

Program Complot
(Version 2021-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.

Tele: 925-443-1911

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

Press Mouse Button to Start

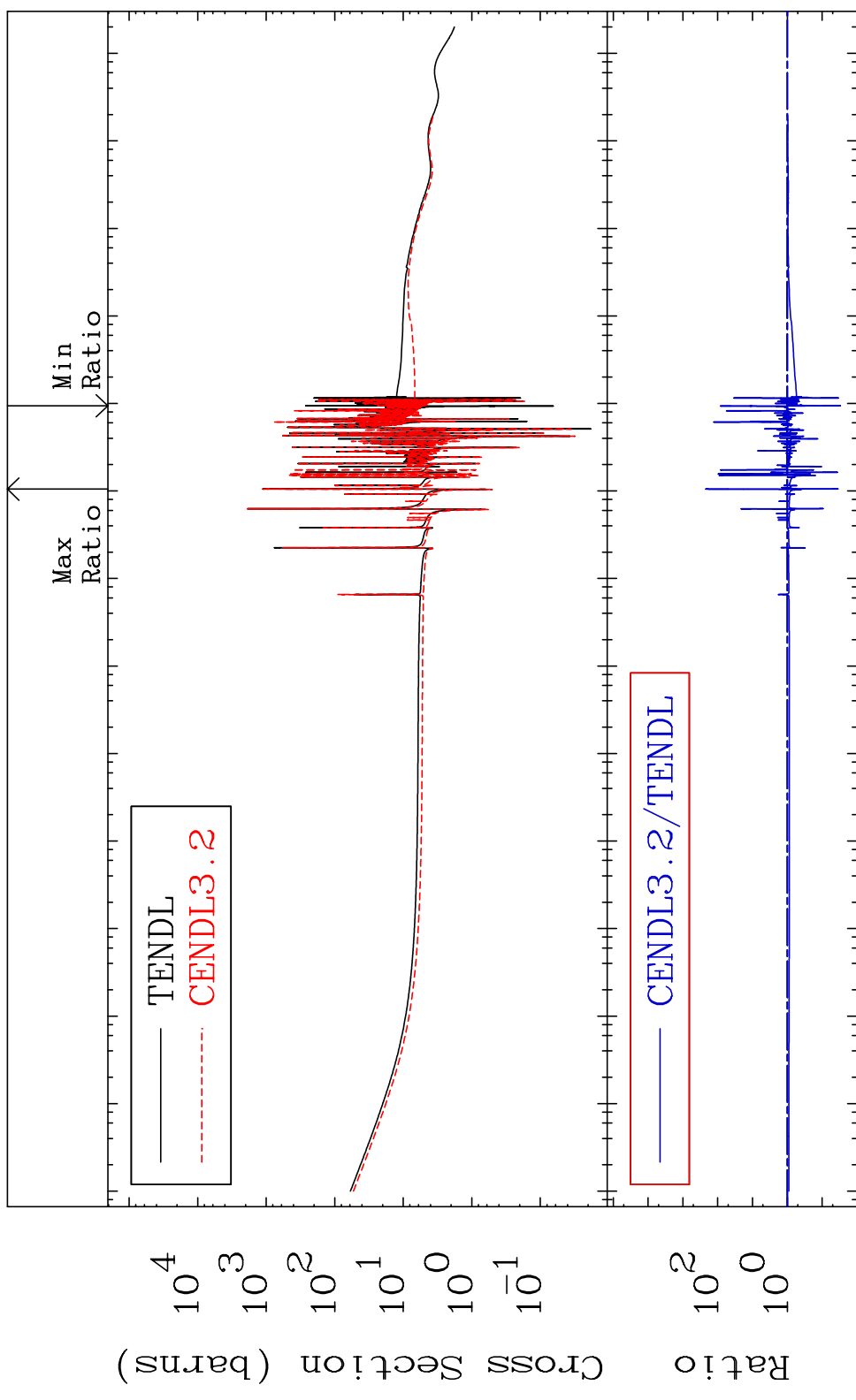
MAT 4449

Total

44-Ru-104

Cross Section

-97.02 To 9999. %



1

Incident Energy (eV)

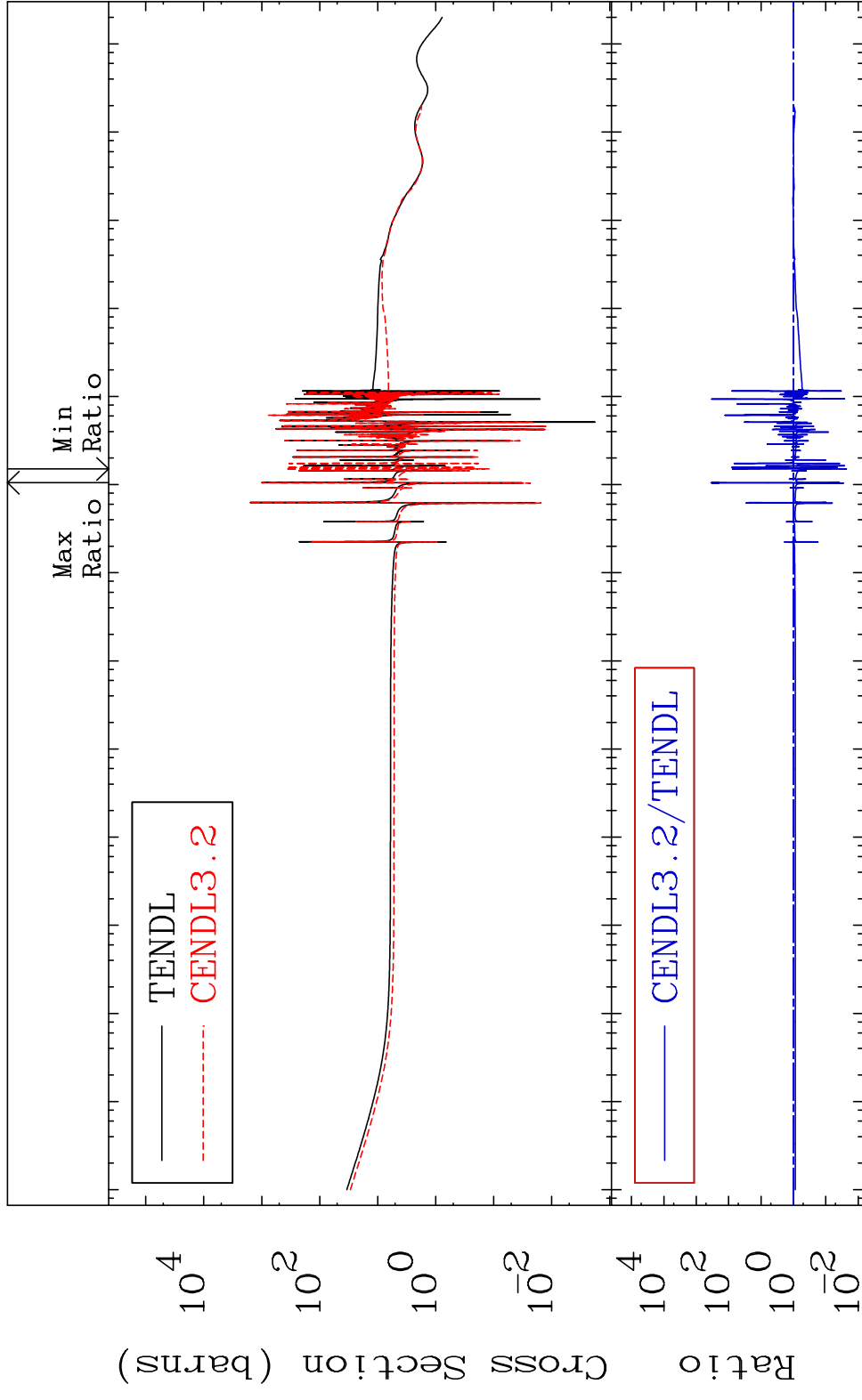
44-Ru-104

MAT 4449

Elastic

44-Ru-104

Cross Section -97.68 To 9999. %

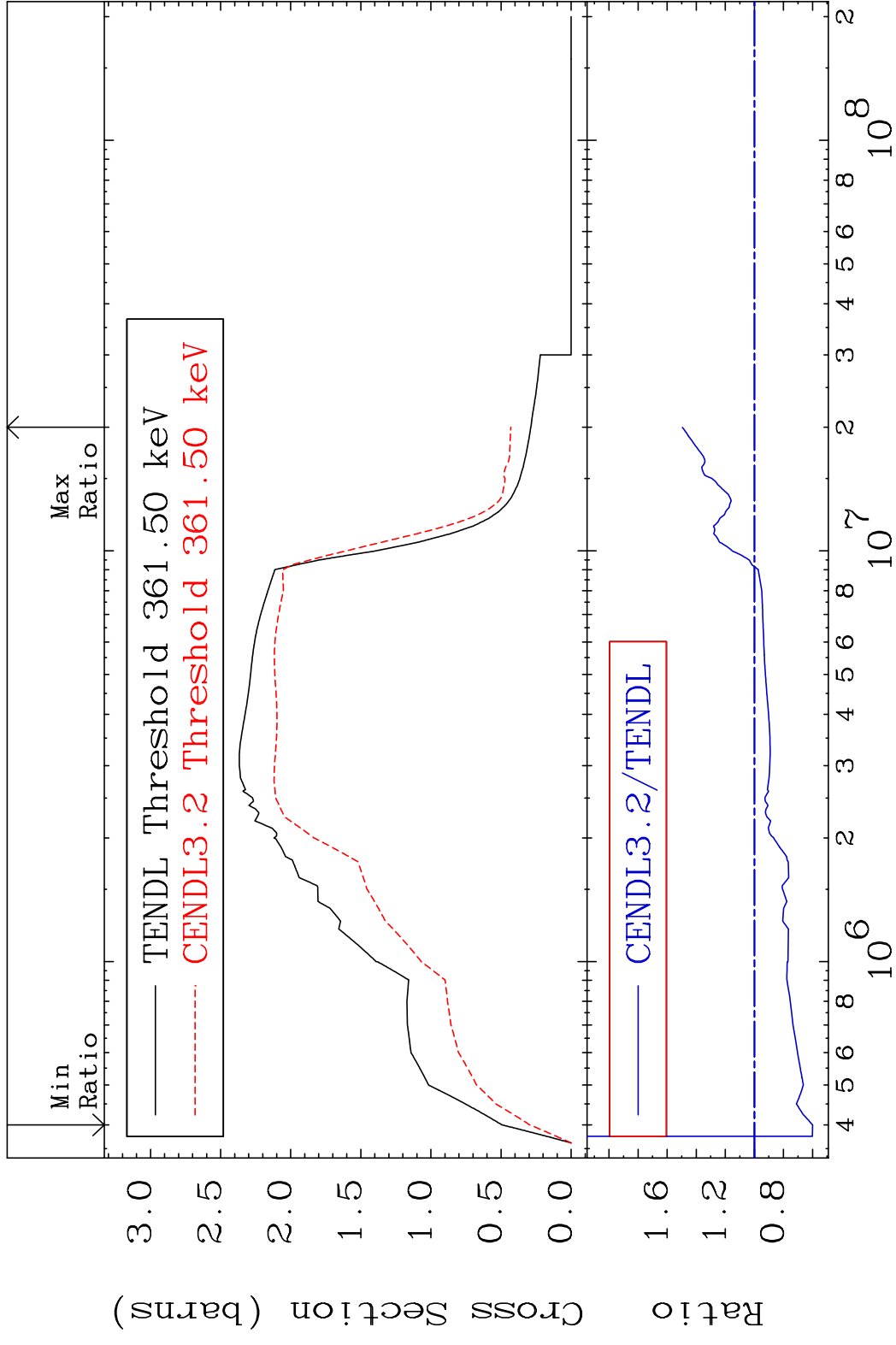


2

Incident Energy (eV)

44-Ru-104

MAT 4449 Inelastic Cross Section 44-Ru-104
 -40.04 To 49.53 %

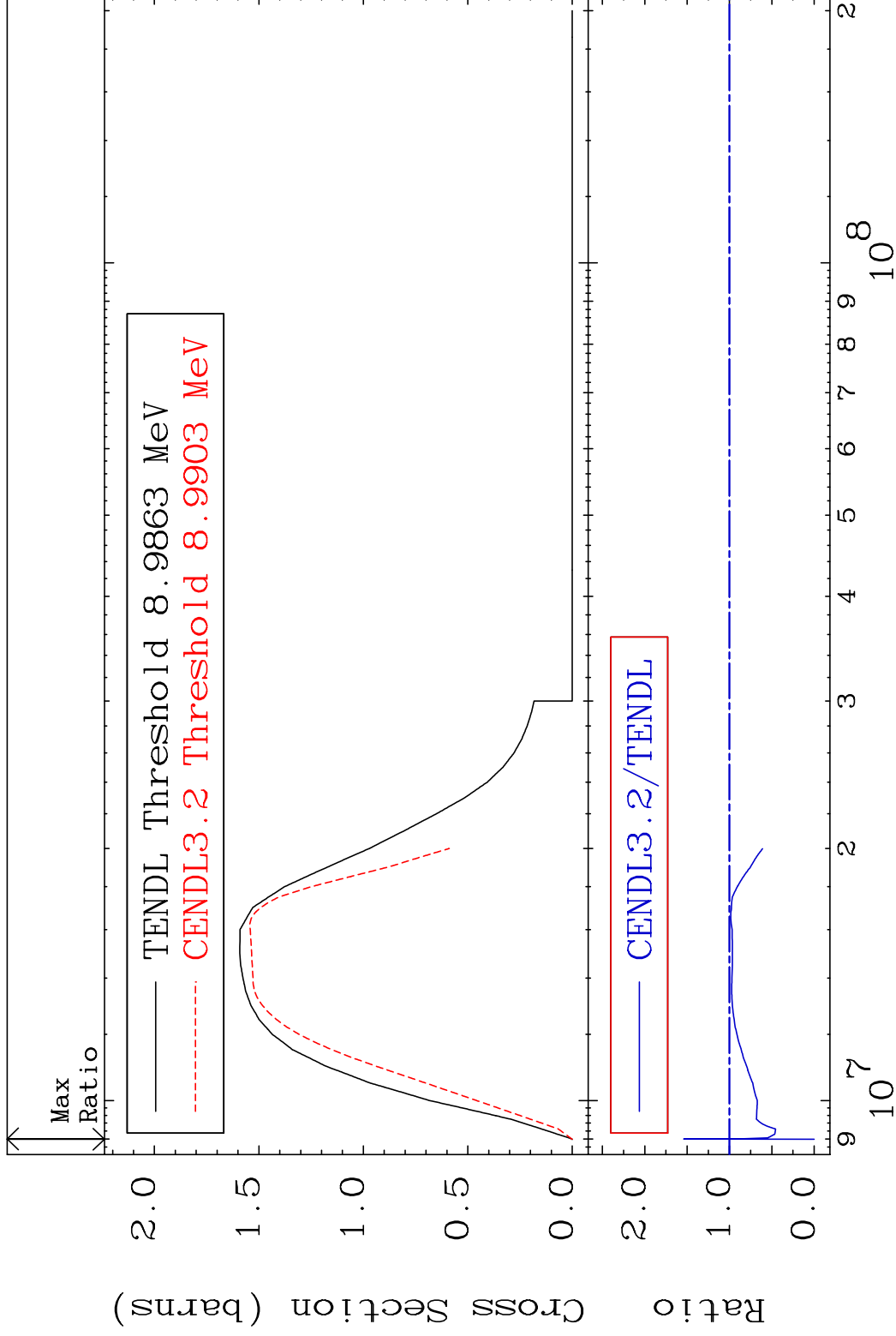


MAT 4449

(n,2n)

44-Ru-104

Cross Section -100.0 To 54.08 %



4

Incident Energy (eV)

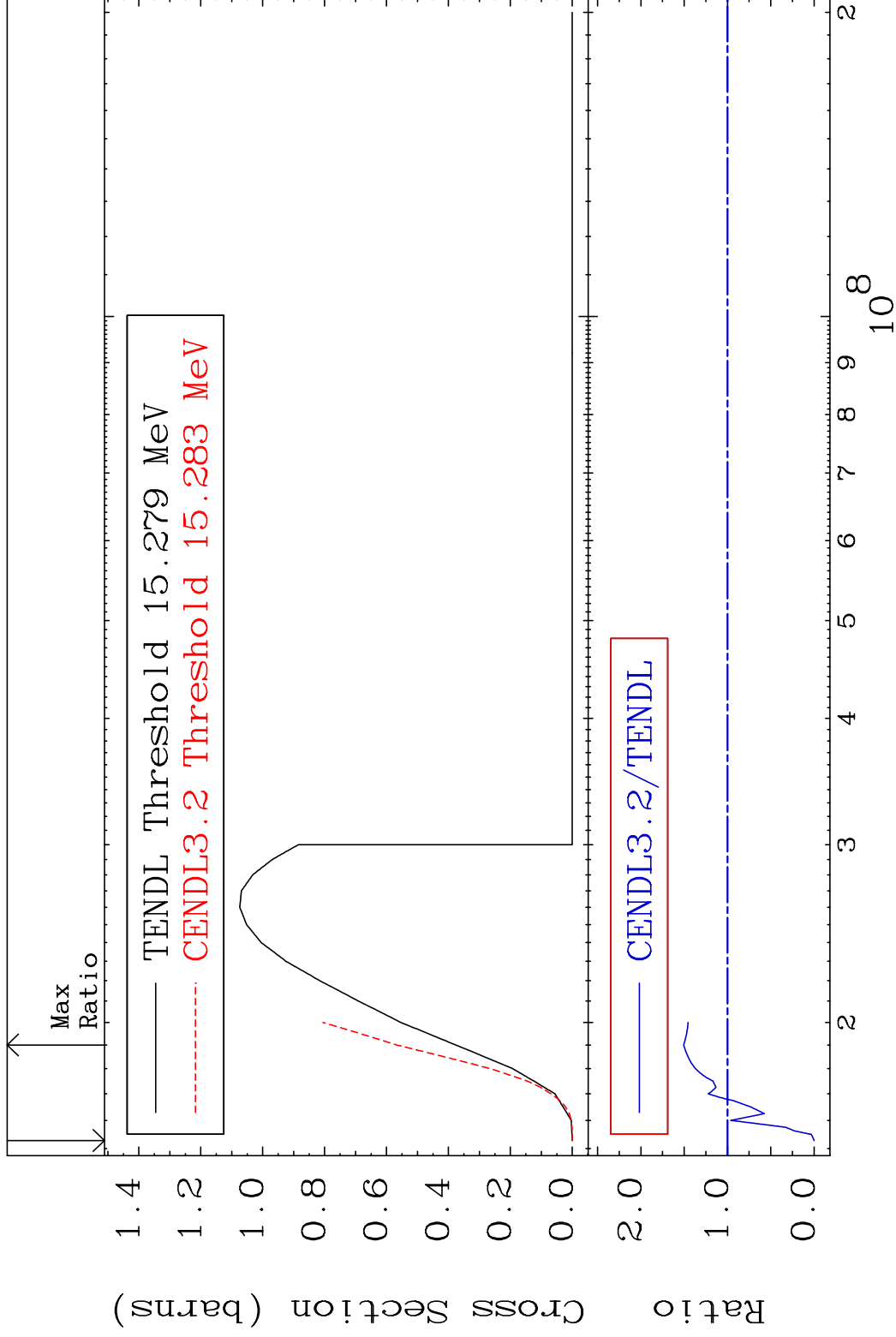
44-Ru-104

MAT 4449

(n,3n)

