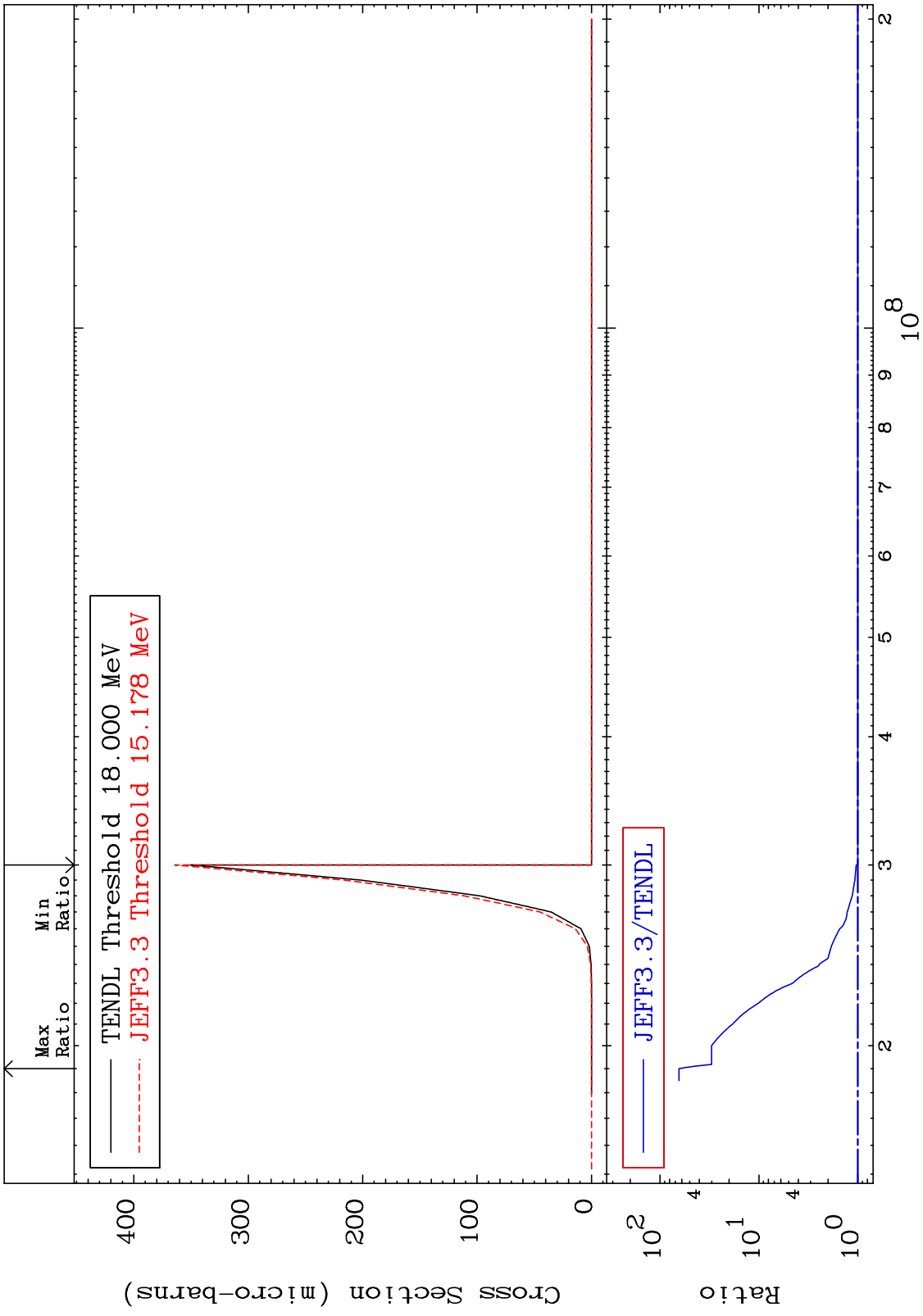
Incident Energy (MeV)

44-Ru-96

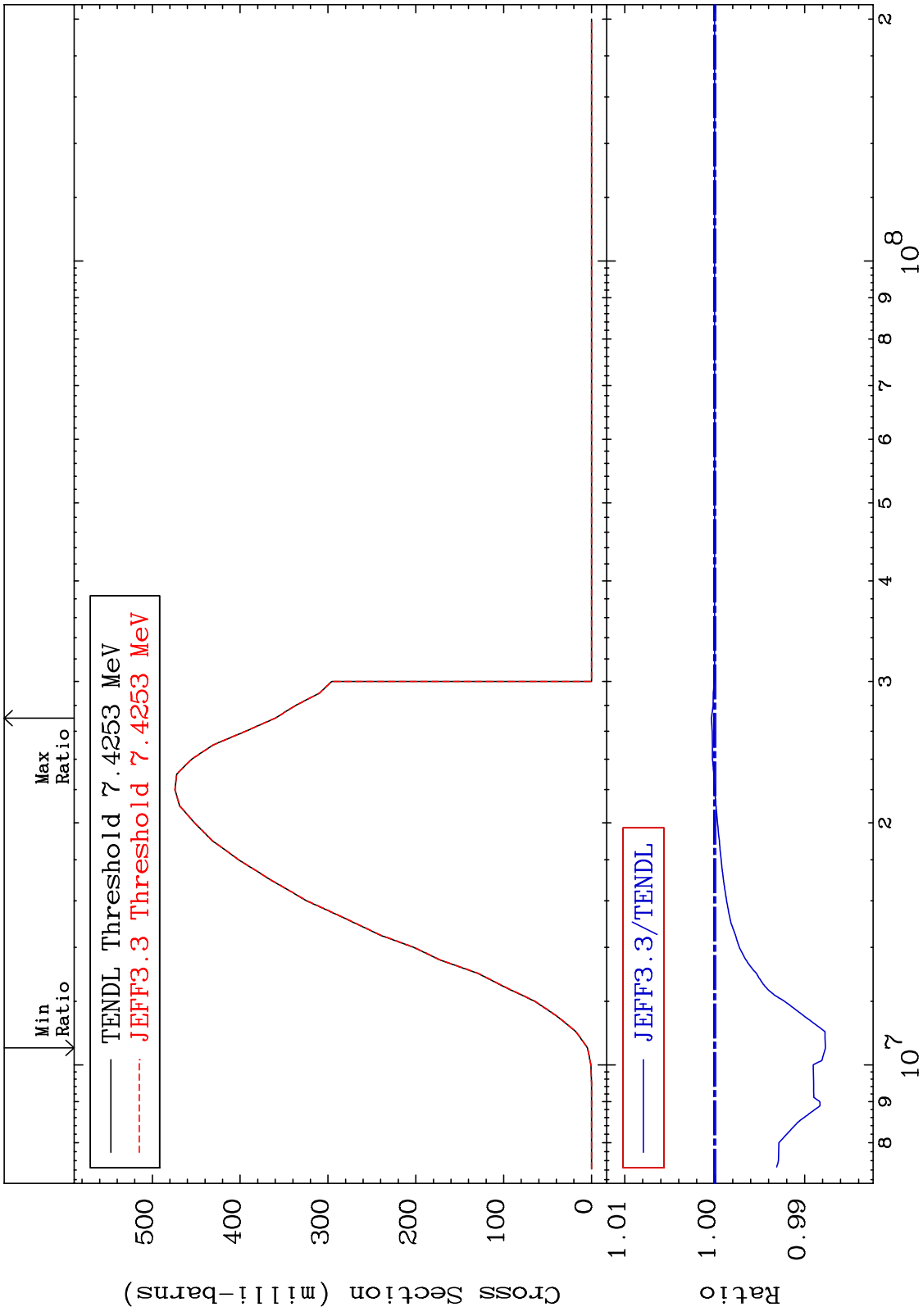
MAT 4425 (n,2n) α : 42-Mo-91g 44-Ru-96
 Radionuclide Production Cross Section 0.000 To 9224. %



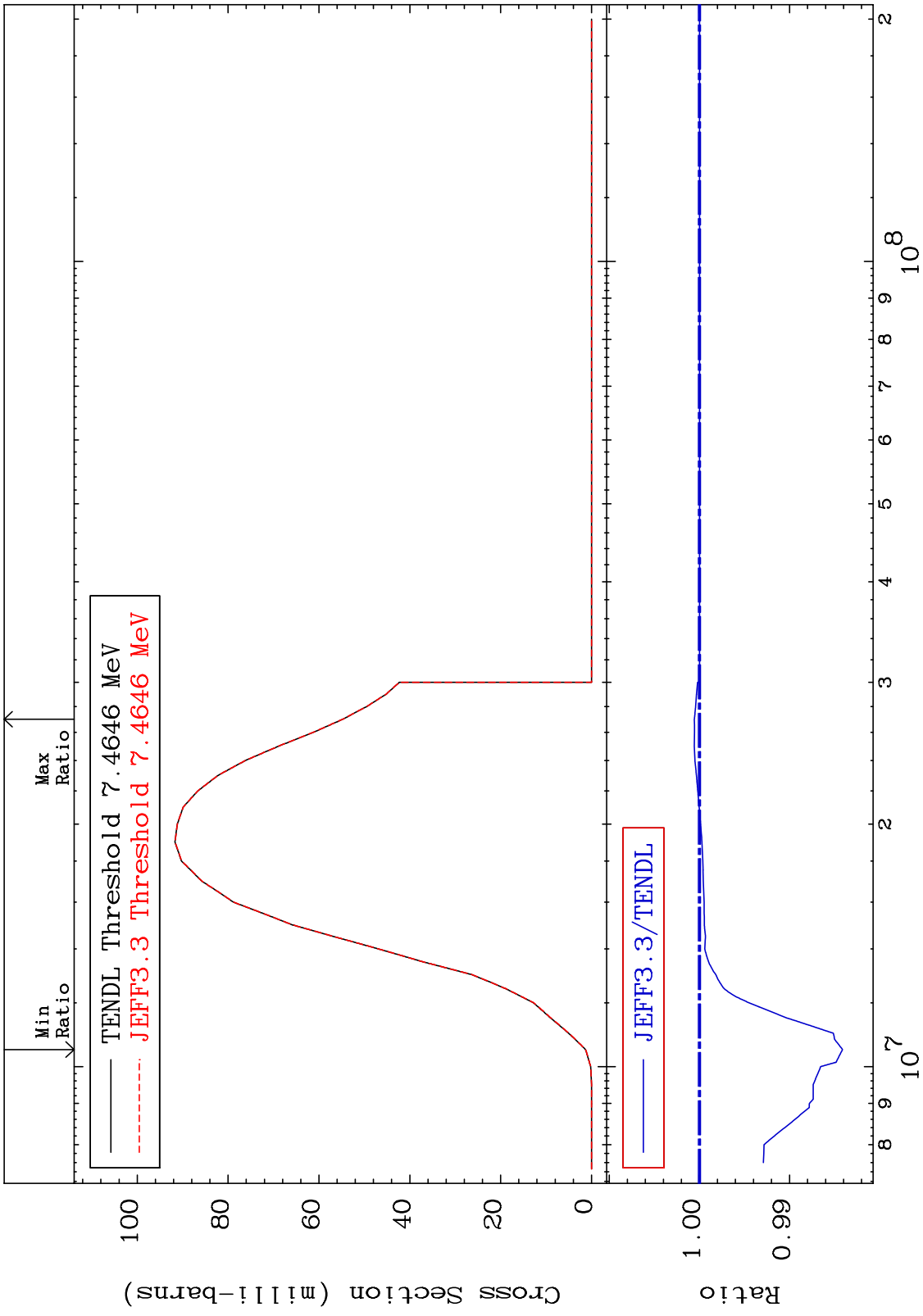
MAT 4425 (n,2n) α :42-Mo-91m1 44-Ru-96
 Radionuclide Production Cross Section 0.000 To 6311. %