44-Ru-104

Cross Section -100.0 To 50.61 %

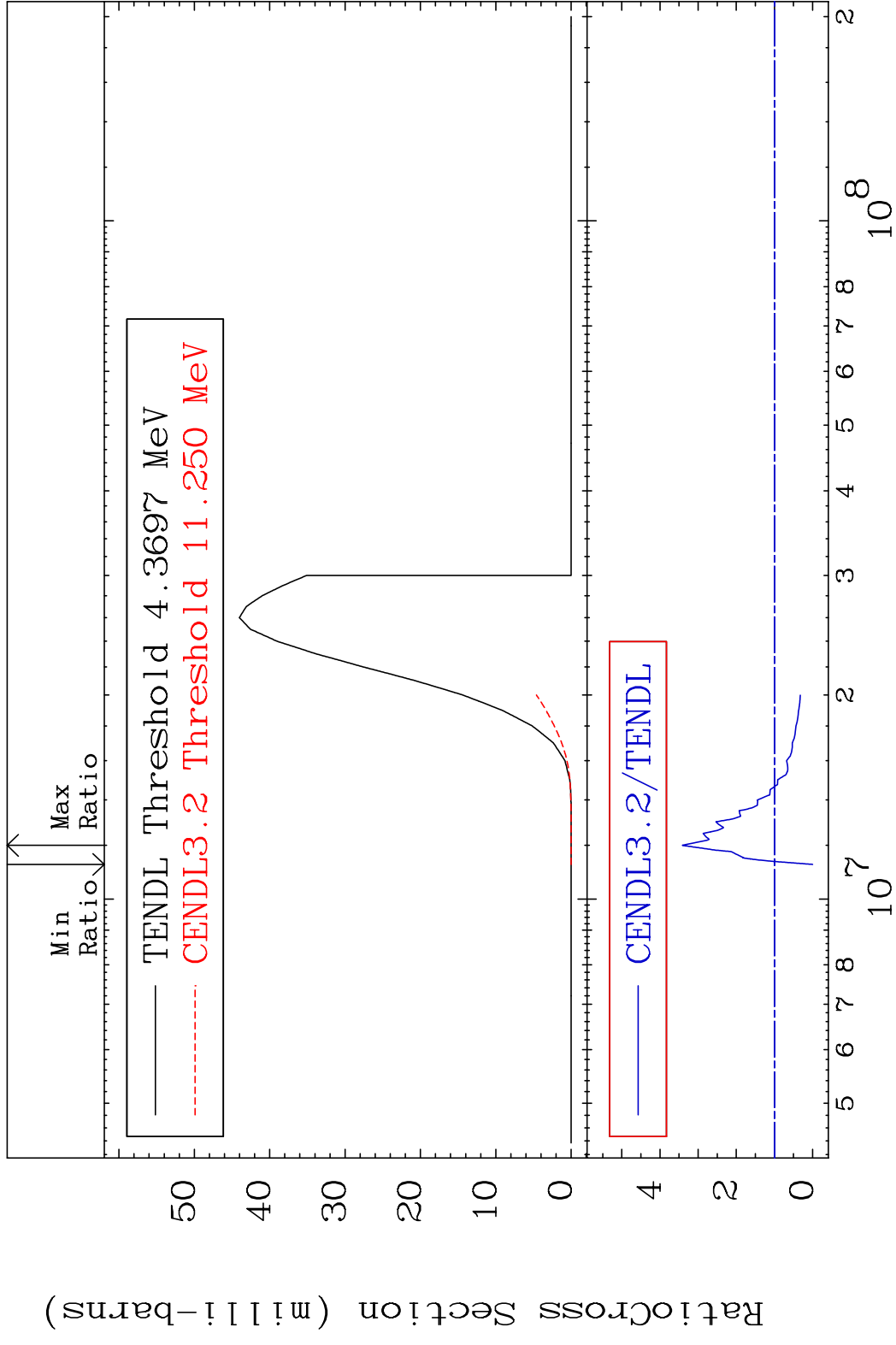


5

Incident Energy (eV)