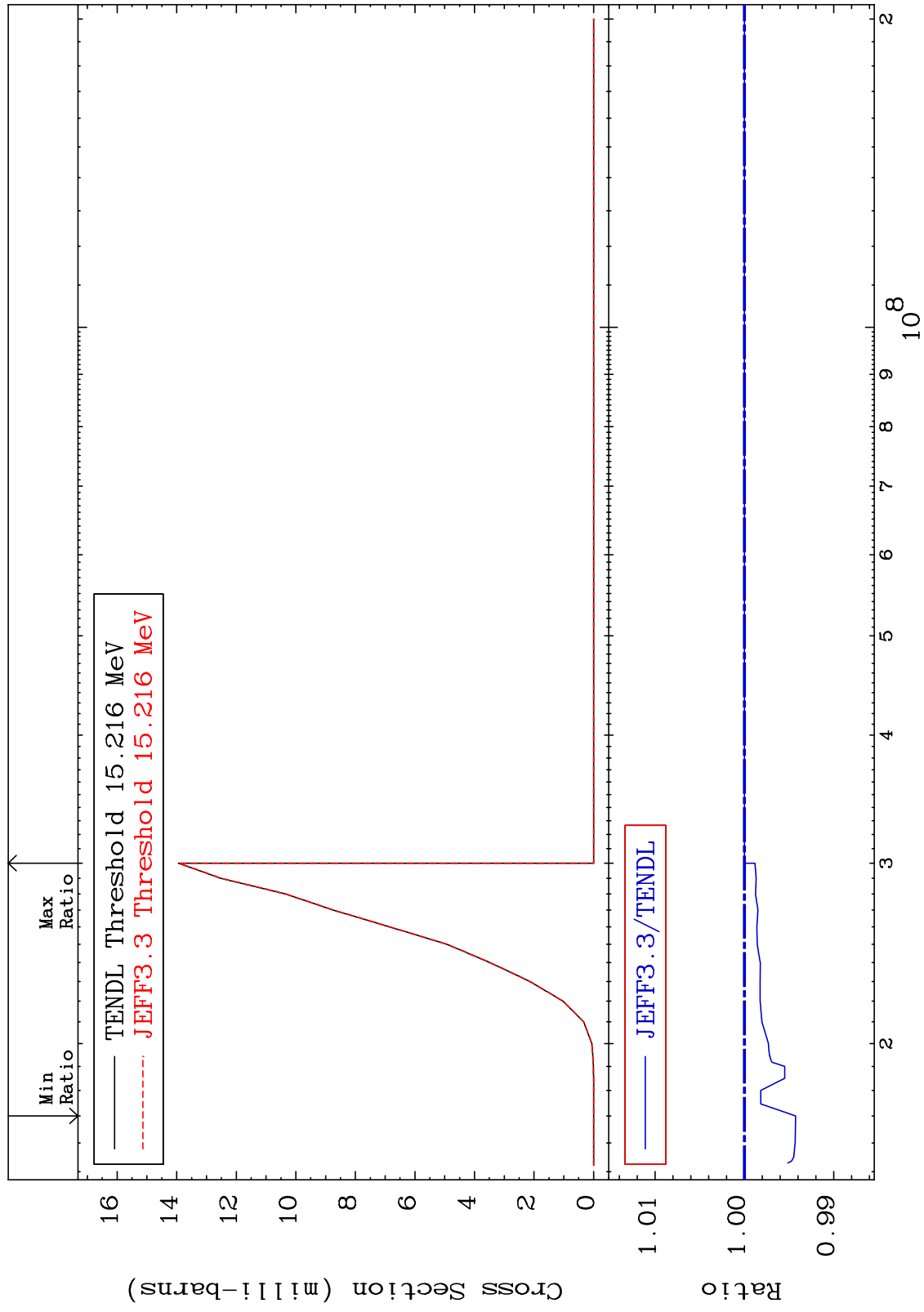


MAT 4425 (n, n') p:43-Tc-95g 44-Ru-96
 Radionuclide Production Cross Section -1.232 To 0.037 %

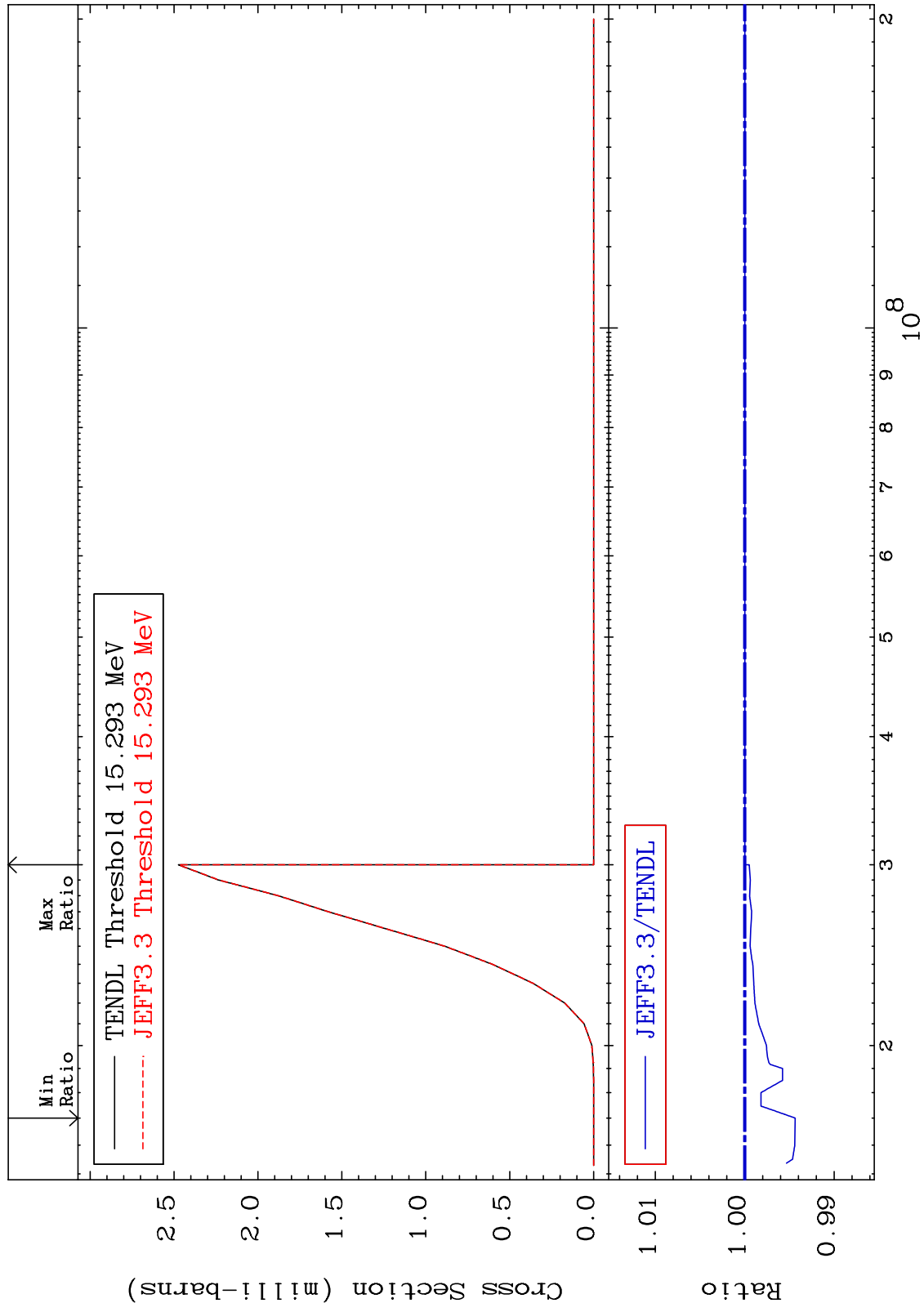


MAT 4425 (n, n') p:43-Tc-95m1 44-Ru-96
 Radionuclide Production Cross Section -1.589 To 0.056 %

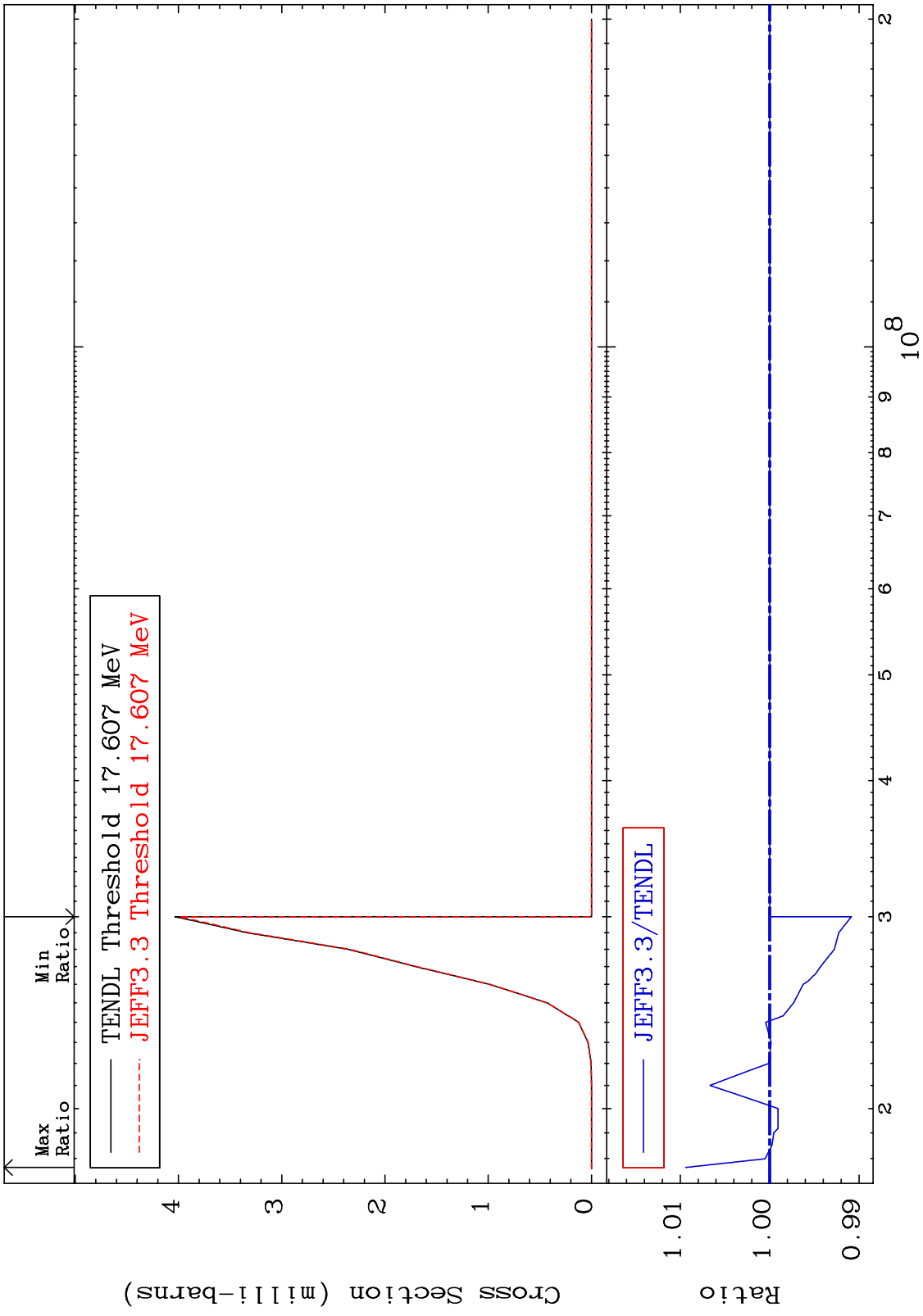




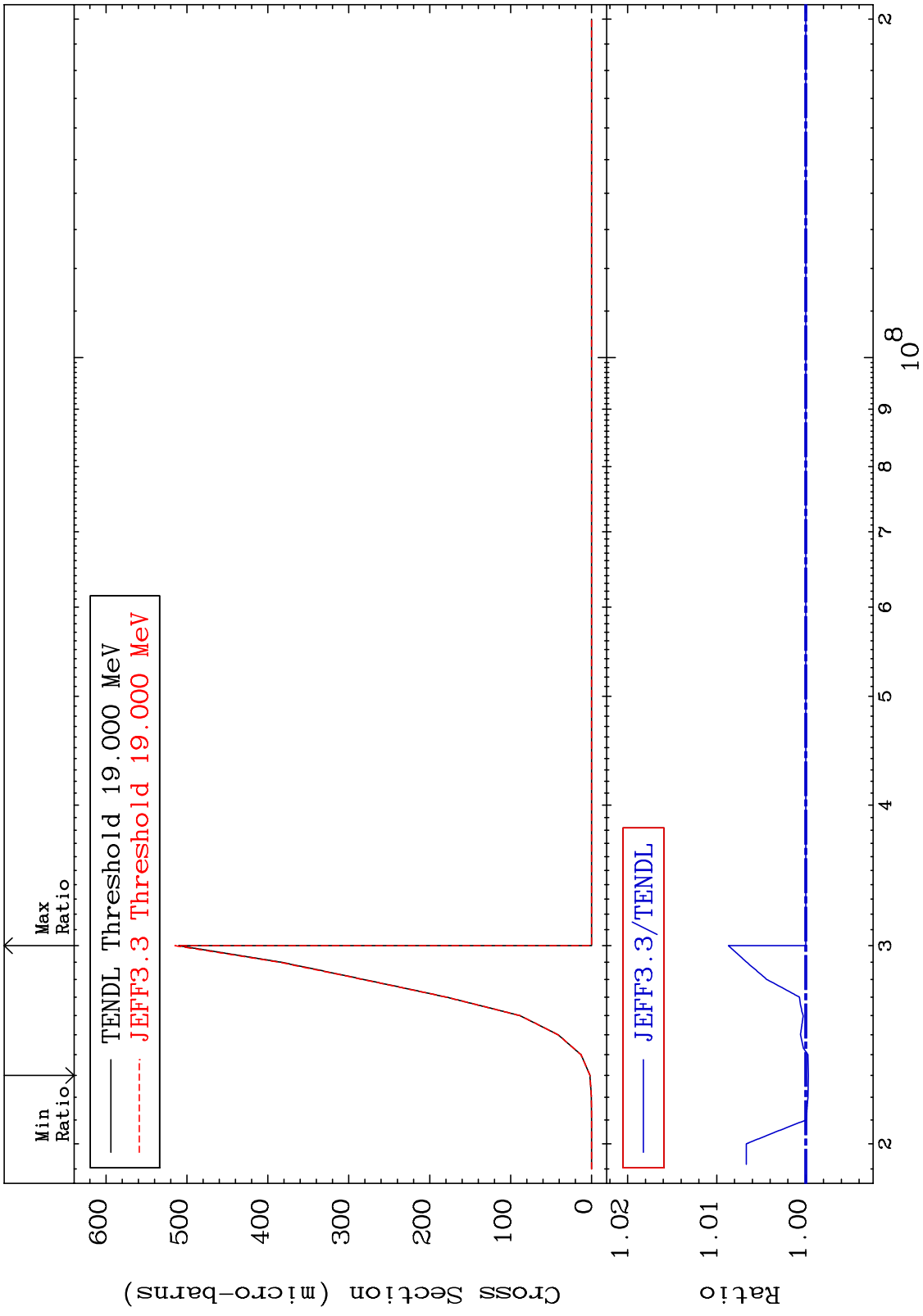
MAT 4425 (n, n') d:43-Tc-94m1 44-Ru-96
Radionuclide Production Cross Section -0.5665 To 0.000 %



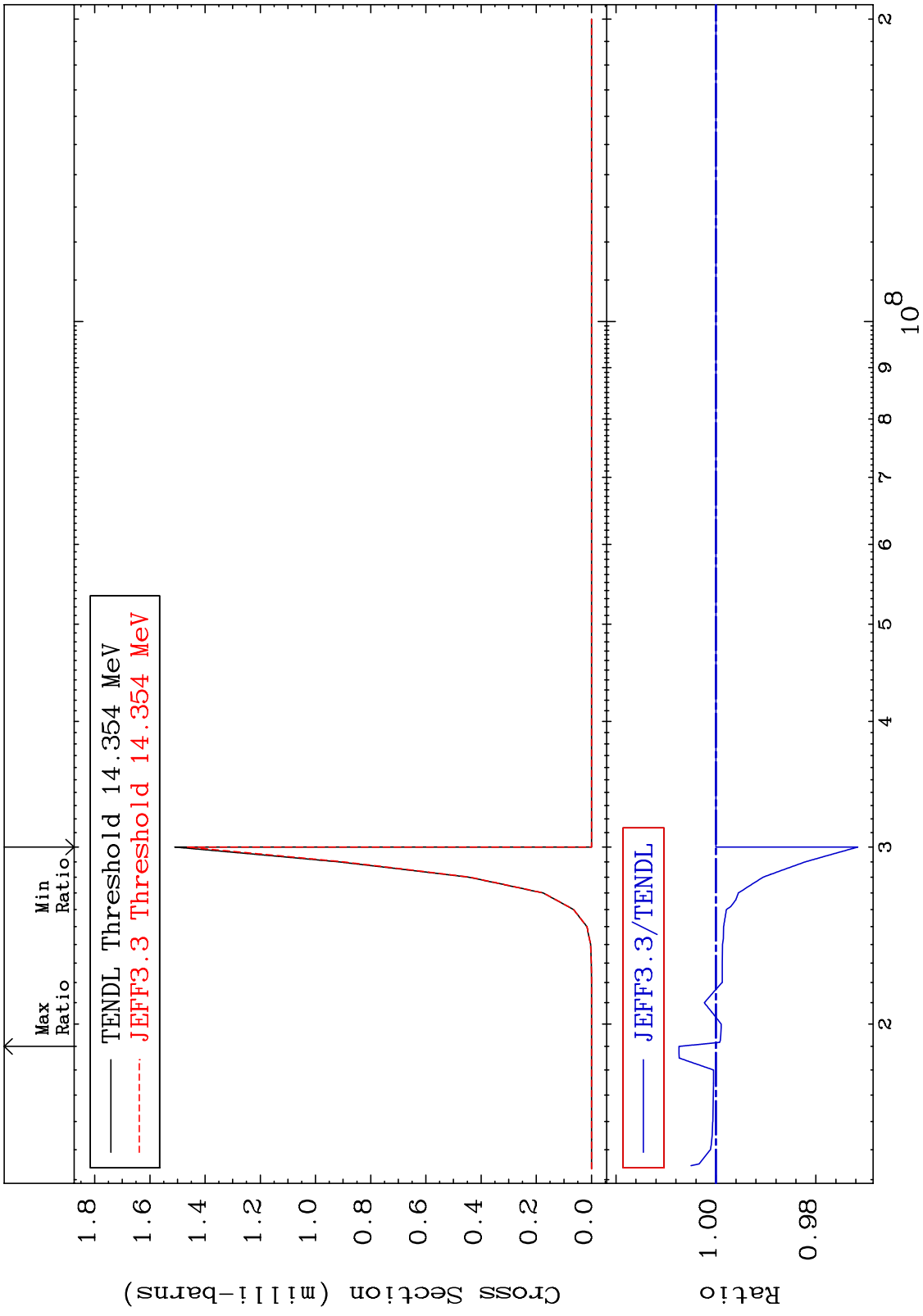
MAT 4425 (n, n') t:43-Tc-93g 44-Ru-96
 Radionuclide Production Cross Section -0.914 To 0.941 %



MAT 4425 (n,n') t:43-Tc-93m1 44-Ru-96
 Radionuclide Production Cross Section -0.030 To 0.868 %



MAT 4425 (n, n') He-3: 42-Mo-93g 44-Ru-96
 Radionuclide Production Cross Section -2.839 To 0.738 %