44-Ru-104

MAT 4449 (n, n') α 44-Ru-104
 Cross Section -100.0 To 241.3 %

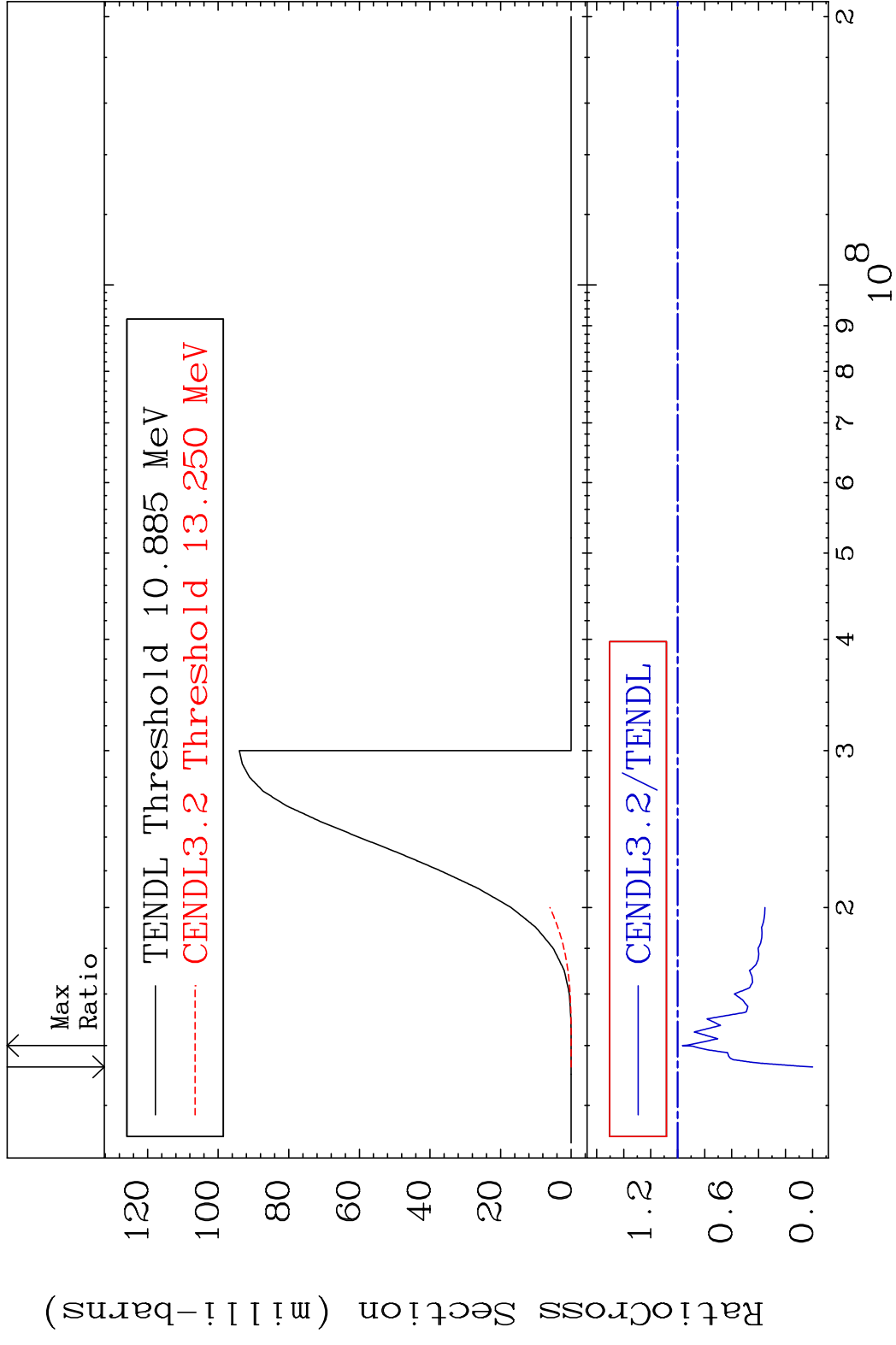


MAT 4449

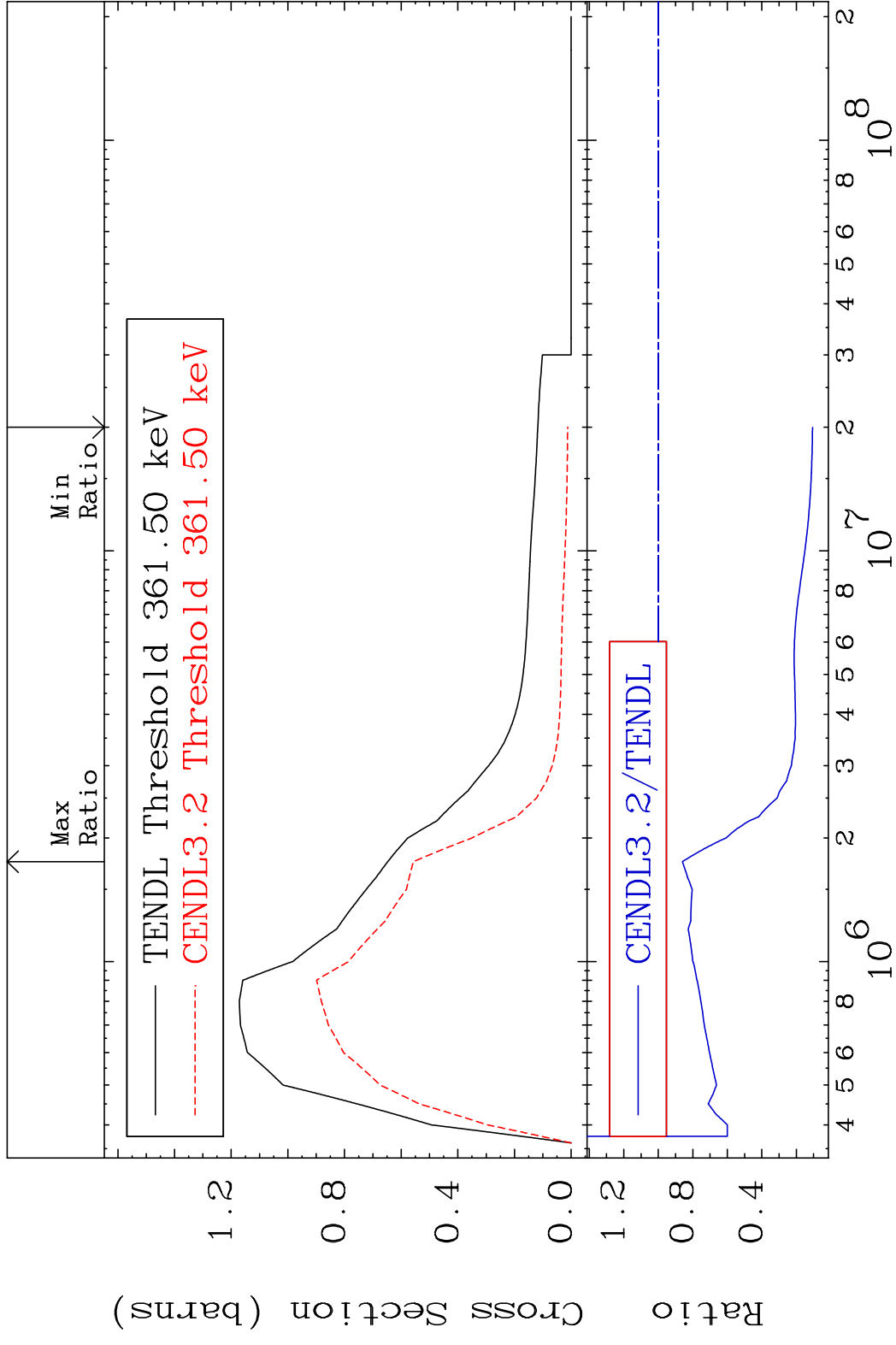
(n, n') p

44-Ru-104

Cross Section -100.0 To -3.483%

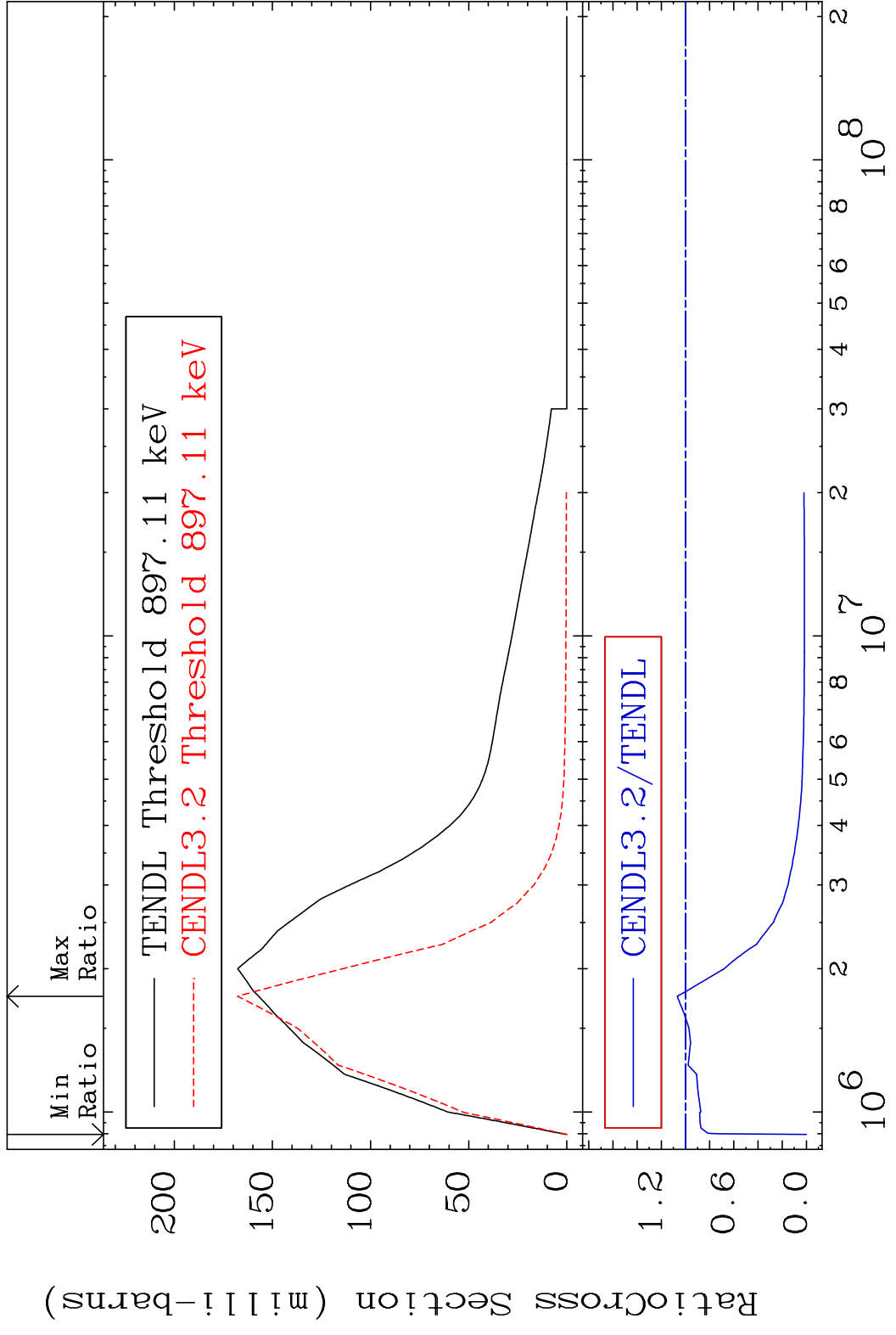


MAT 4449 MT= 51 (n, n') Level 44-Ru-104
 Cross Section -89.39 To -13.93%

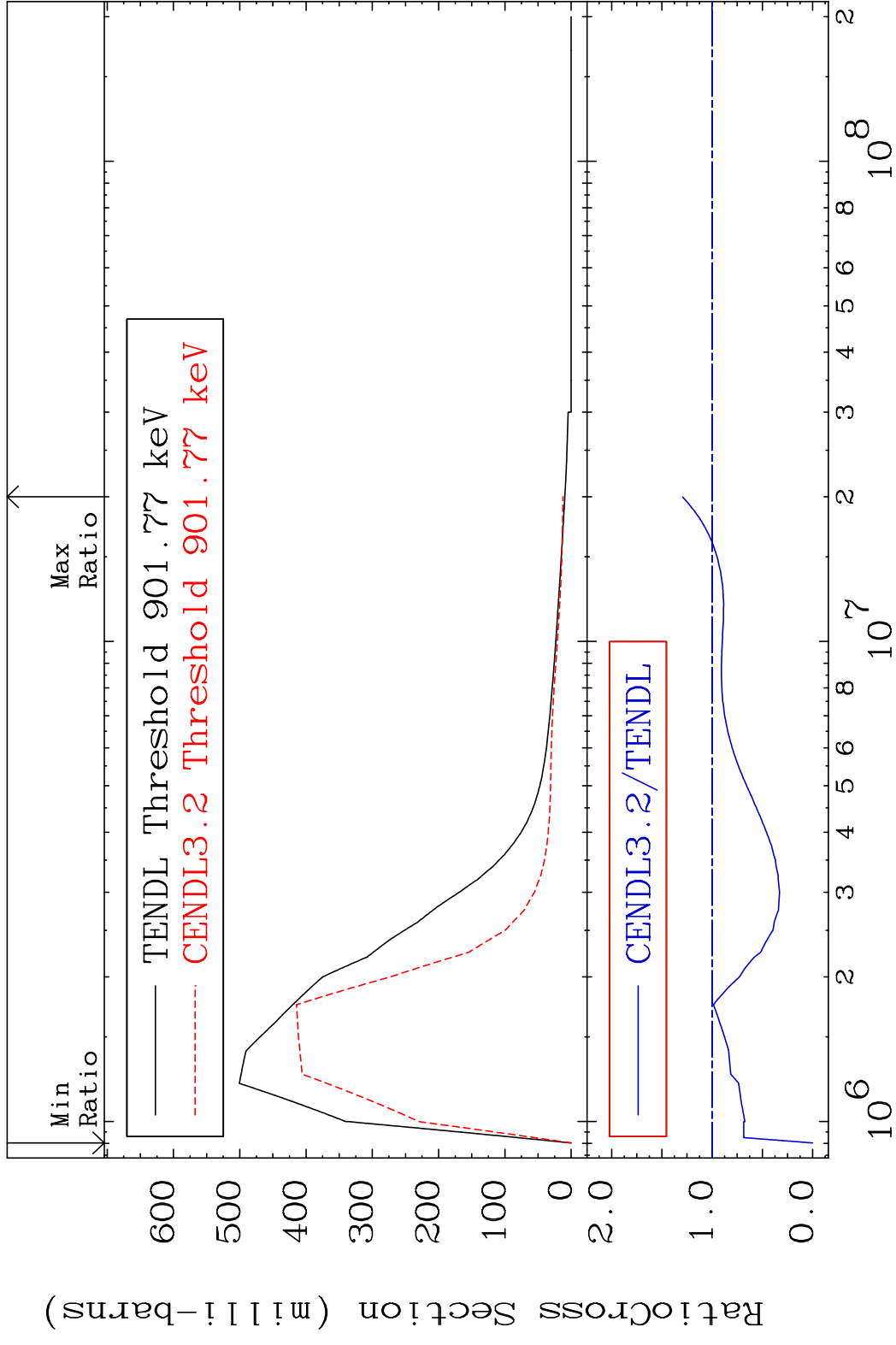


8 Incident Energy (eV) 44-Ru-104

MAT 4449 MT= 52 (n, n') Level 44-Ru-104
 Cross Section -100.0 To 6.866 %

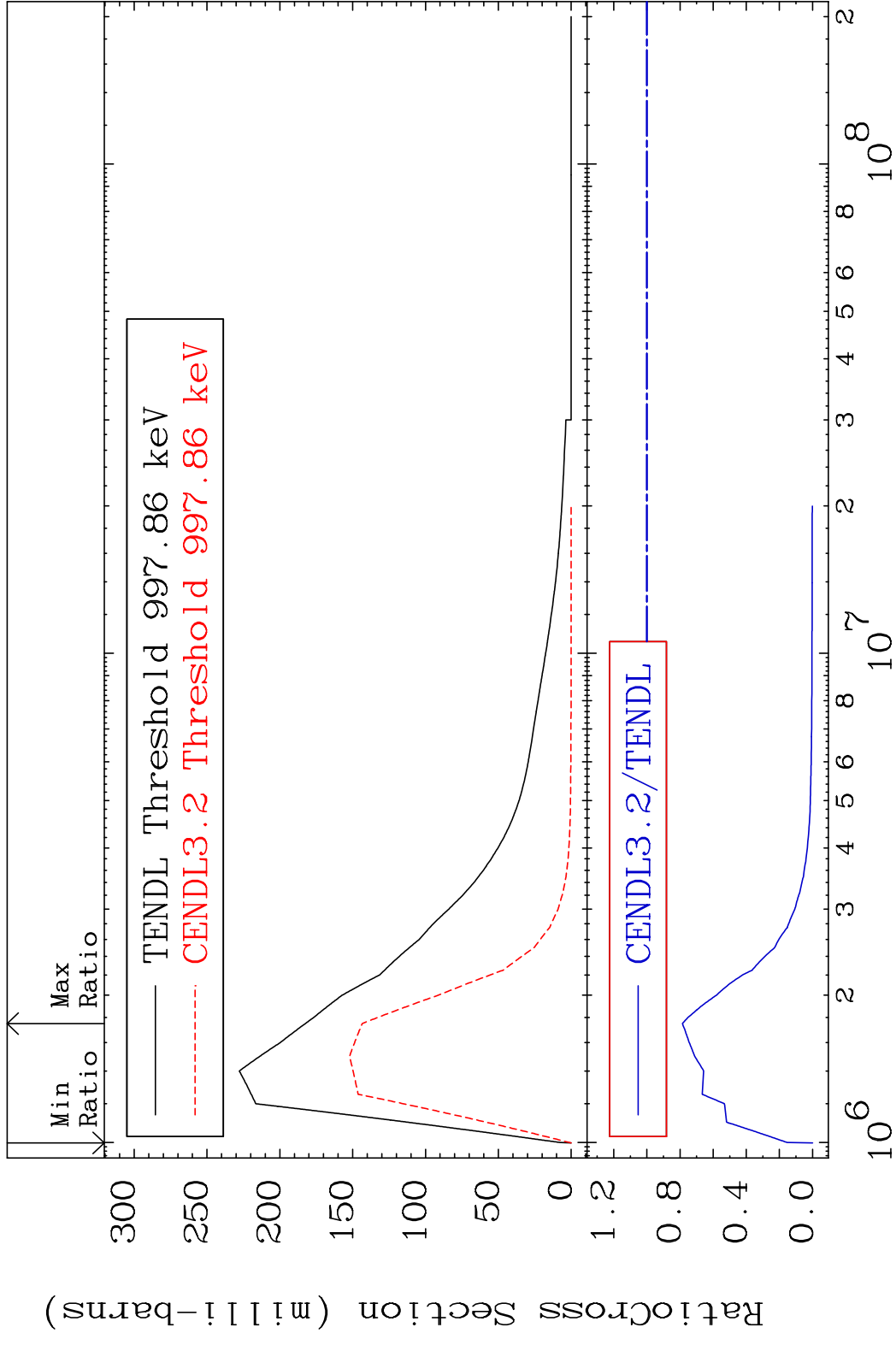


MAT 4449 MT= 53 (n, n') Level 44-Ru-104
 Cross Section -100.0 To 29.59 %

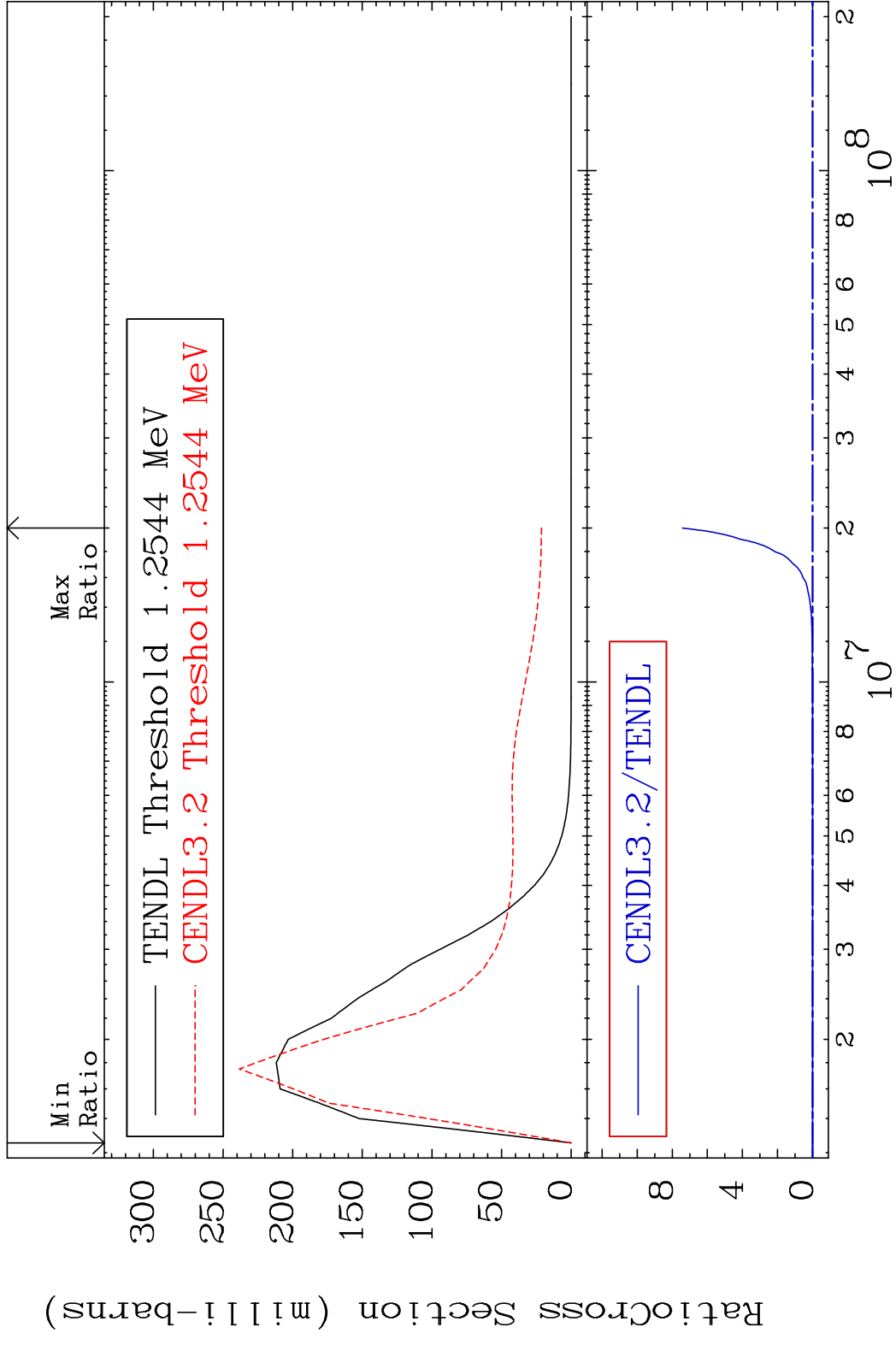


10 Incident Energy (eV) 44-Ru-104

MAT 4449 MT= 54 (n,n') Level 44-Ru-104
 Cross Section -100.0 To -21.40%



MAT 4449 MT= 55 (n, n') Level 44-Ru-104
 Cross Section -100.0 To 9999. %

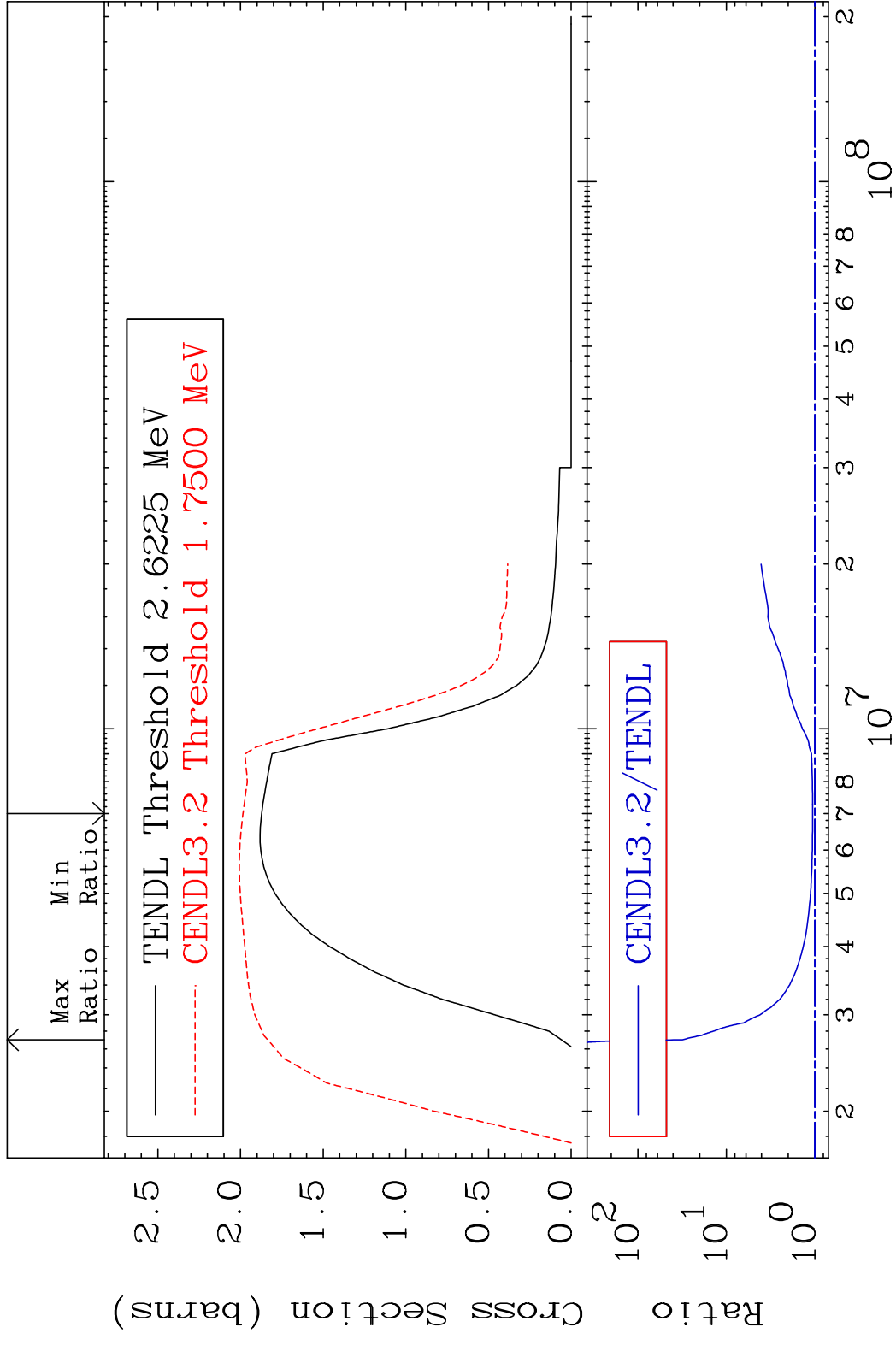


MAT 4449

(n,n') Continuum

44-Ru-104

Cross Section 5.997 To 3040. %

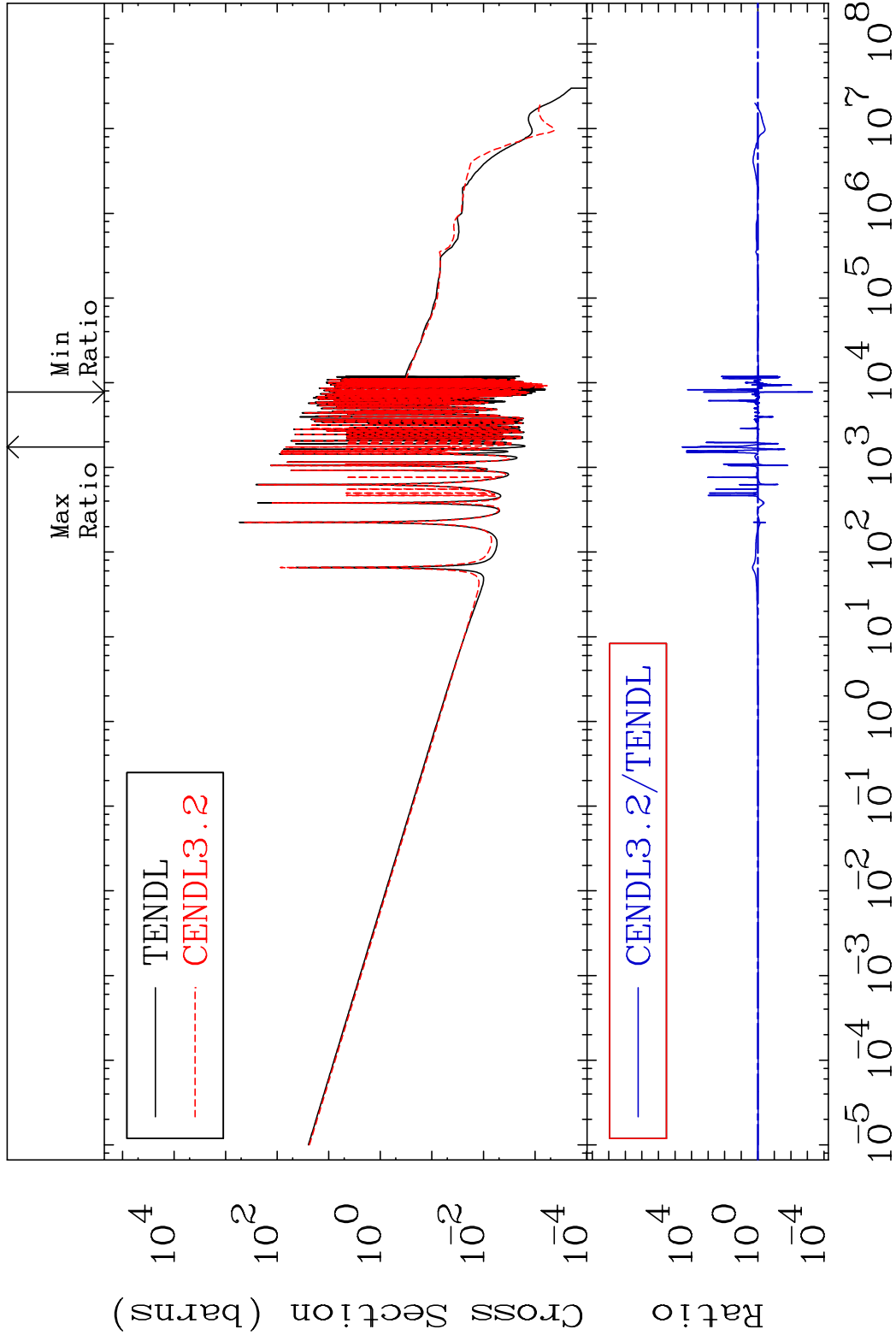


MAT 4449

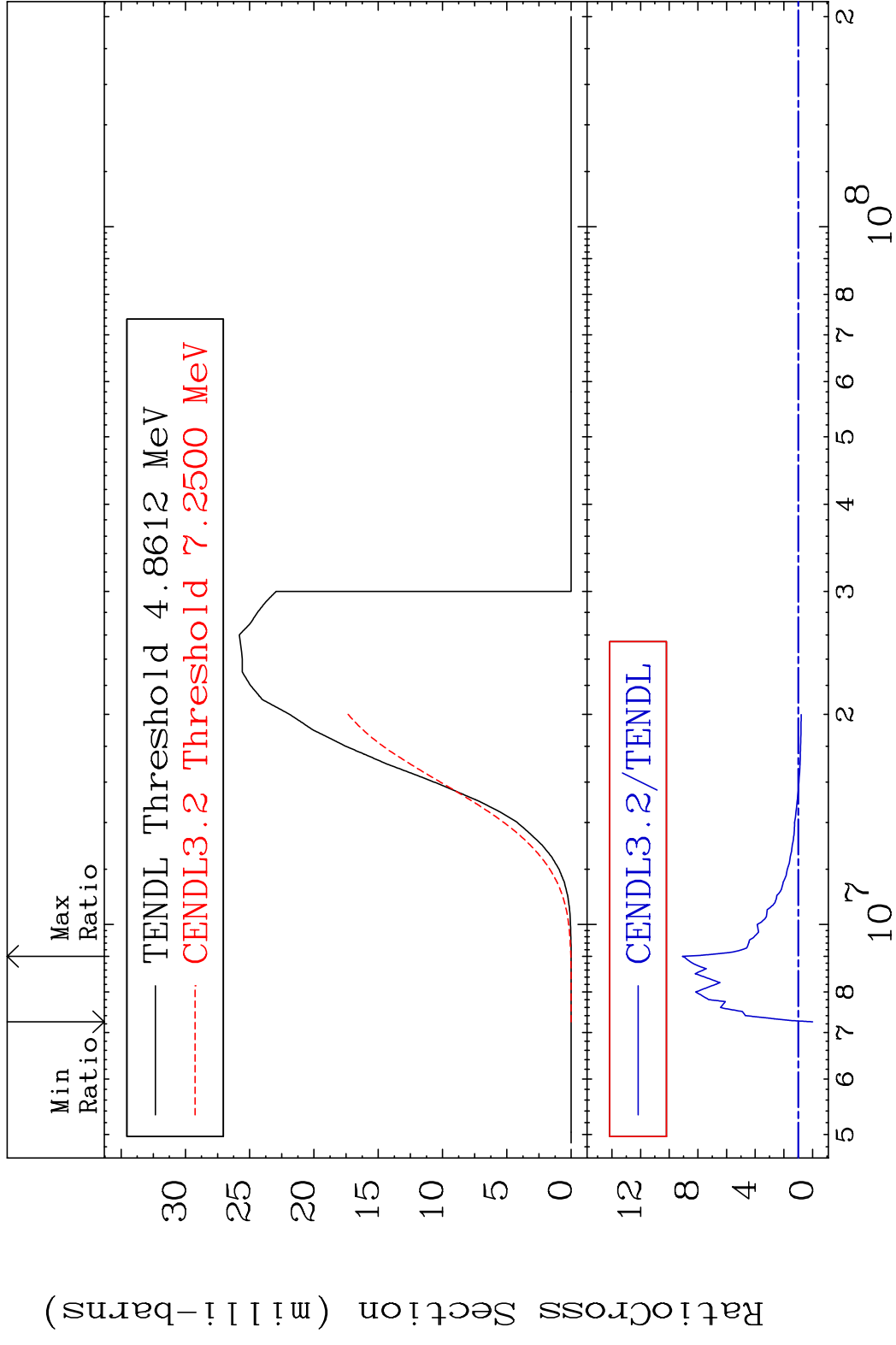
(n, γ)

44-Ru-104

Cross Section -99.95 To 9999. %



MAT 4449 (n,p) 44-Ru-104
 Cross Section -100.0 To 808.4 %

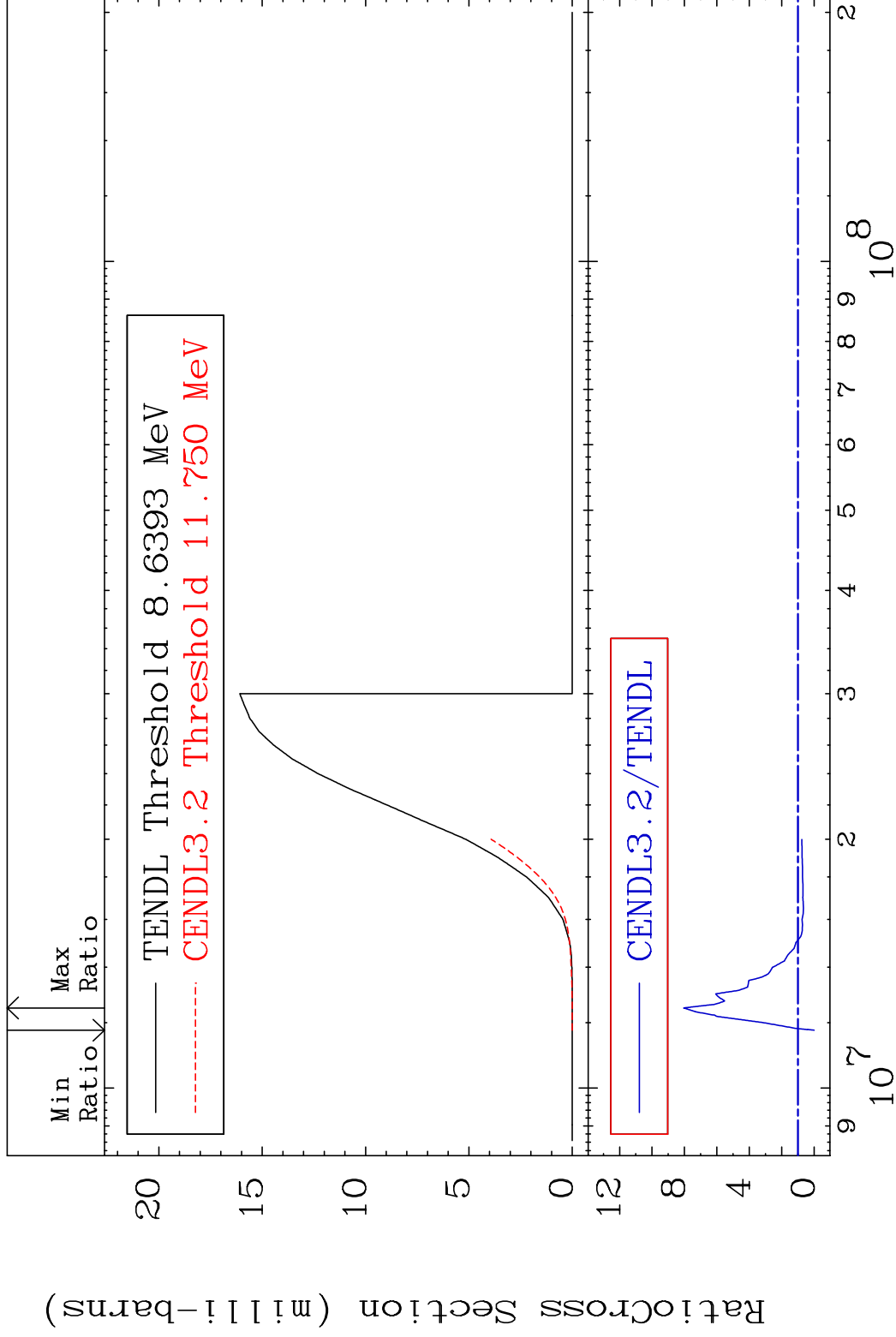


MAT 4449

(n, d)

44-Ru-104

Cross Section -100.0 To 704.8 %



16

Incident Energy (eV)

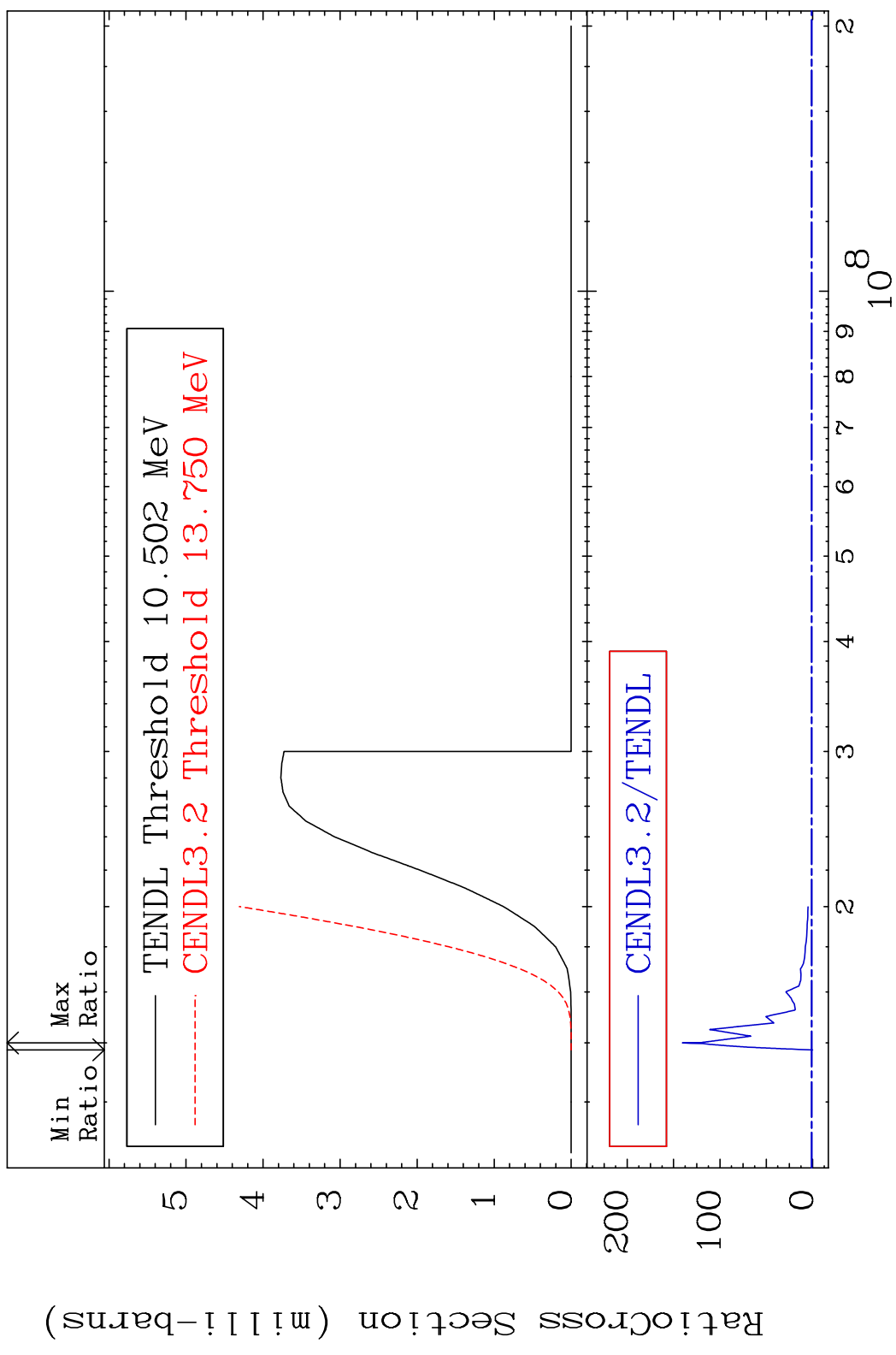
44-Ru-104

MAT 4449

(n, t)

44-Ru-104

Cross Section -100.0 To 9999. %

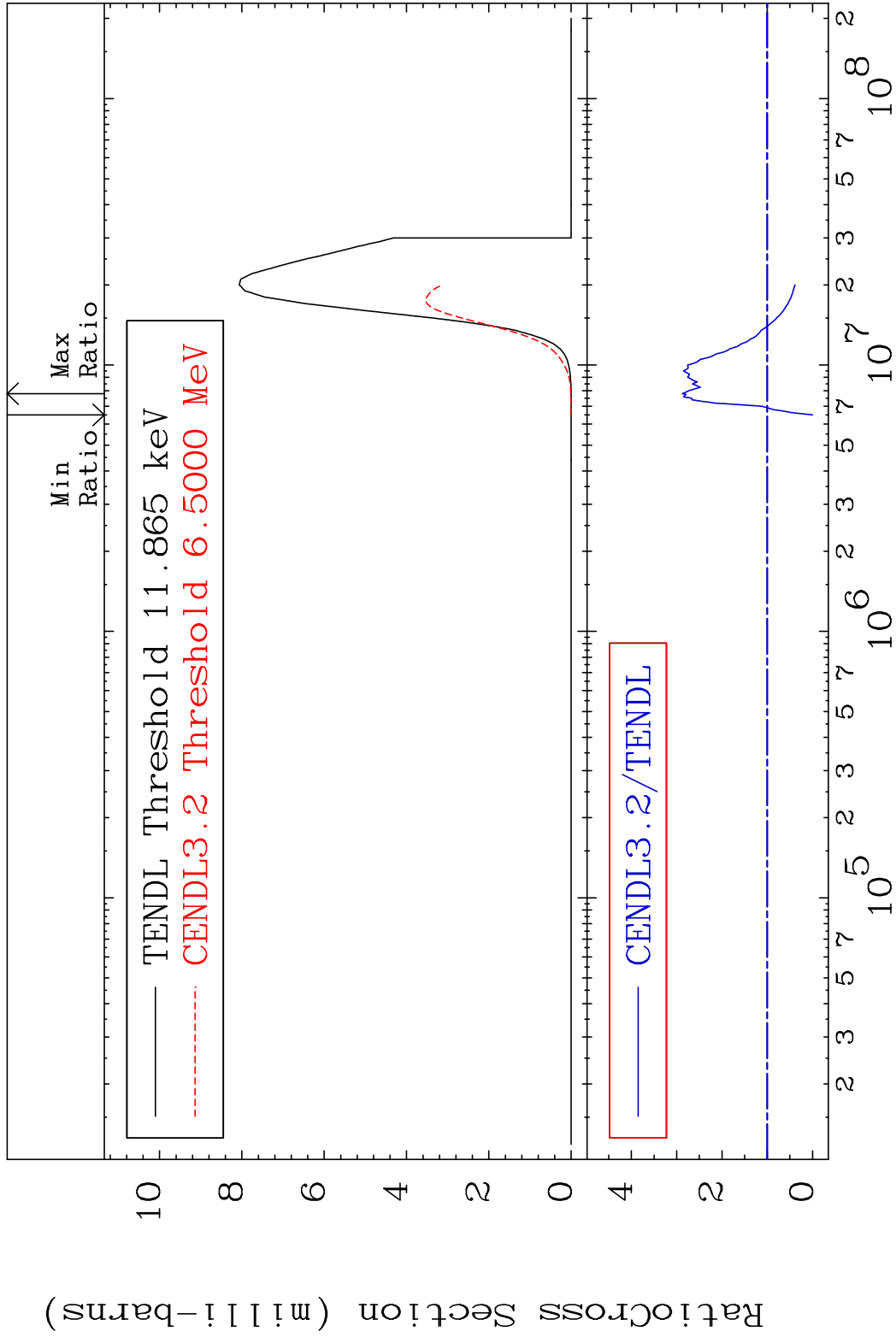


MAT 4449

(n, α)