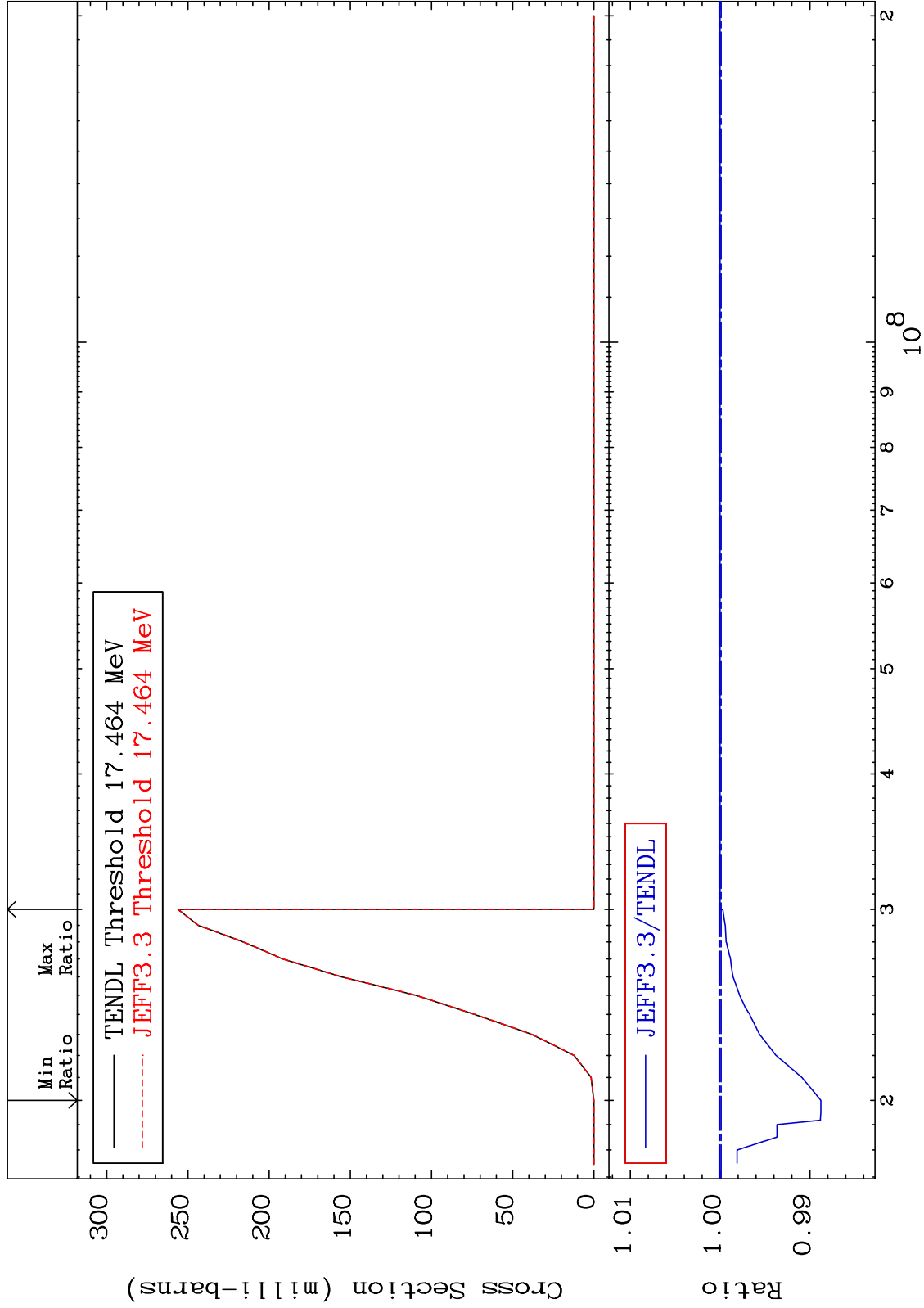


MAT 4425

(n,2n) p:43-Tc-94g

44-Ru-96

Radionuclide Production Cross Section -1.123 To 0.000 %

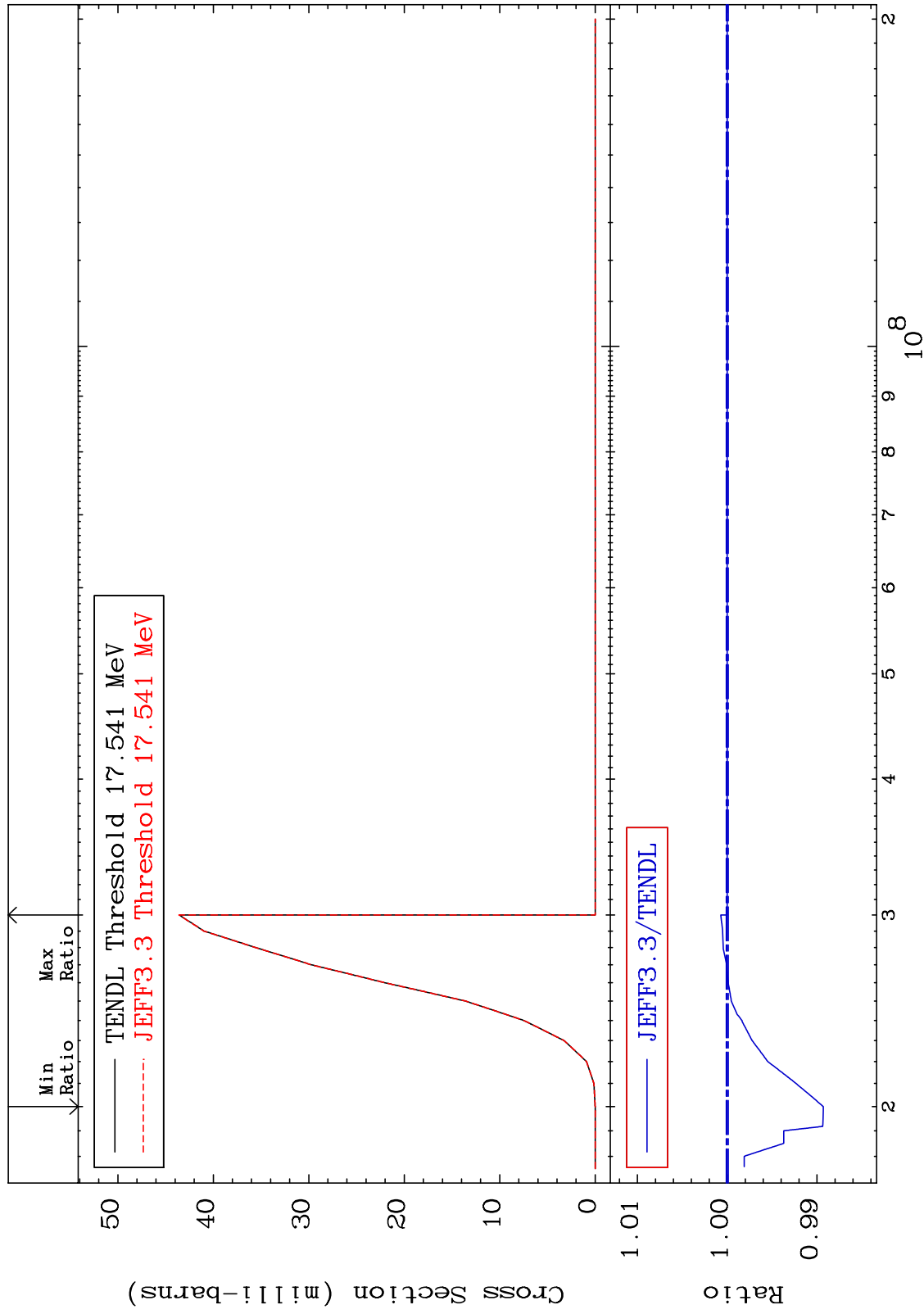


MAT 4425

(n,2n) p:43-Tc-94m1

44-Ru-96

Radionuclide Production Cross Section -1.069 To 0.073 %

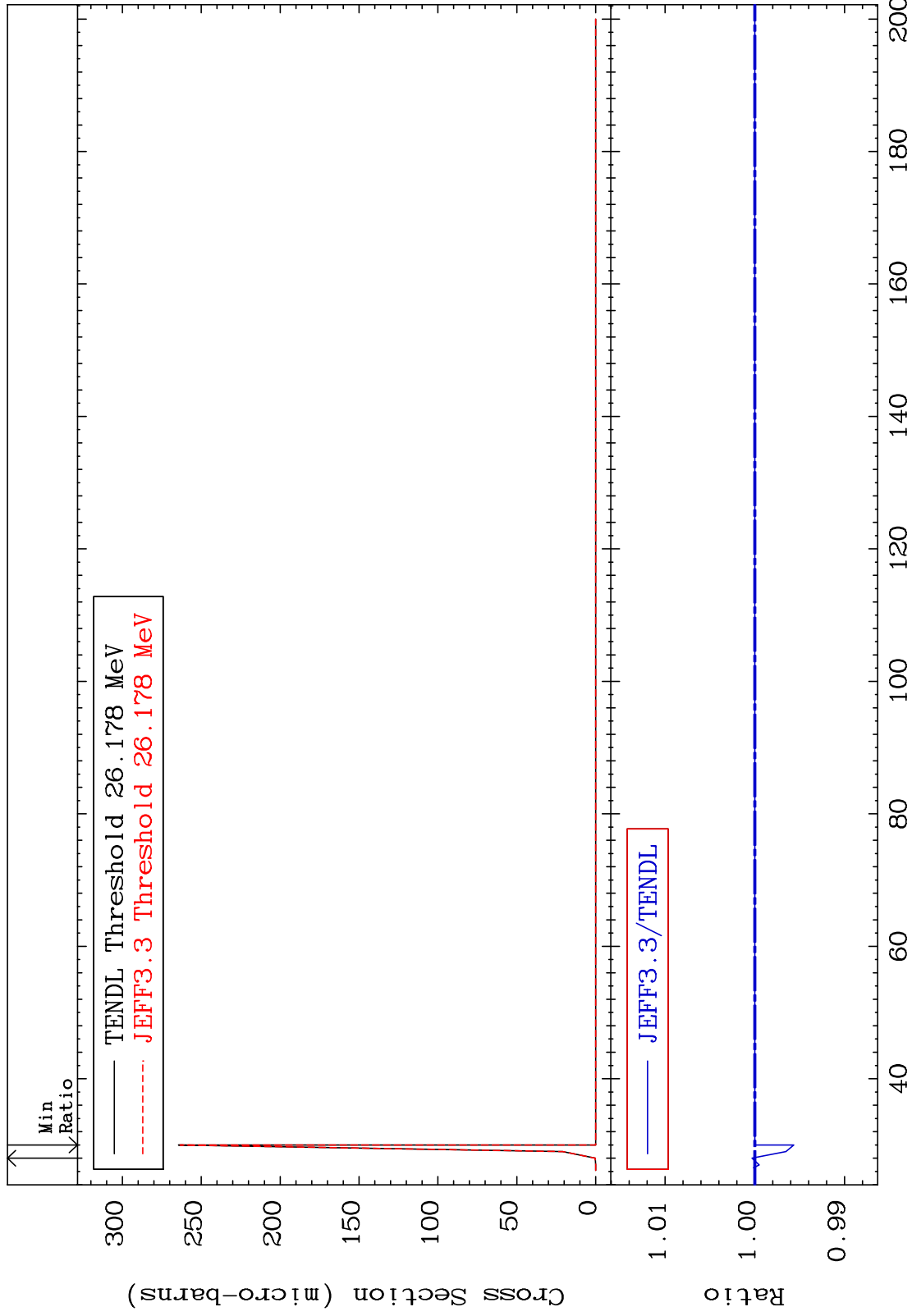


MAT 4425

(n, 3n) p:43-Tc-93g

44-Ru-96

Radionuclide Production Cross Section -0.434 To 0.033 %



90

Incident Energy (MeV)