44-Ru-104

Cross Section -100.0 To 187.5 %

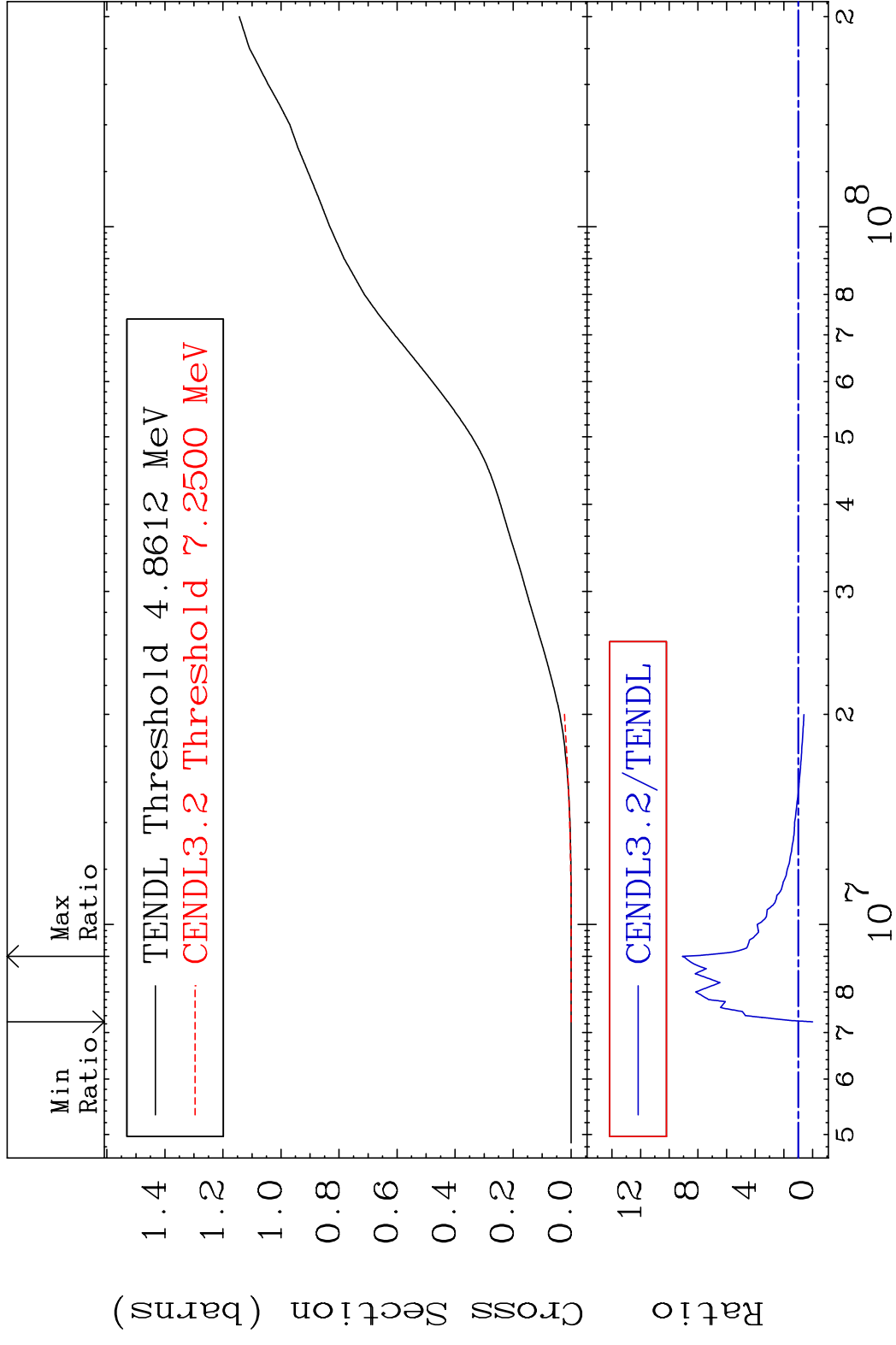


MAT 4449

Hydrogen Production

44-Ru-104

Cross Section -100.0 To 808.4 %

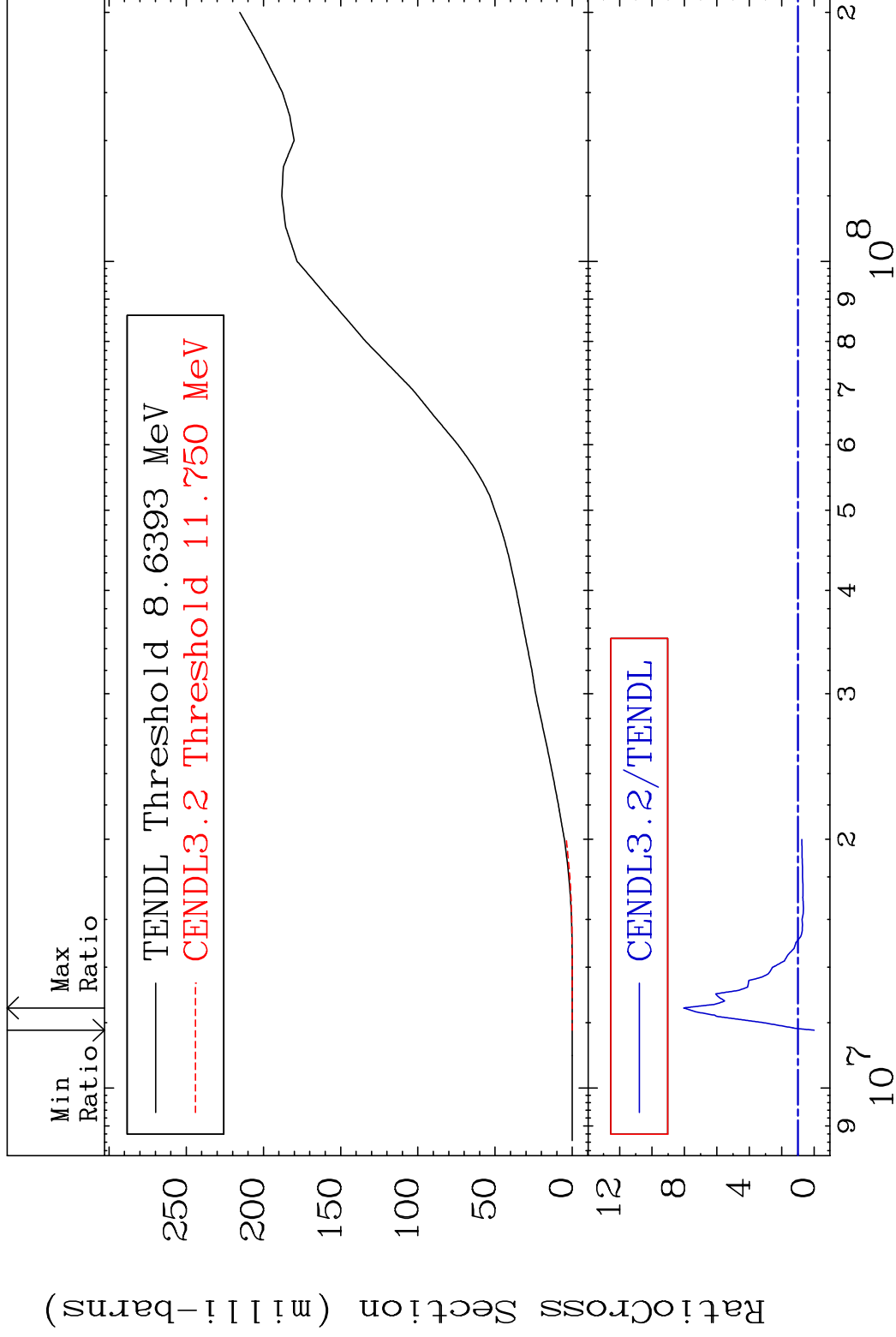


MAT 4449

Deuterium Production

44-Ru-104

Cross Section -100.0 To 704.8 %

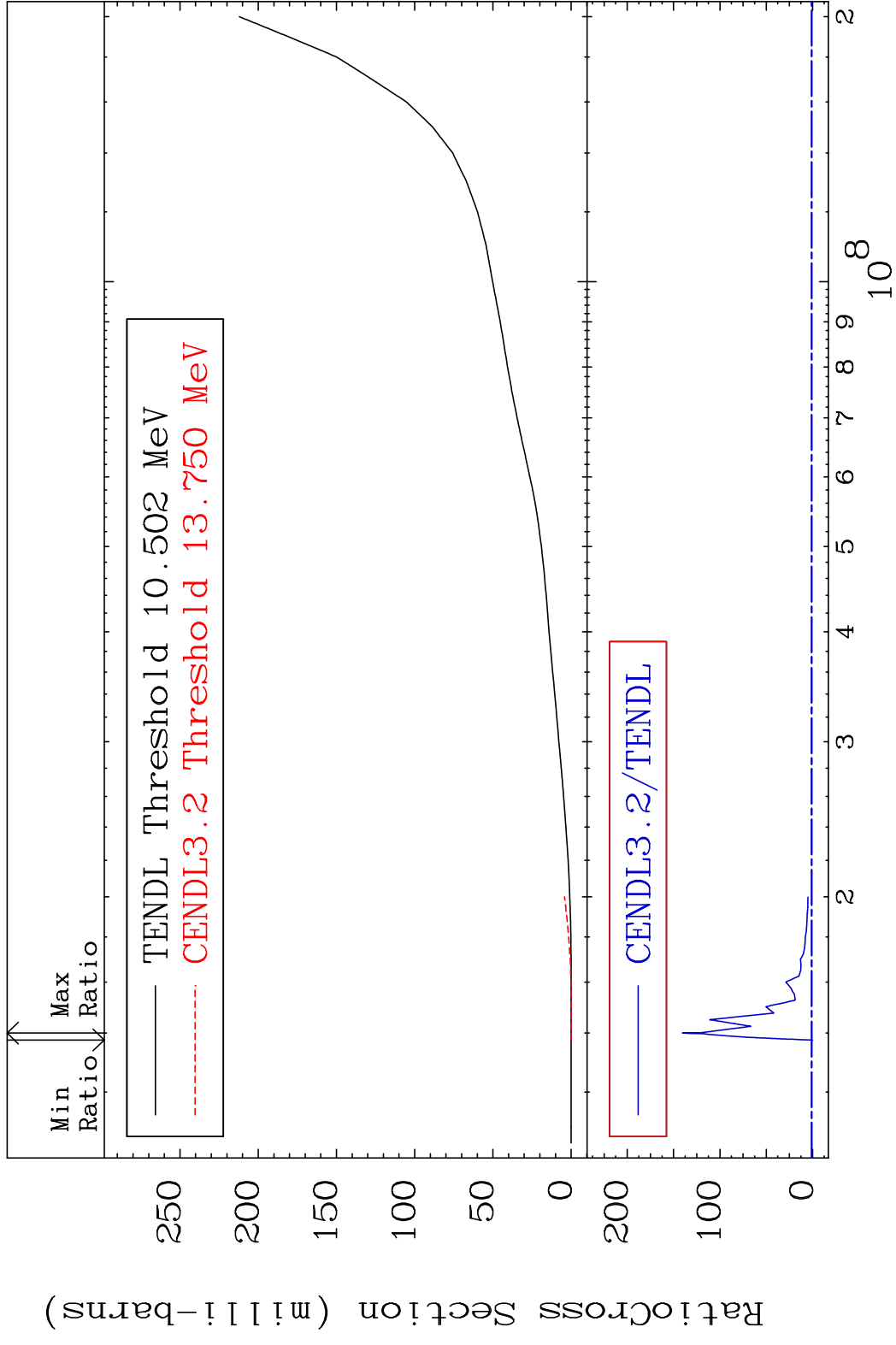


20

Incident Energy (eV)

44-Ru-104

MAT 4449 Tritium Production 44-Ru-104
 Cross Section -100.0 To 9999. %

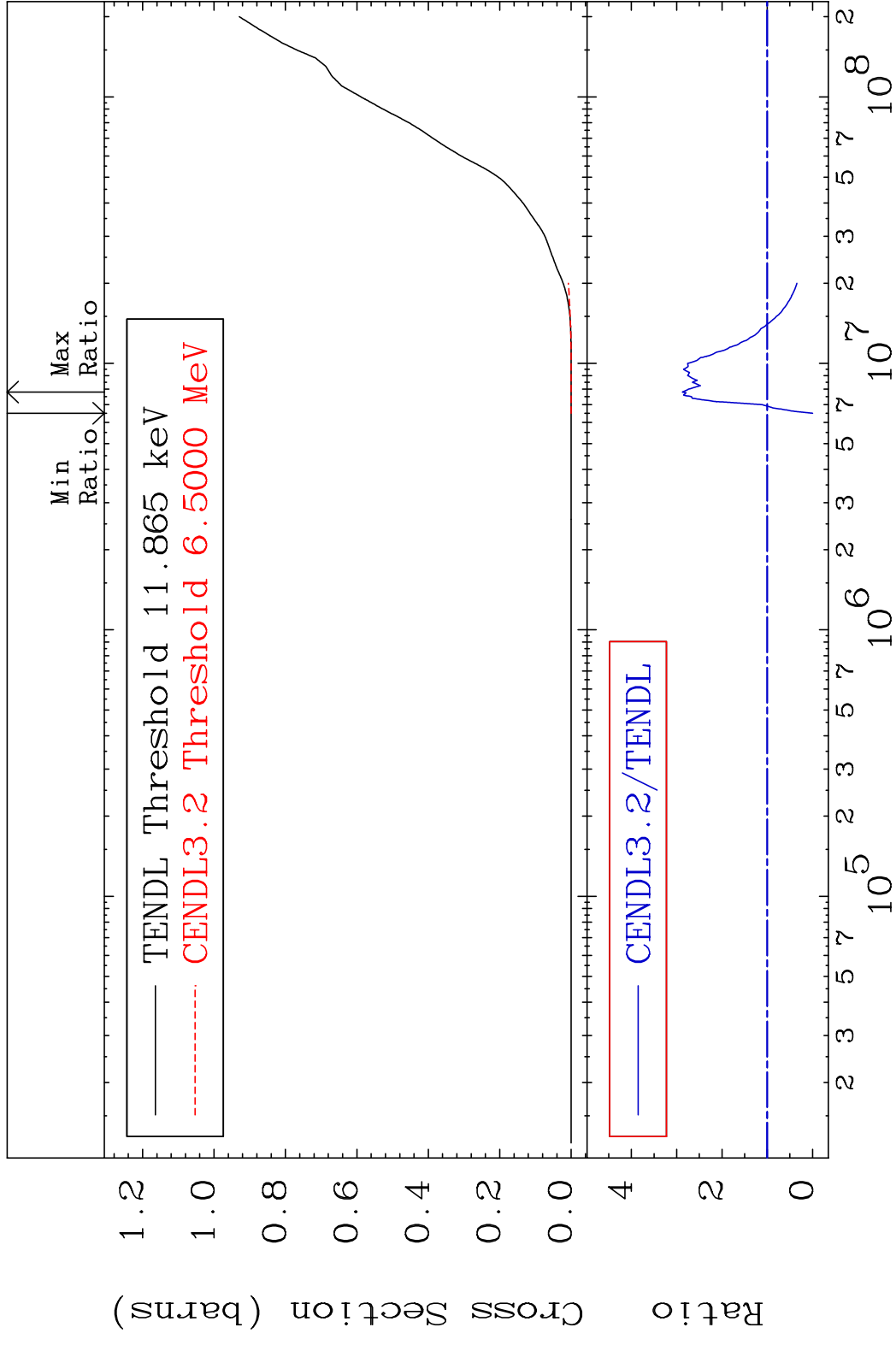


MAT 4449

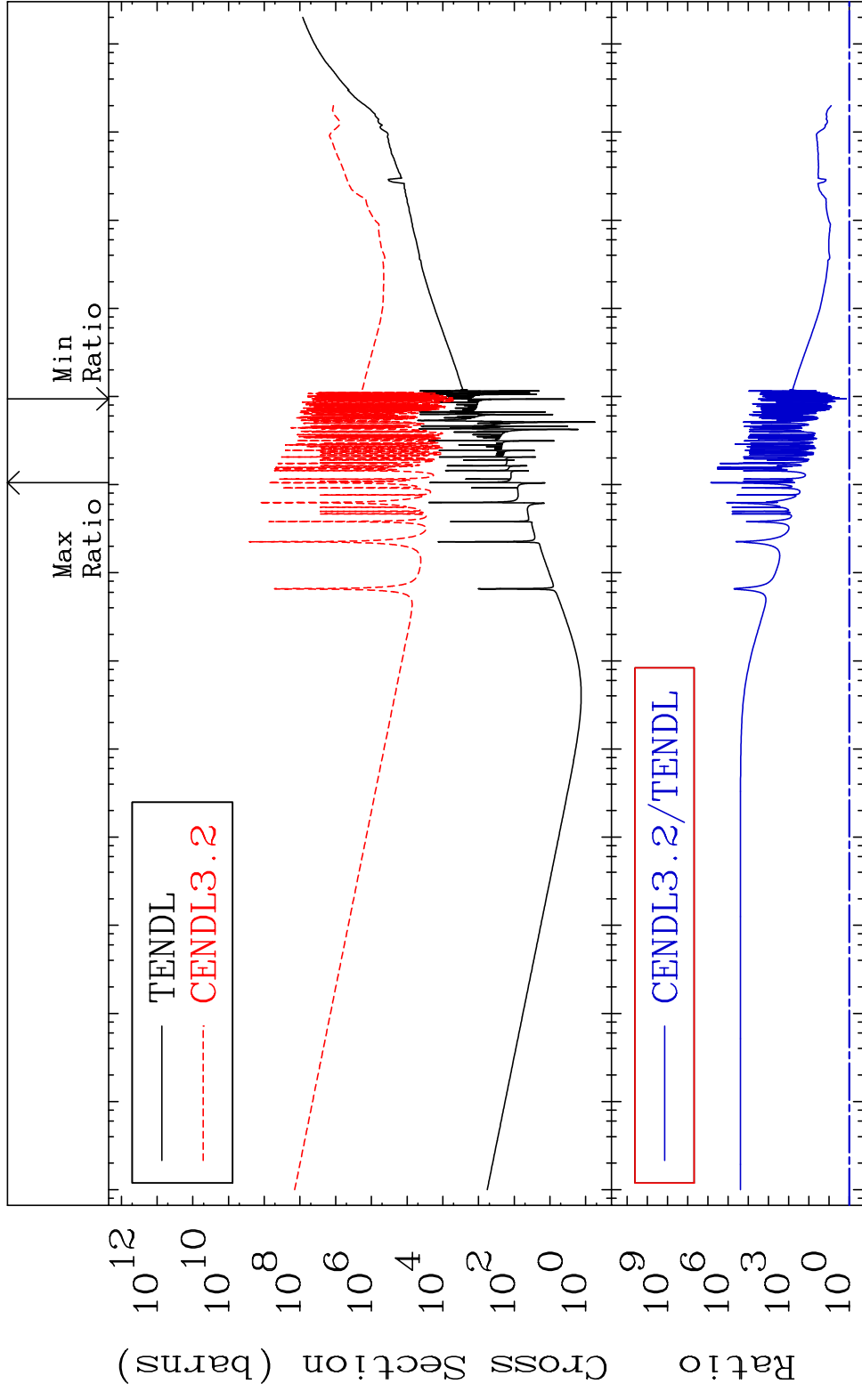
He-4 Production

44-Ru-104

Cross Section -100.0 To 187.5 %



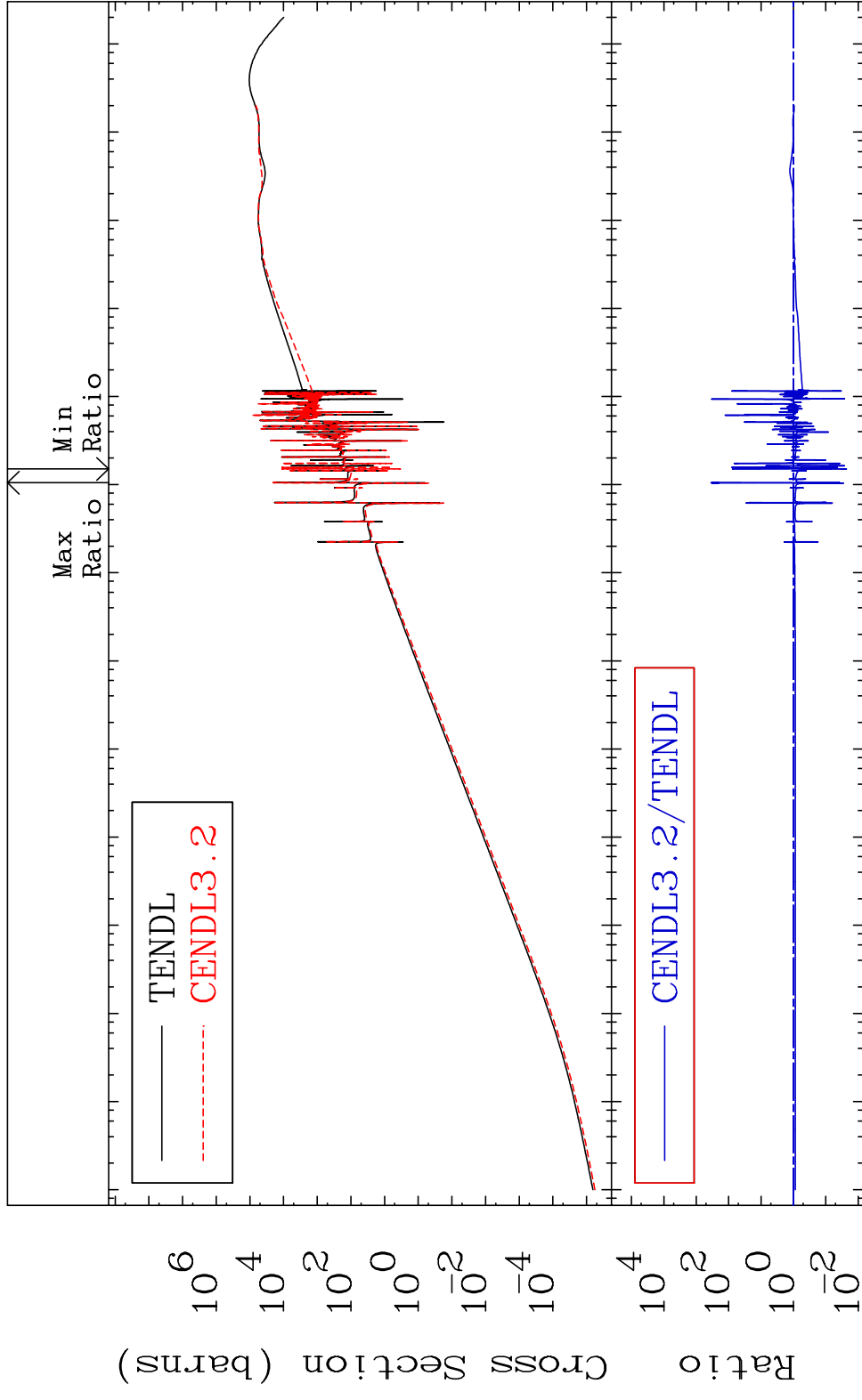
MAT 4449 Kerma total (eV-barns) 44-Ru-104
 Cross Section 40.73 To 9999. %