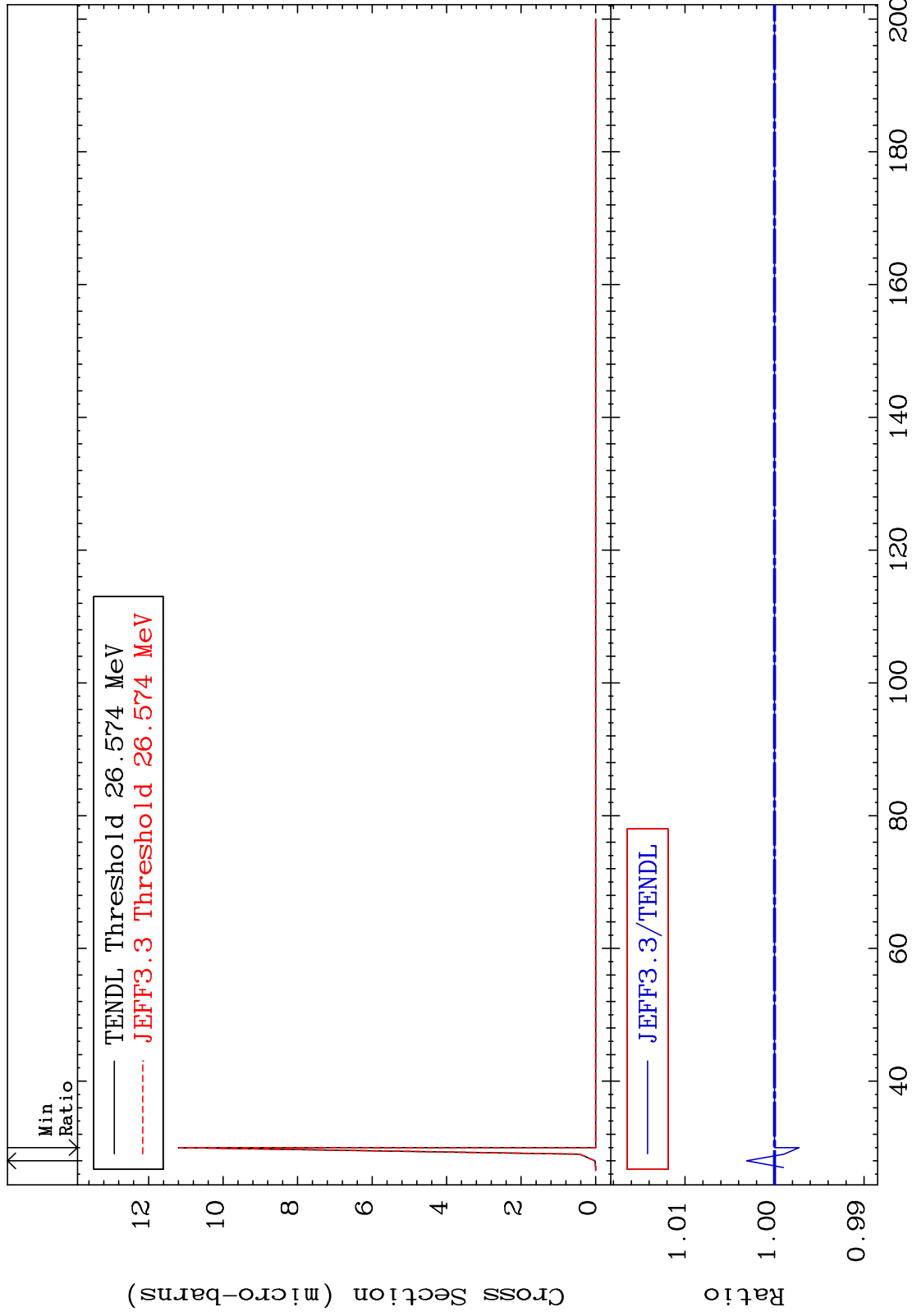
44-Ru-96

MAT 4425

(n,3n) p:43-Tc-93m1

44-Ru-96

Radionuclide Production Cross Section -0.274 To 0.311 %

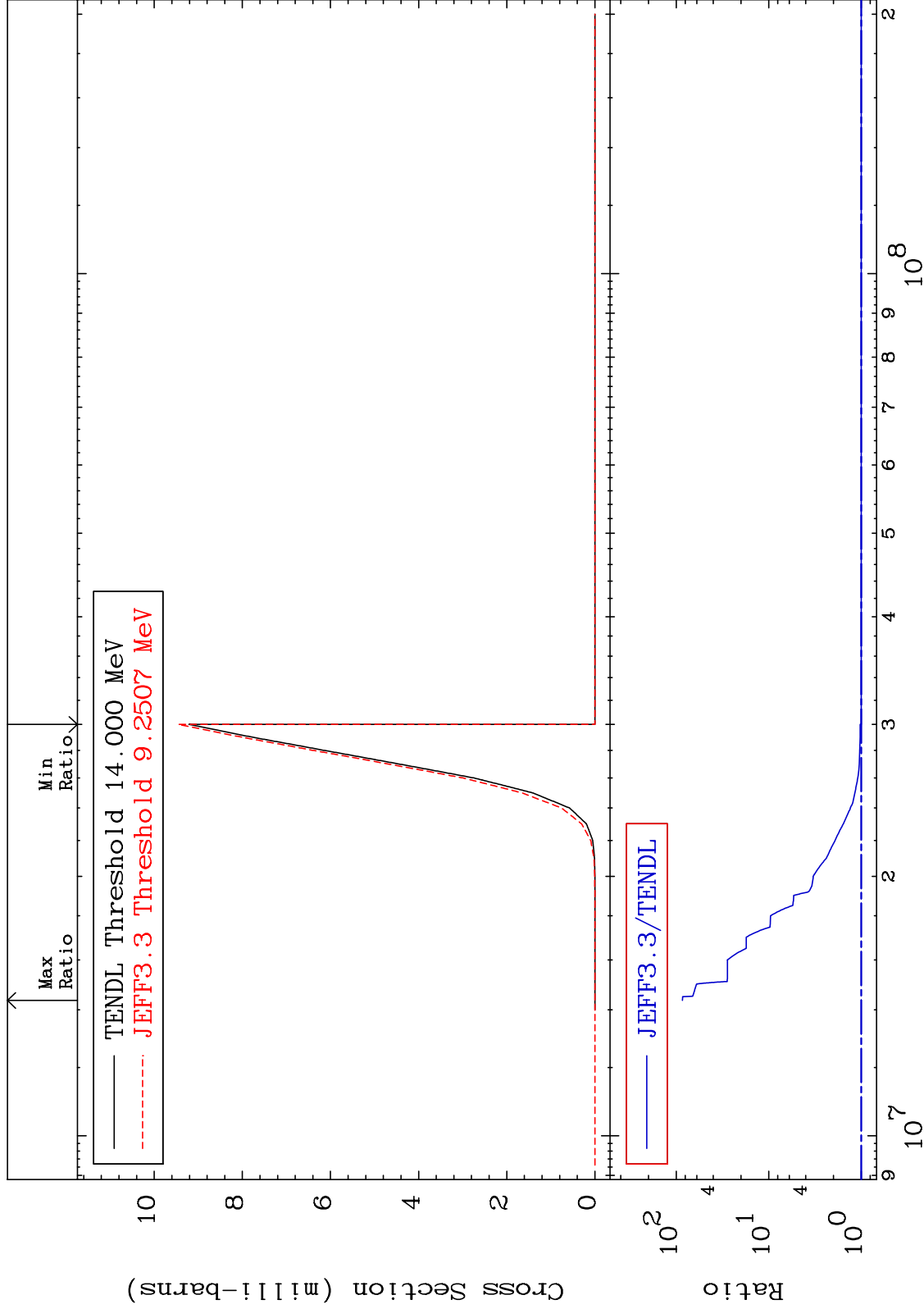


MAT 4425

(n,n') p α :41-Nb-91g

Radionuclide Production Cross Section 0.000 To 8484. %

44-Ru-96

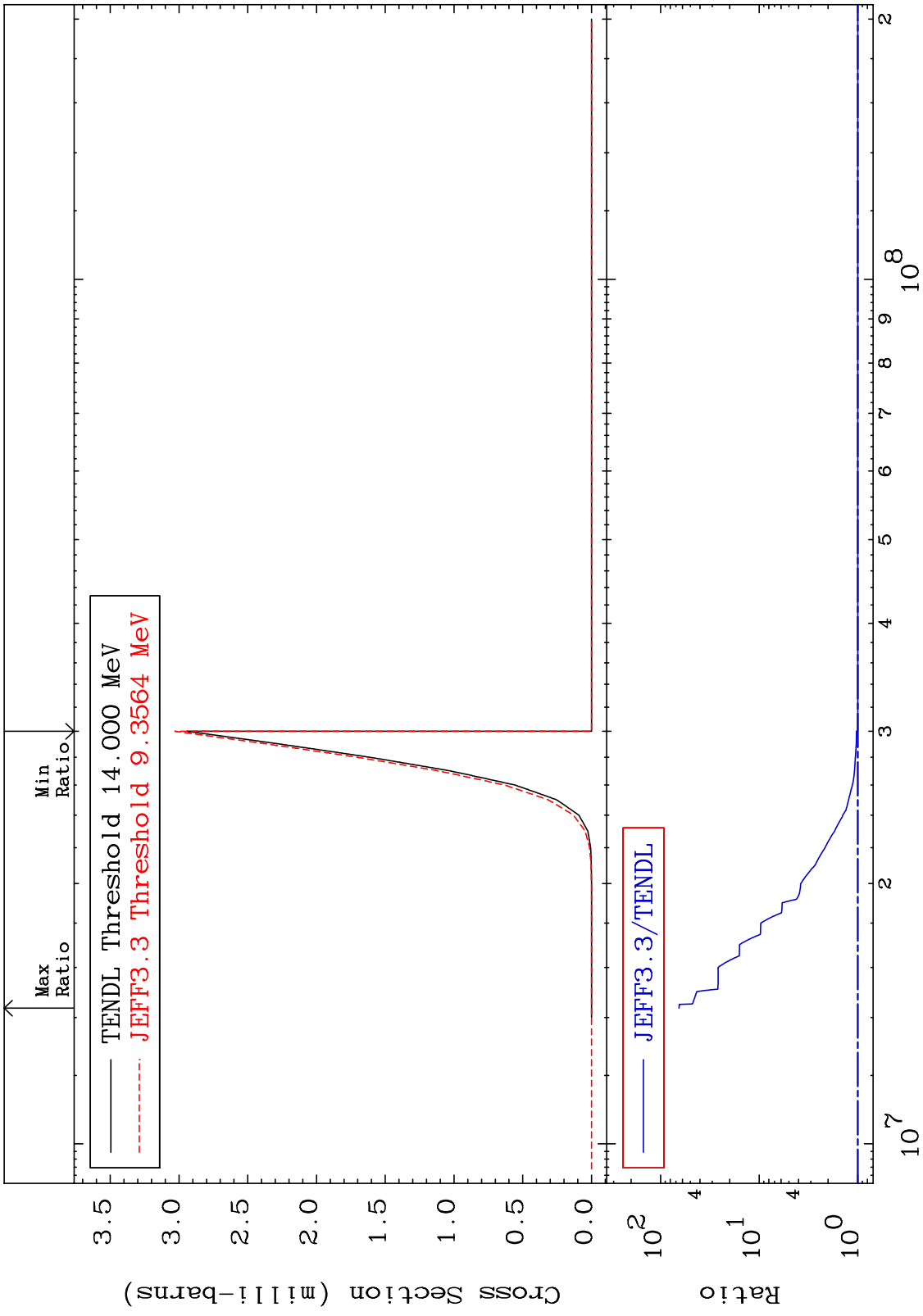


92

Incident Energy (eV)