MAT 4449

Kerma elastic
Cross Section -97.68 To 9999. %

44-Ru-104

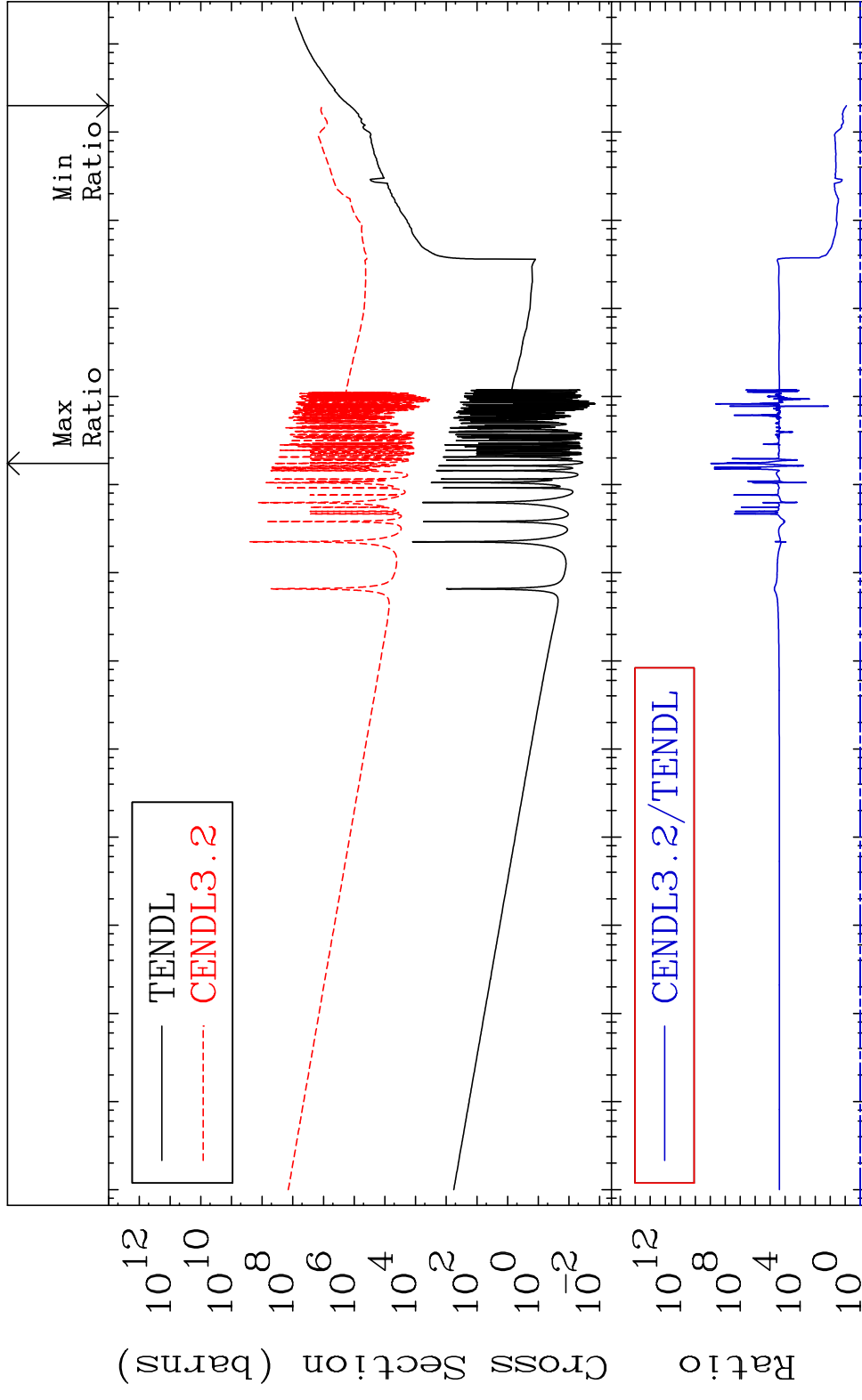


24

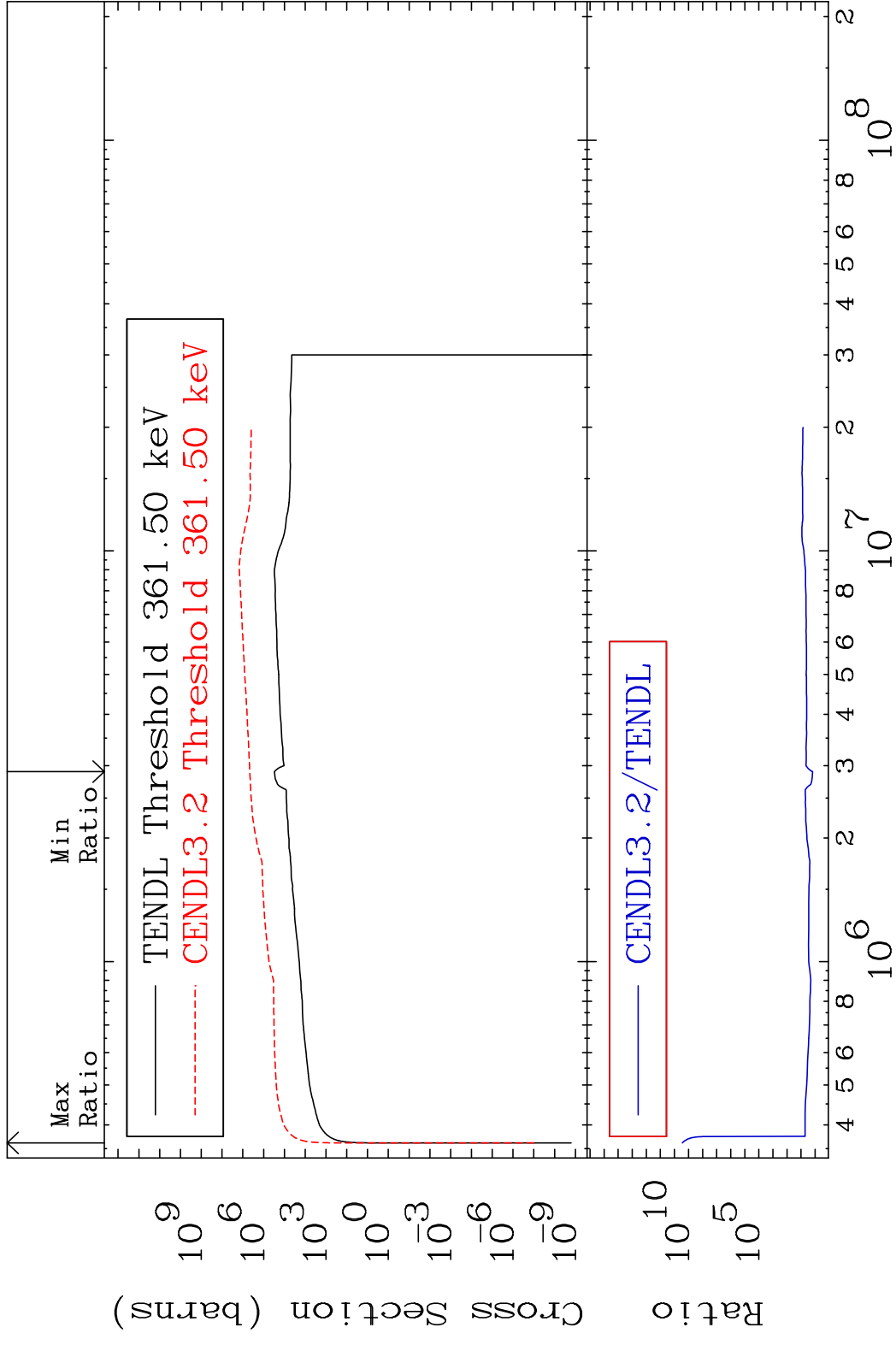
Incident Energy (eV)

44-Ru-104

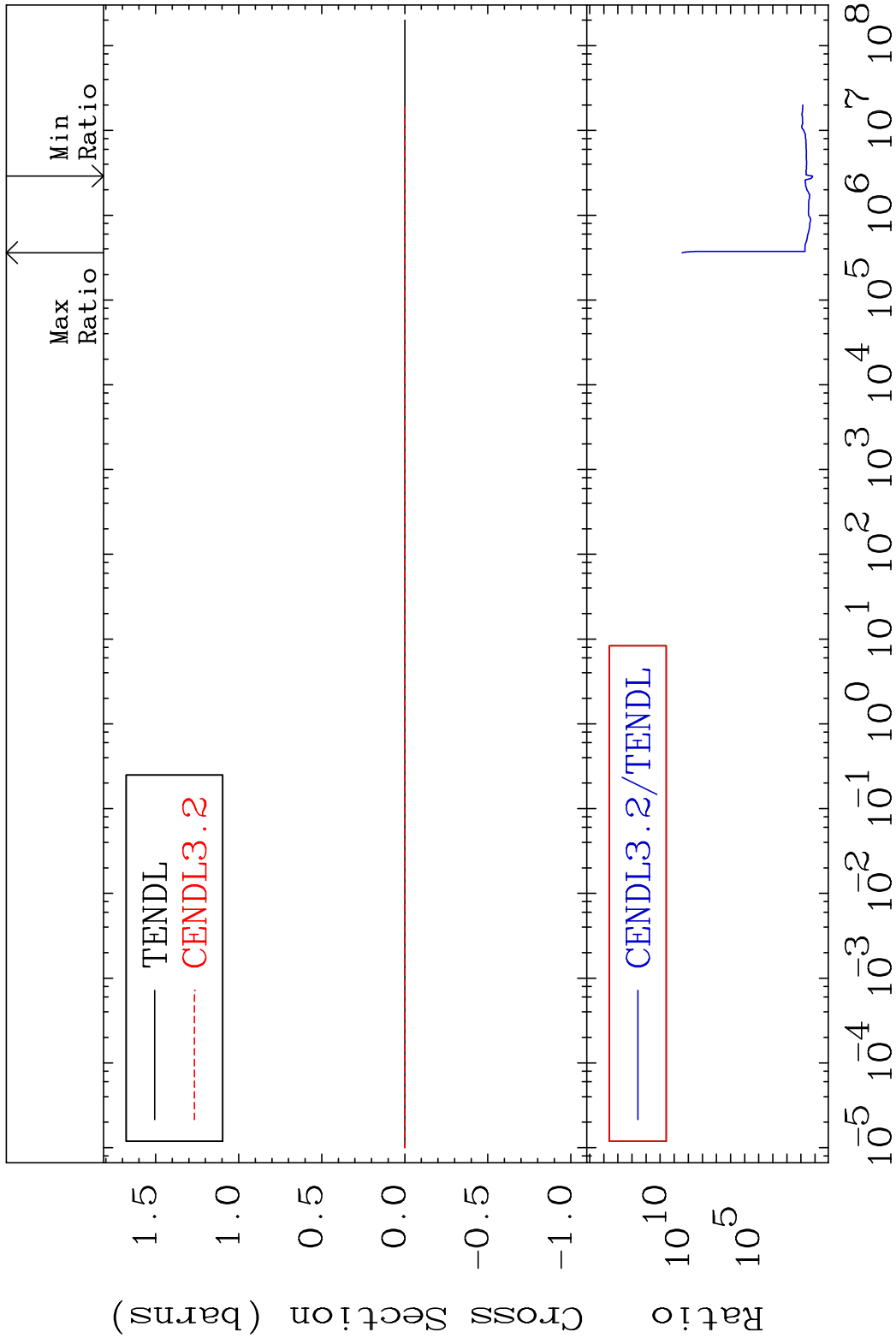
MAT 4449 Kerma non-elastic (all but mt2) 44-Ru-104
 Cross Section 734.6 To 9999. %



MAT 4449 Kerma inelastic (mt51-91) 44-Ru-104
 Cross Section 1430. To 9999. %

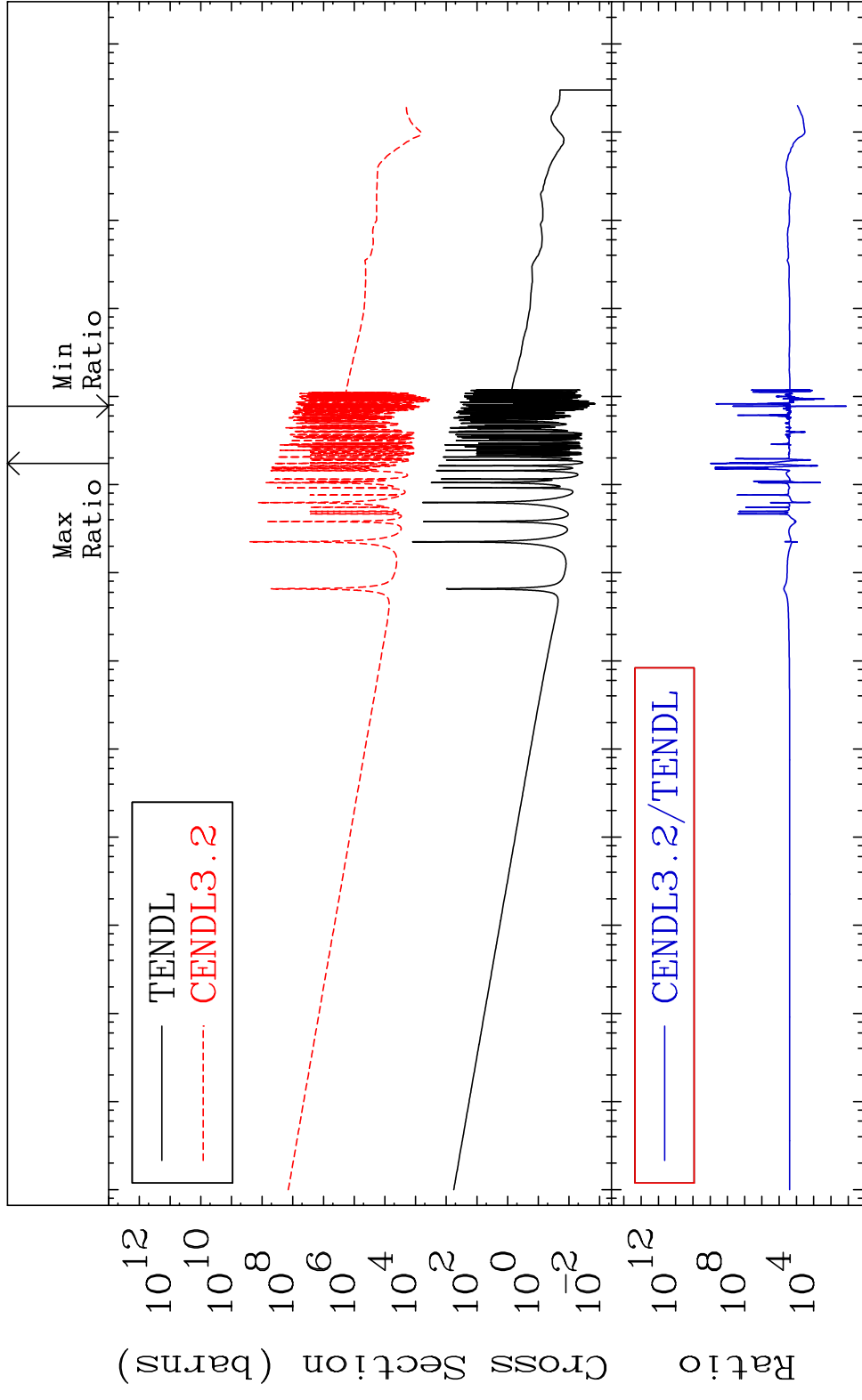


MAT 4449 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-104
 Cross Section 1430. To 9999. %

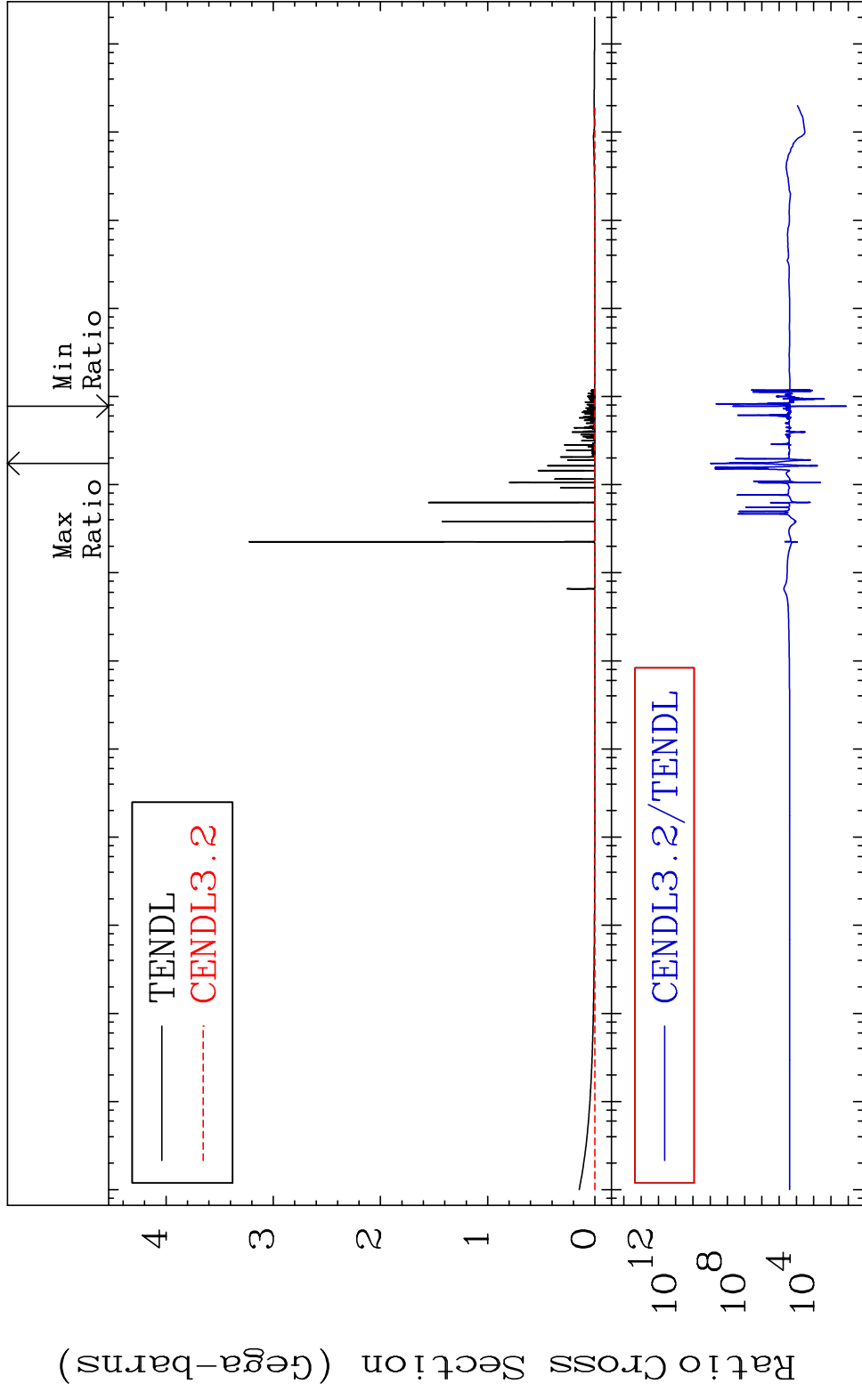


MAT 4449

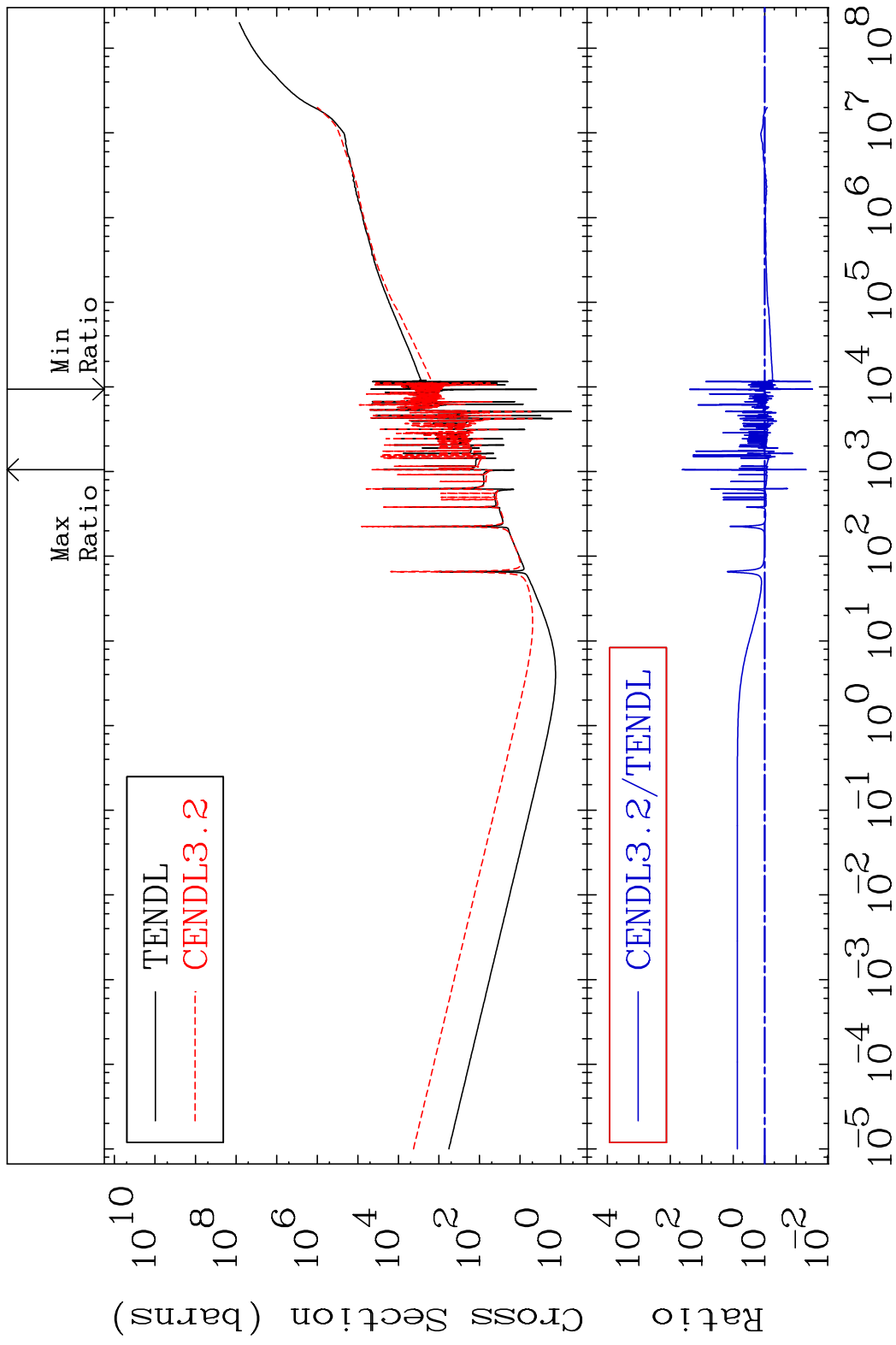
Kerma capture (mt102) 44-Ru-104
Cross Section 9999. To 9999. %



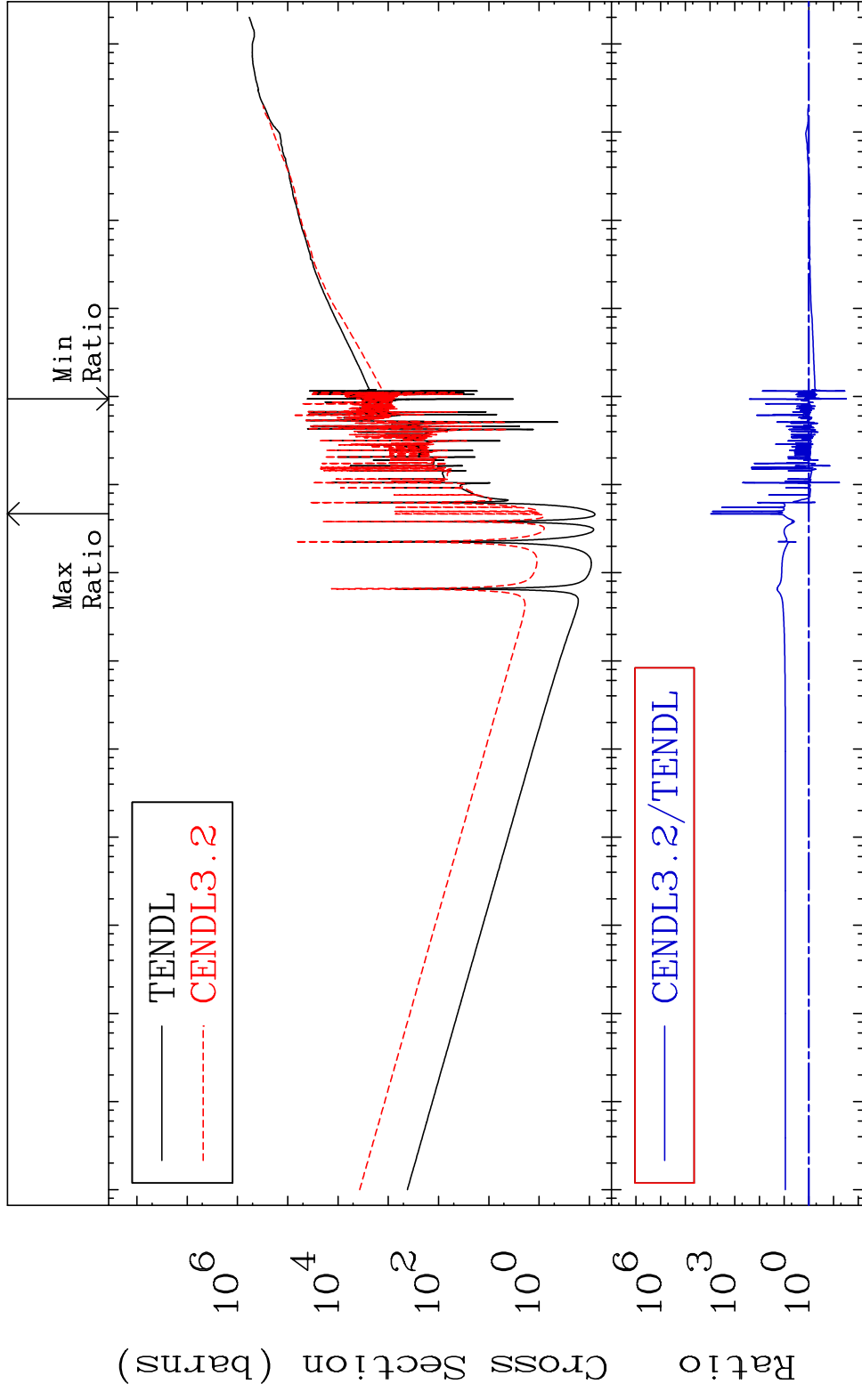
MAT 4449 Total photon (eV-barns) 44-Ru-104
 Cross Section 9999. To 9999. %



MAT 4449 Total kinematic kerma (high limit) 44-Ru-104
 Cross Section -96.98 To 9999. %



MAT 4449 Dpa total (eV-barns) 44-Ru-104
 Cross Section -96.98 To 9999. %

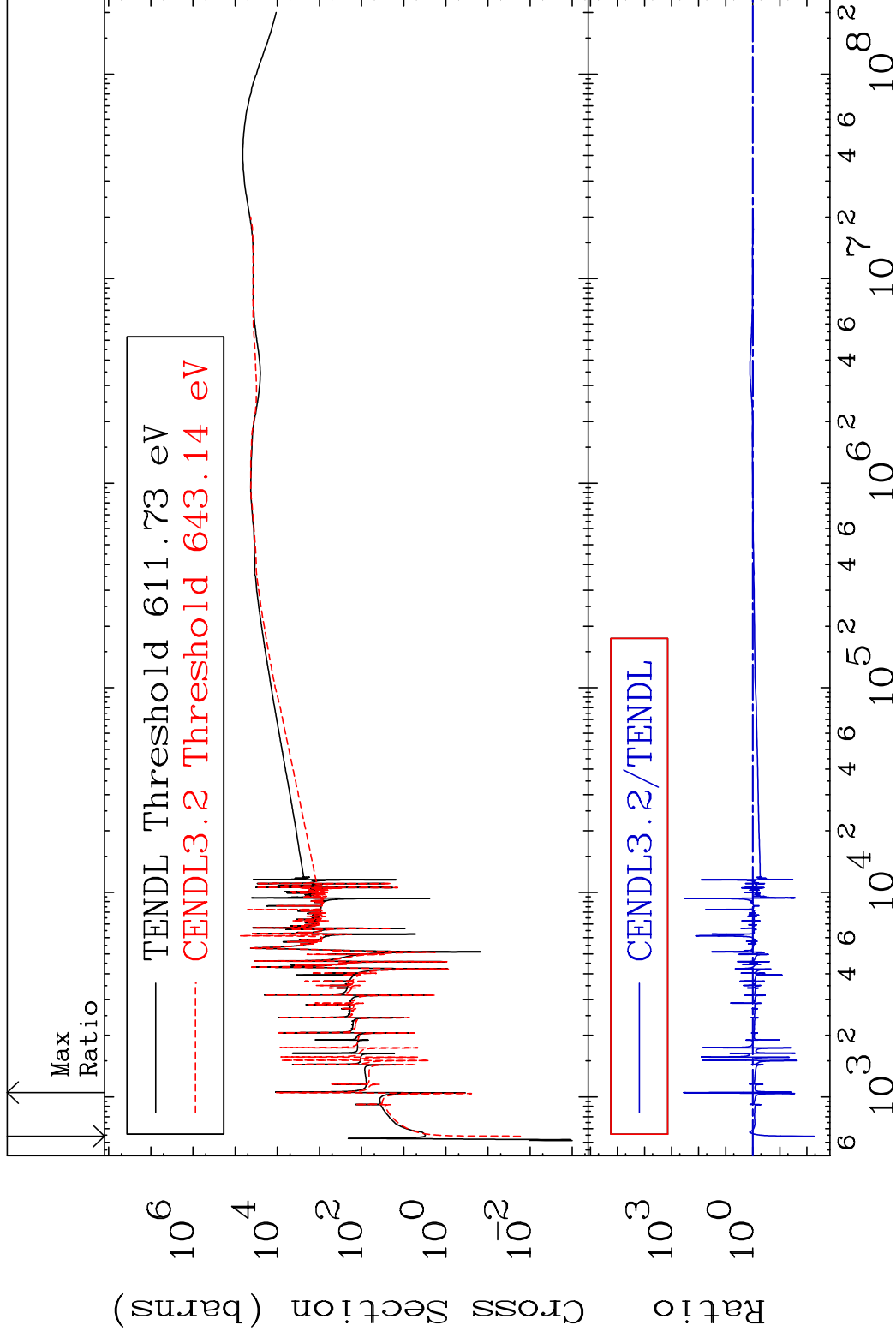


MAT 4449

Dpa elastic (mt2)

44-Ru-104

Cross Section -99.46 To 9999. %

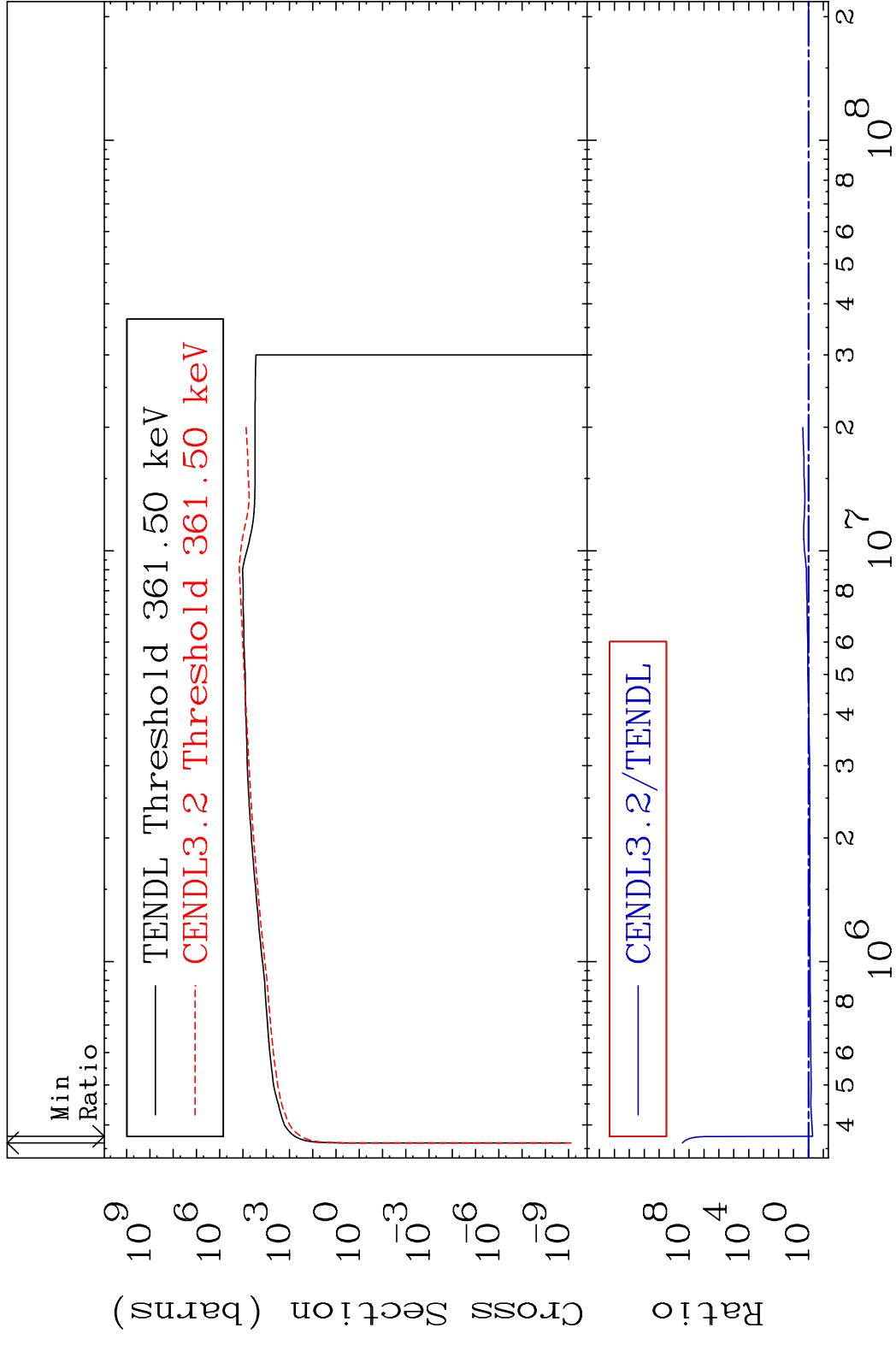


32

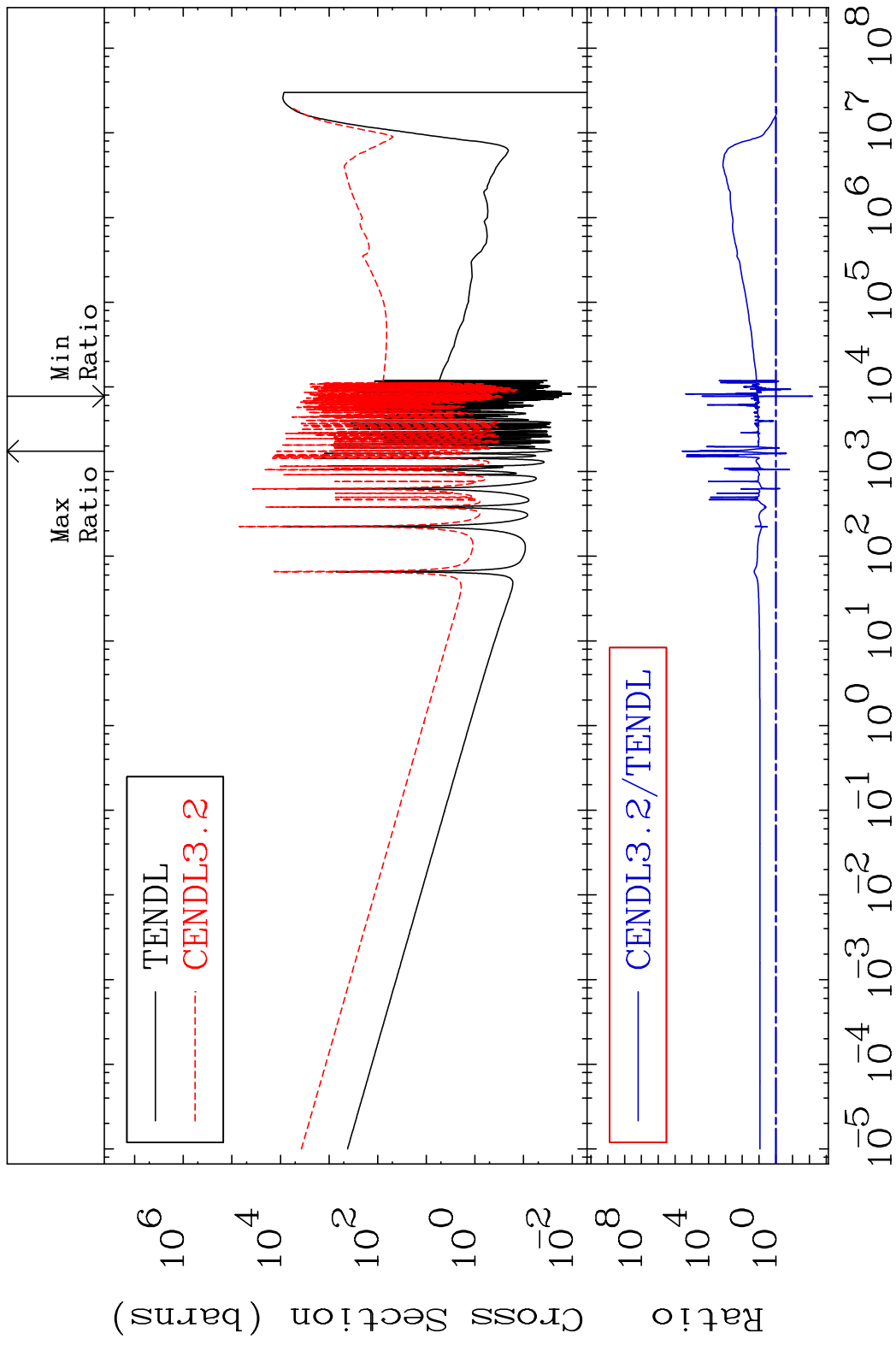
Incident Energy (eV)

44-Ru-104

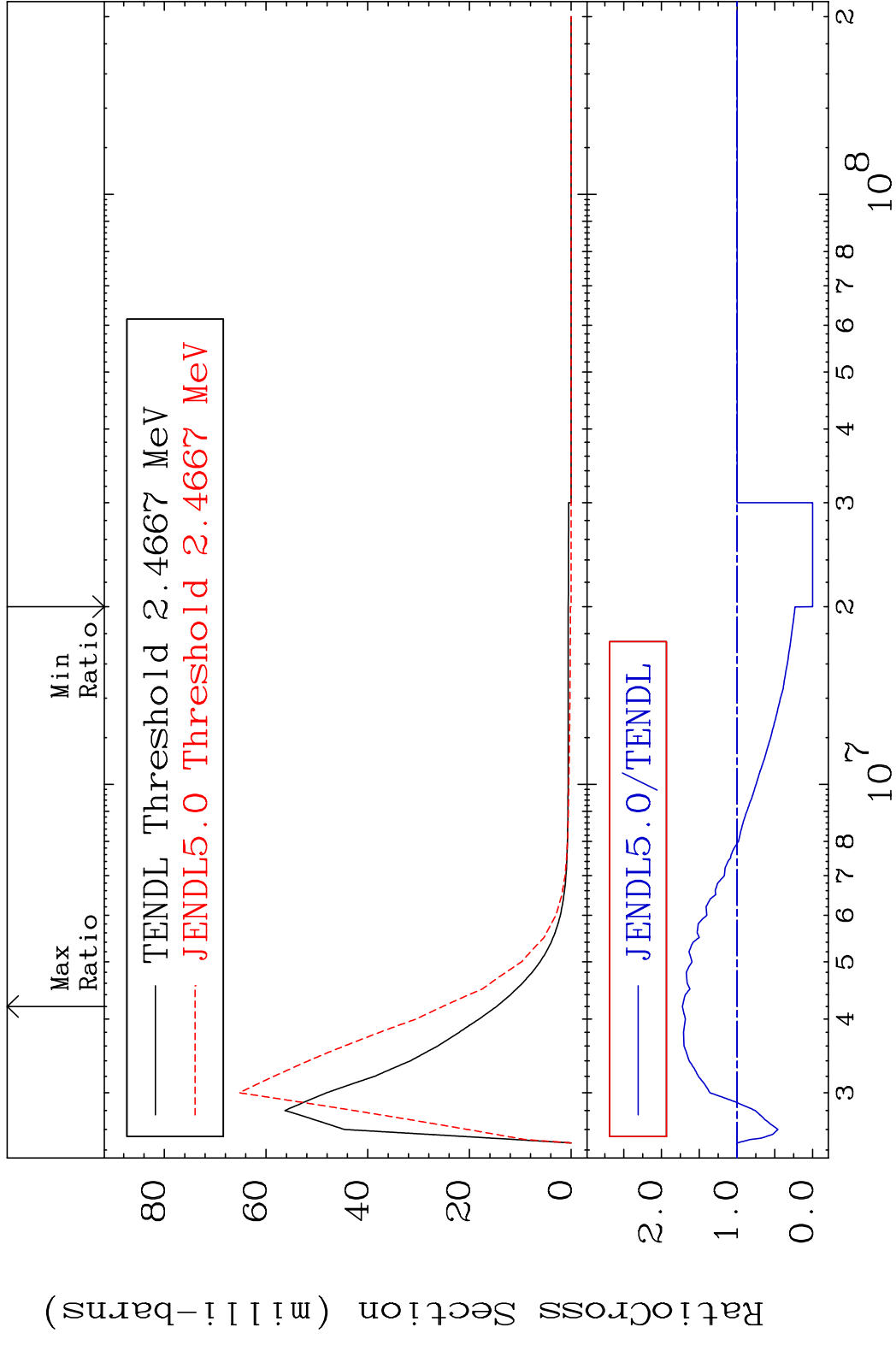
MAT 4449 Dpa inelastic (mt51-91) 44-Ru-104
 Cross Section -46.52 To 9999. %