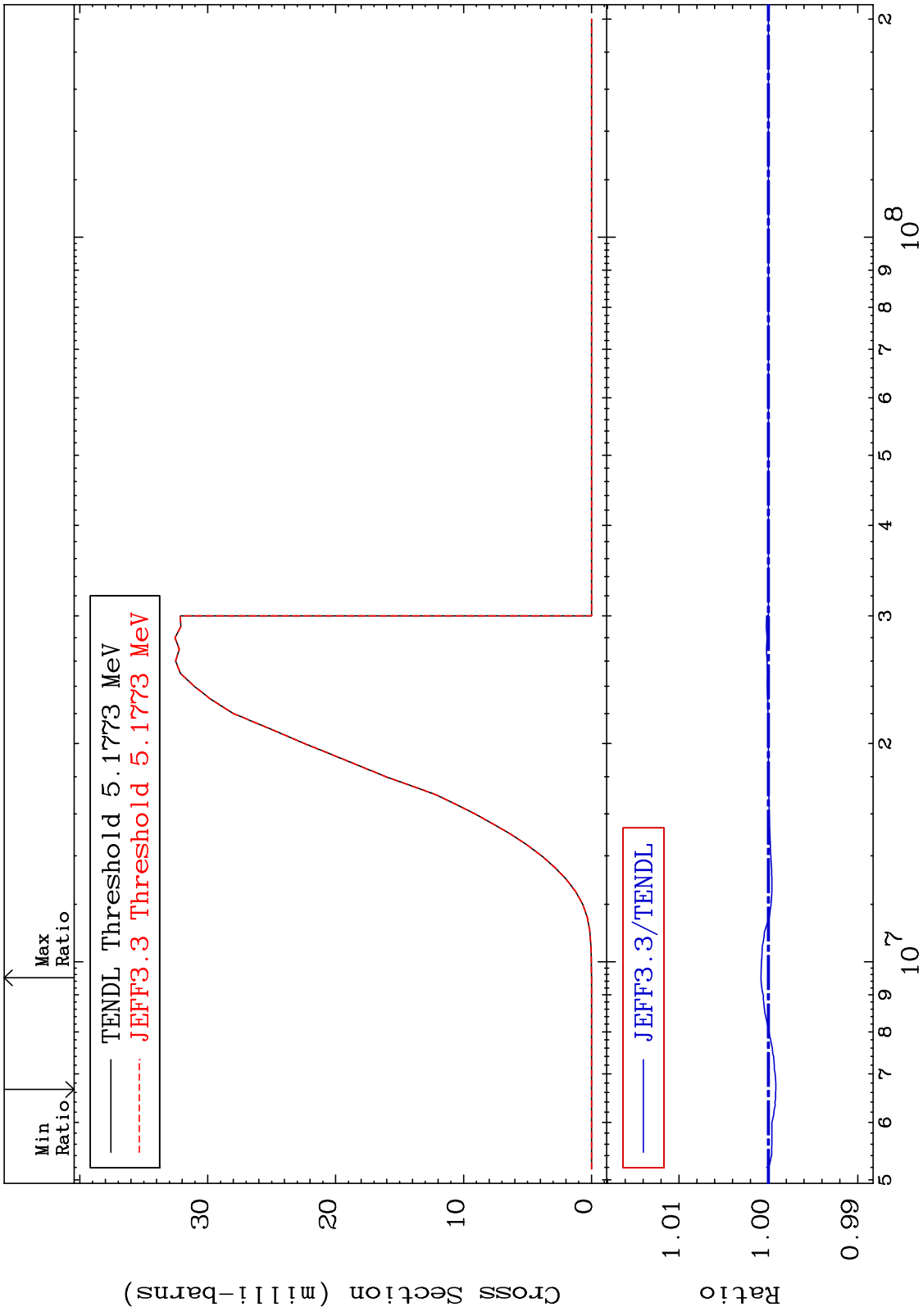
44-Ru-96

MAT 4425 (n,n') p α :41-Nb-91m1 44-Ru-96
 Radionuclide Production Cross Section 0.000 To 6414. %

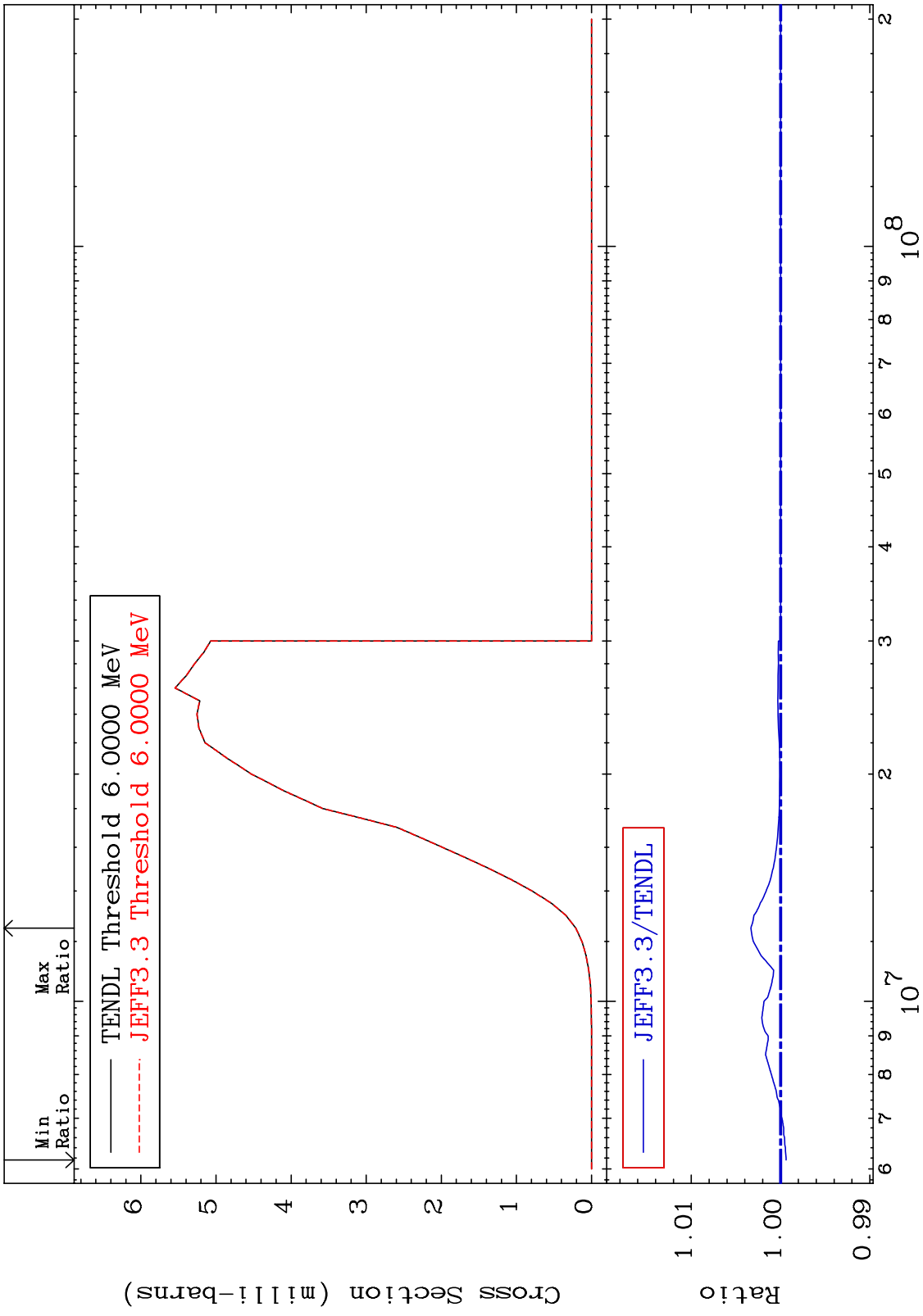


93 44-Ru-96

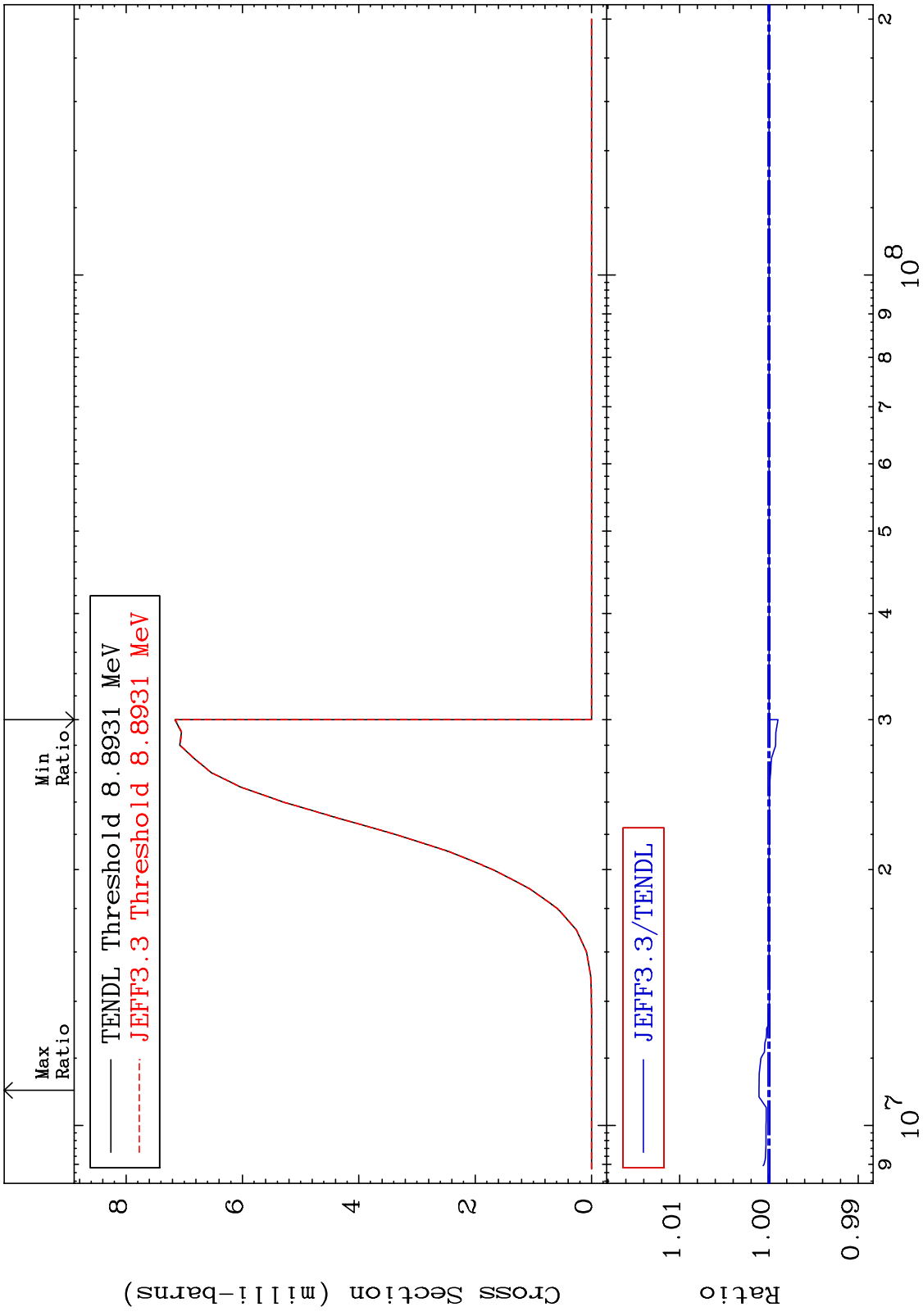
MAT 4425 (n,d):43-Tc-95g 44-Ru-96
 Radionuclide Production Cross Section -0.084 To 0.082 %



MAT 4425 (n,d):43-Tc-95m1 44-Ru-96
 Radionuclide Production Cross Section -0.062 To 0.334 %



MAT 4425 (n, t) : 43-Tc-94g 44-Ru-96
 Radionuclide Production Cross Section -0.101 To 0.112 %



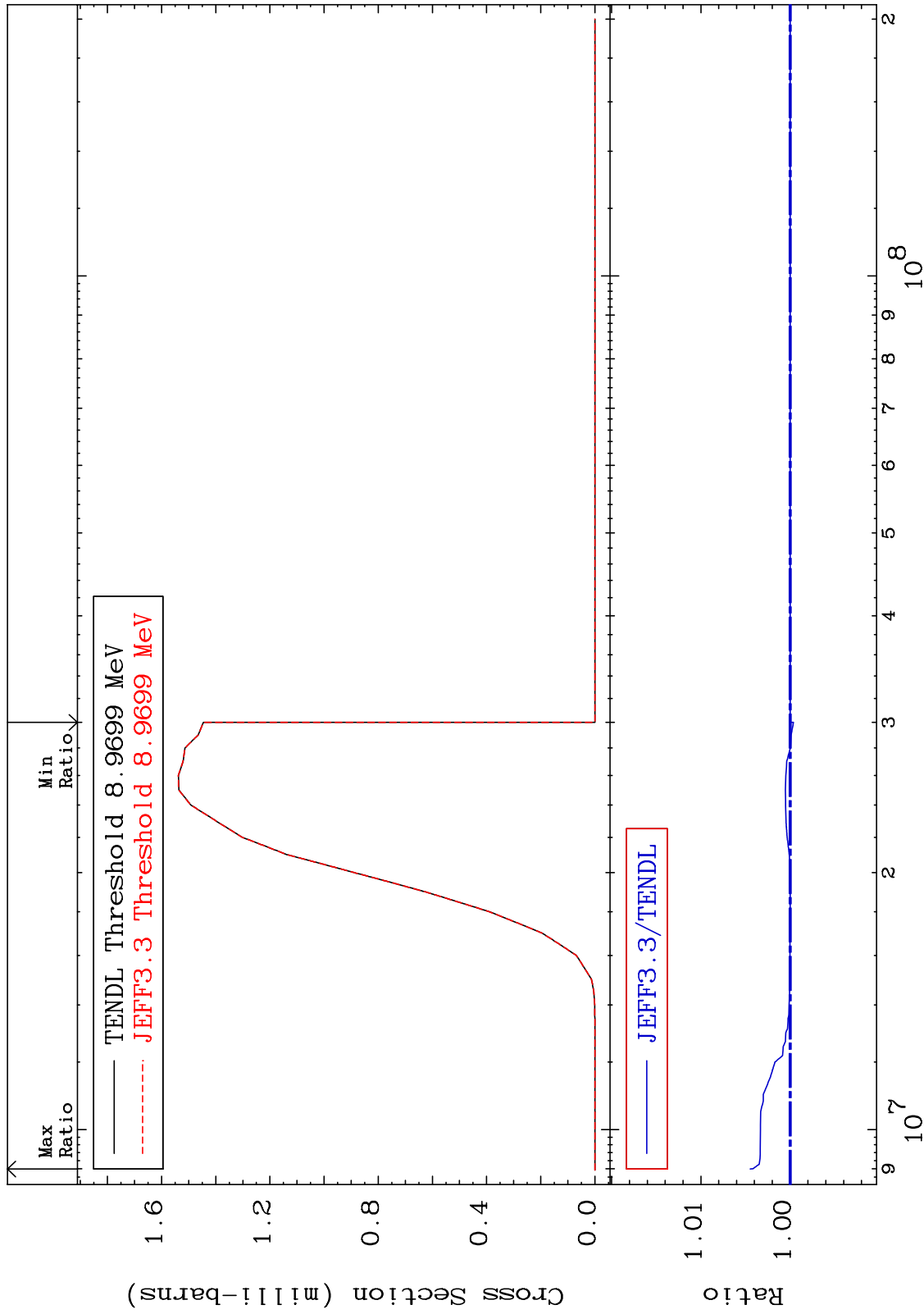
96 44-Ru-96

MAT 4425

(n, t) : 43-Tc-94m1

44-Ru-96

Radionuclide Production Cross Section -0.038 To 0.447 %



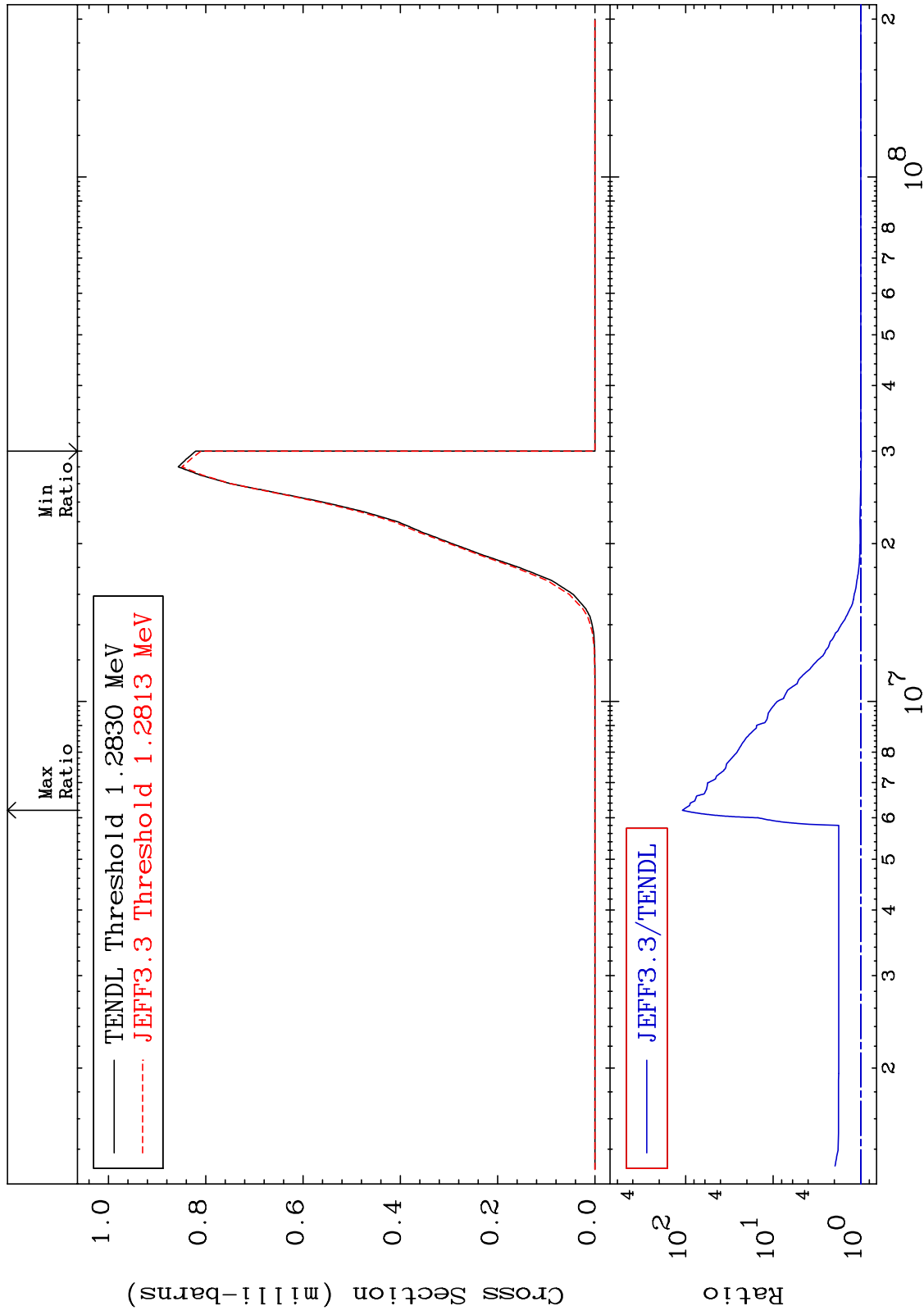
97

Incident Energy (eV)

44-Ru-96

MAT 4425

(n,p) α : 41-Nb-92g 44-Ru-96
Radionuclide Production Cross Section -1.312 To 9999. %

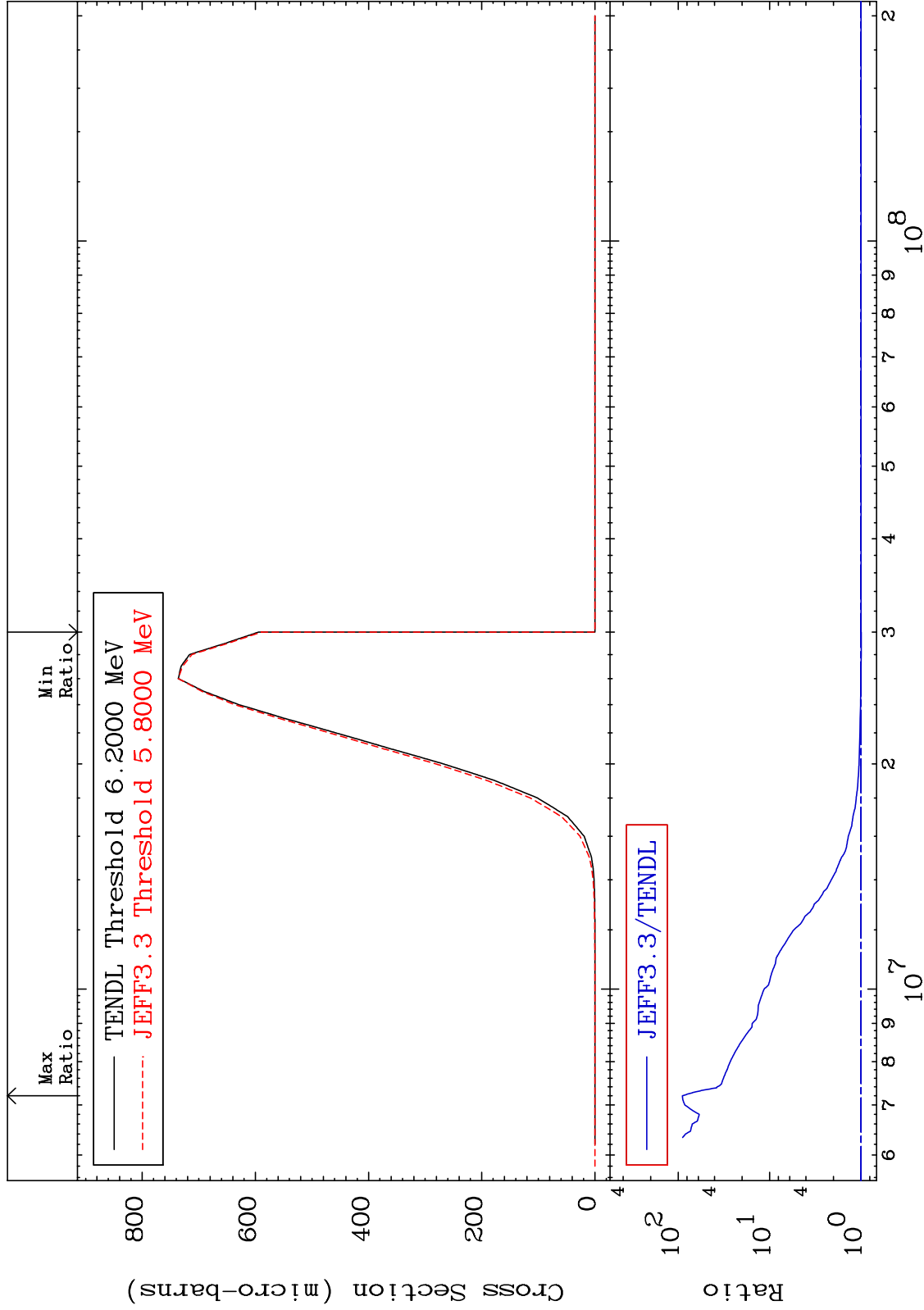


MAT 4425

(n, p) α : 41-Nb-92m1

44-Ru-96

Radionuclide Production Cross Section -0.866 To 8867. %



99

Incident Energy (eV)

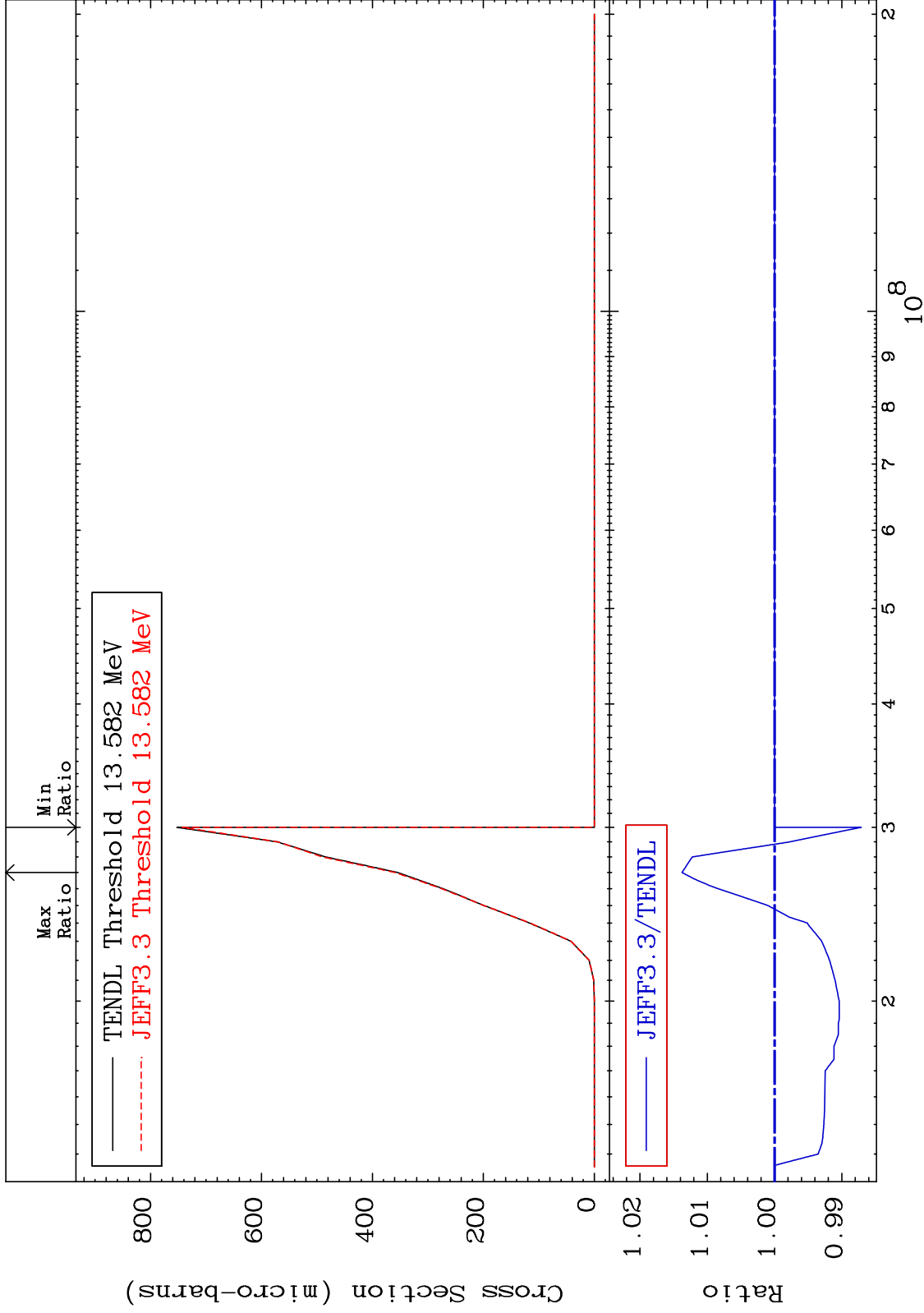
44-Ru-96

MAT 4425

(n,p) t:42-Mo-93g

44-Ru-96

Radionuclide Production Cross Section -1.288 To 1.375 %

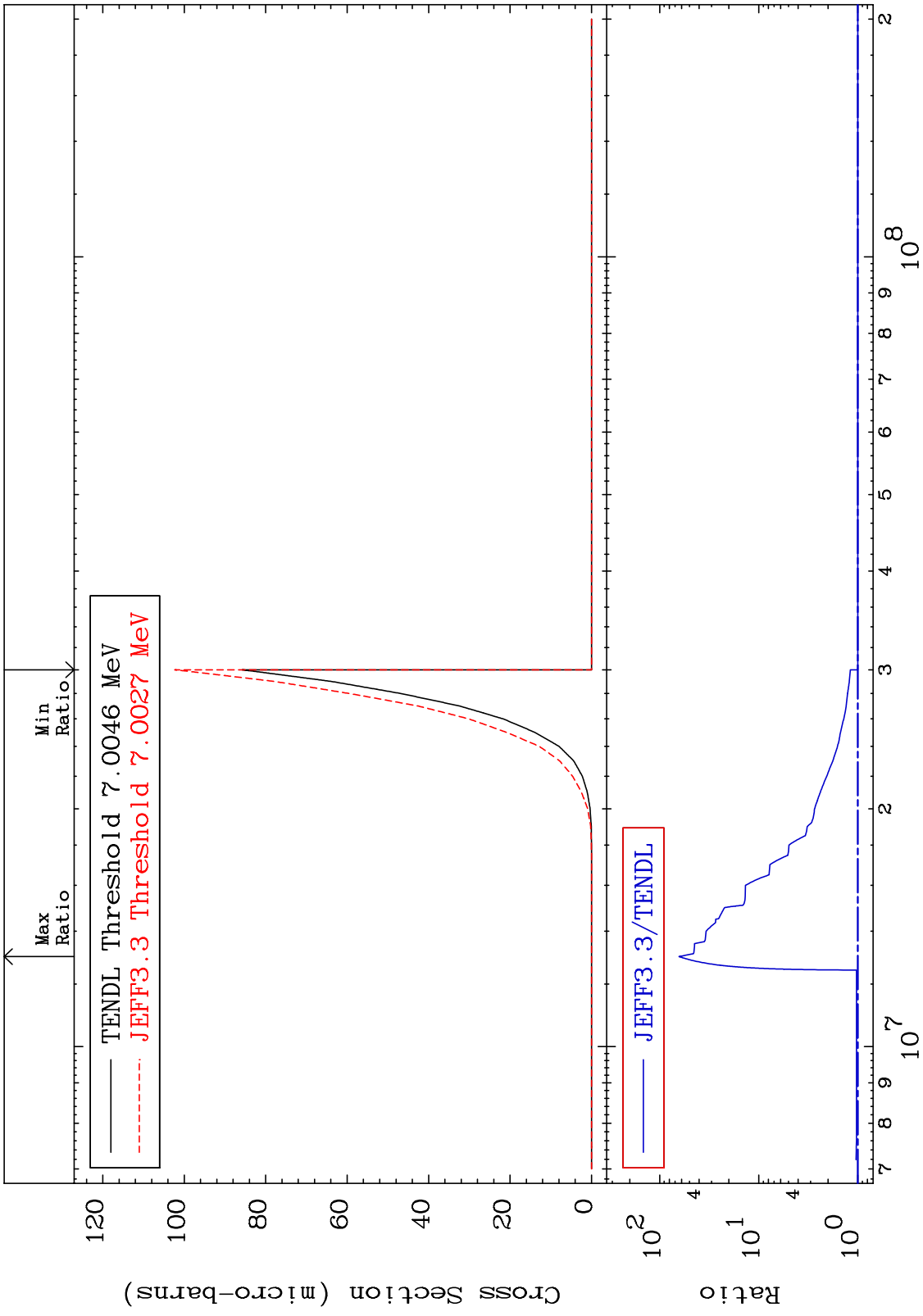


100

Incident Energy (eV)

44-Ru-96

MAT 4425 (n,d) α :41-Nb-91g 44-Ru-96
 Radionuclide Production Cross Section 0.000 To 6273. %

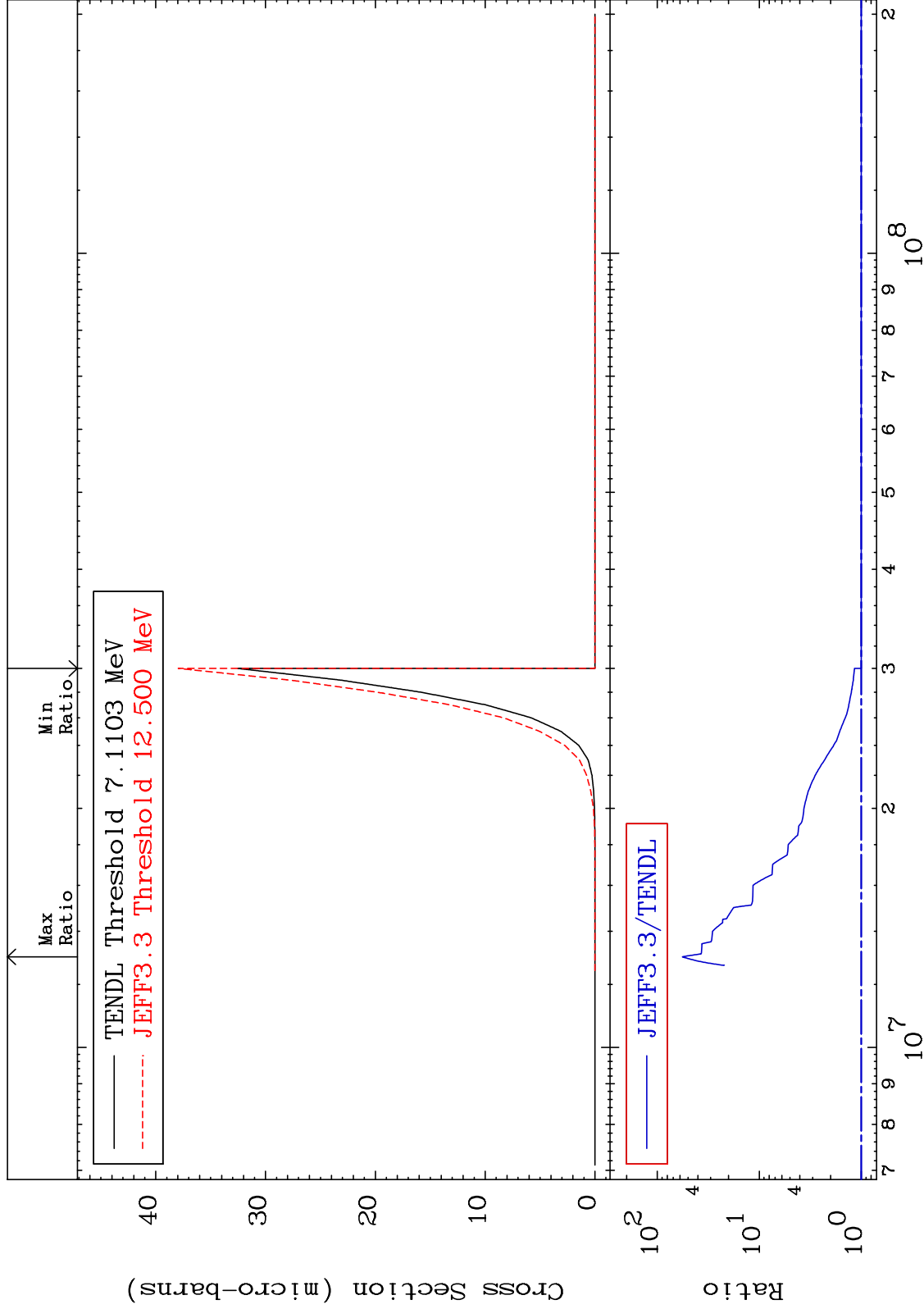


MAT 4425

(n, d) α : 41-Nb-91m1

44-Ru-96

Radionuclide Production Cross Section 0.000 To 5572. %



102