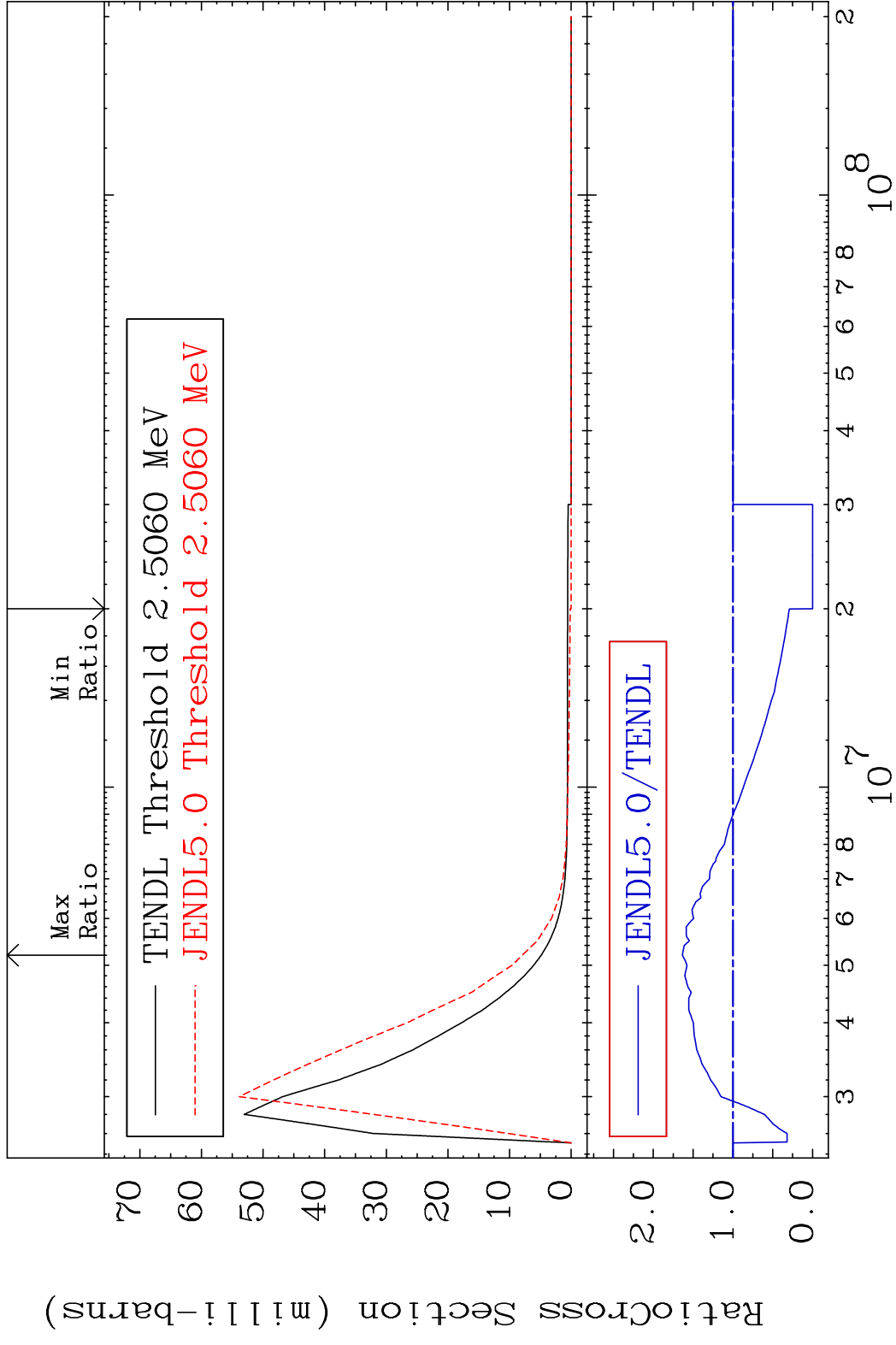
MAT 4449 Dpa disappearance (mt102 -120) 44-Ru-104
 Cross Section -99.35 To 9999. %



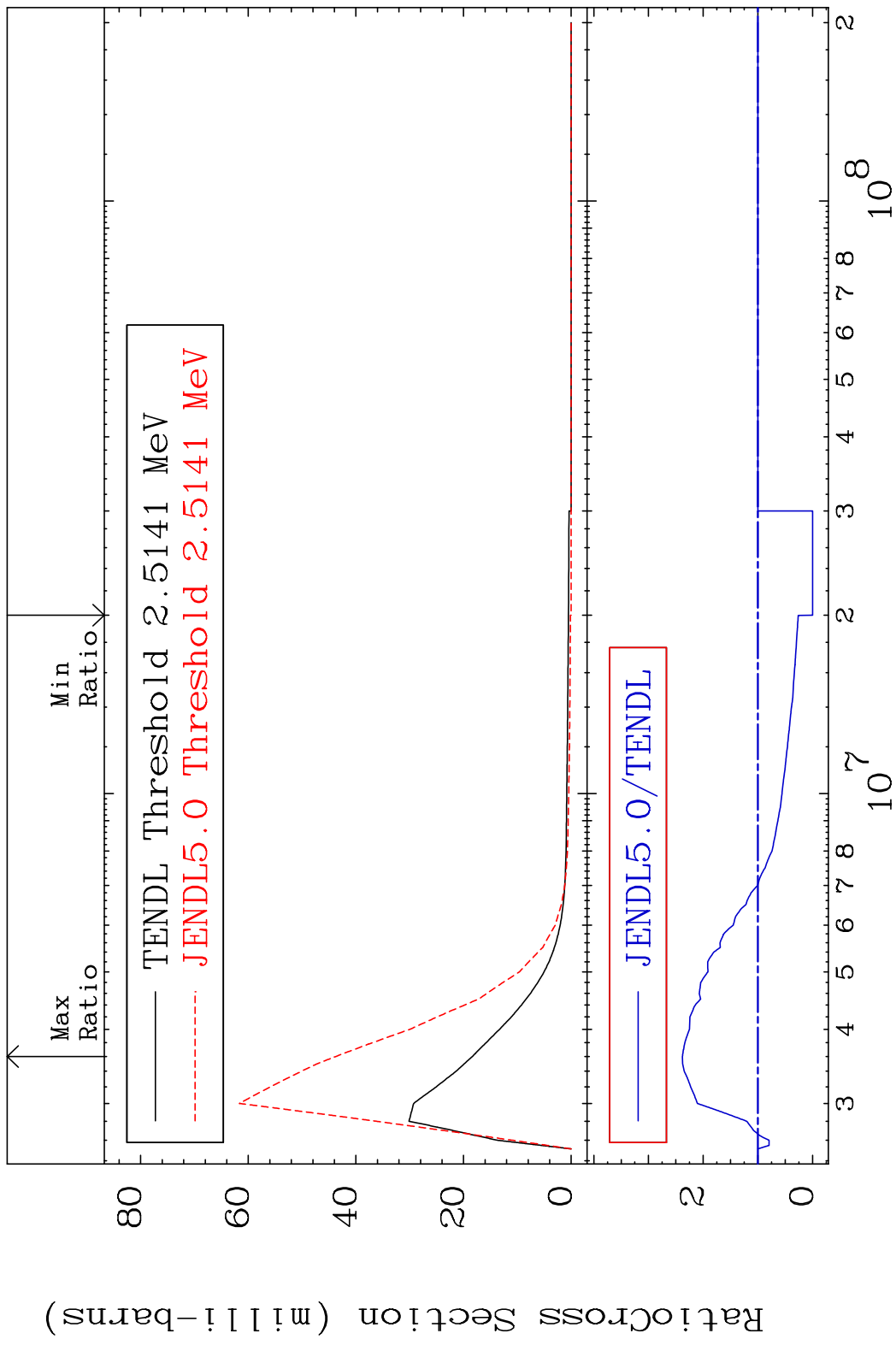
MAT 4449 MT= 76 (n,n') Level 44-Ru-104
 Cross Section -100.0 To 72.38 %



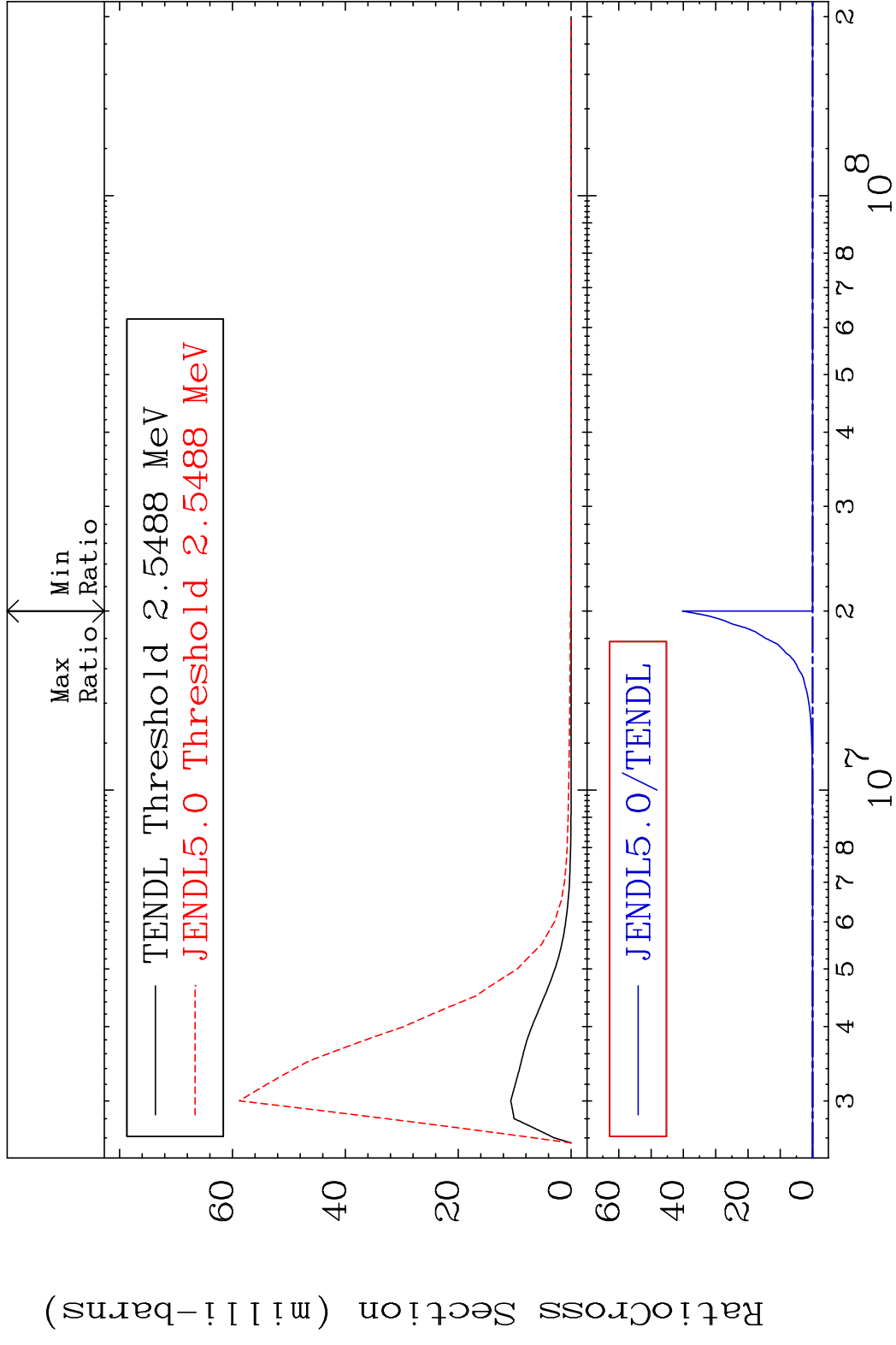
MAT 4449 MT= 77 (n,n') Level 44-Ru-104
 Cross Section -100.0 To 63.51 %



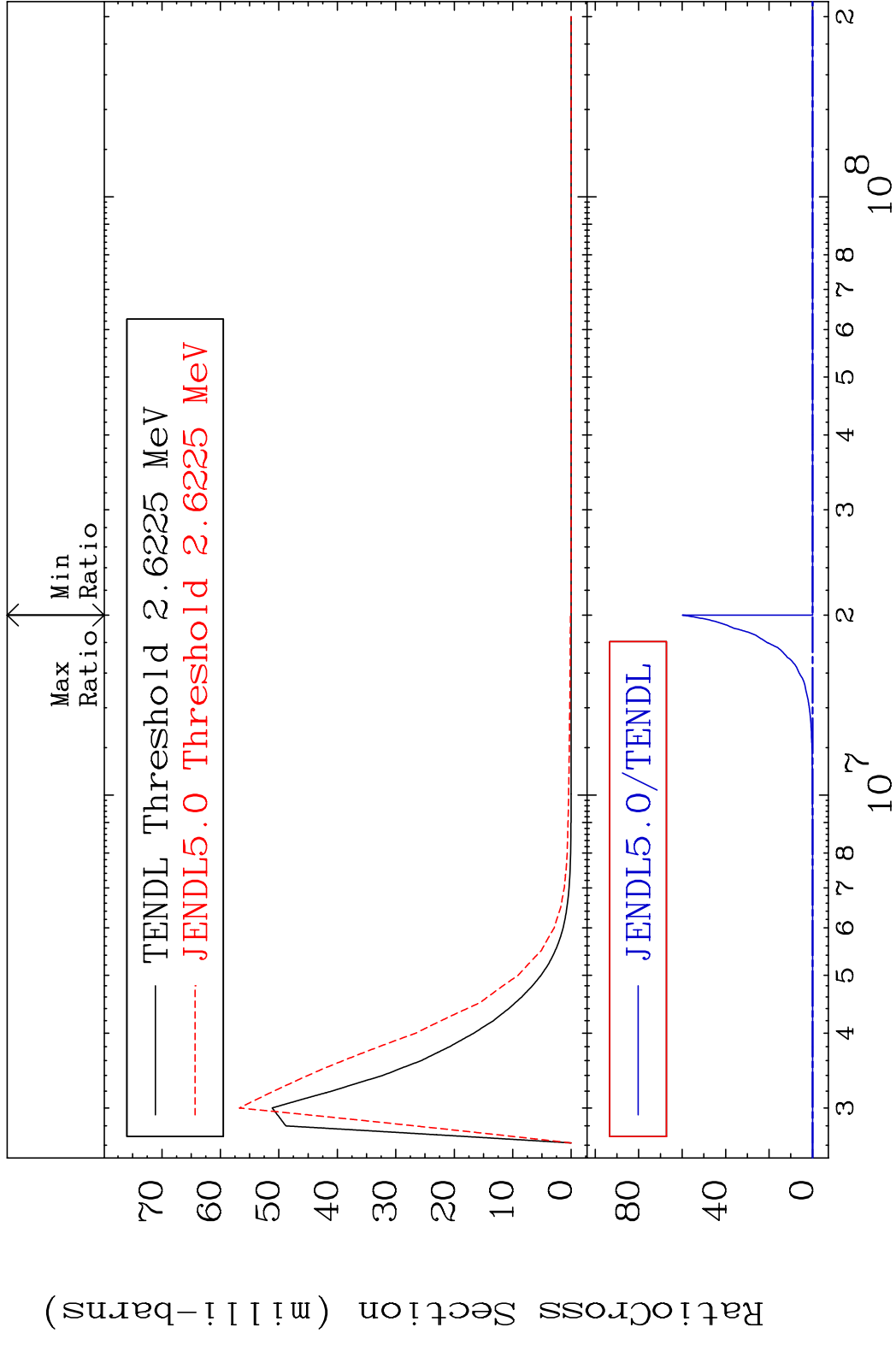
MAT 4449 MT= 78 (n, n') Level 44-Ru-104
 Cross Section -100.0 To 138.1 %



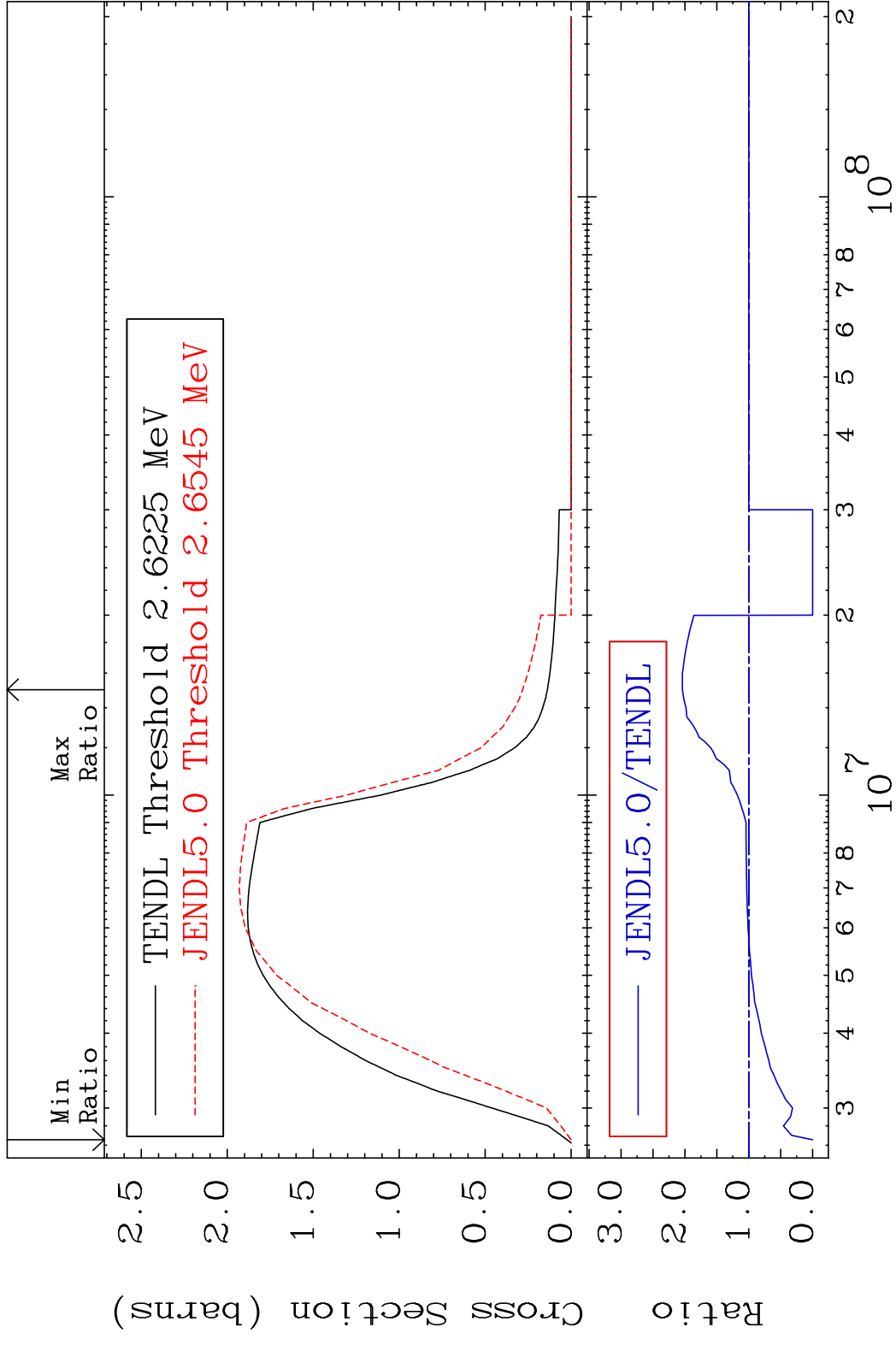
MAT 4449 MT= 79 (n, n') Level 44-Ru-104
 Cross Section -100.0 To 9999. %



MAT 4449 MT= 80 (n, n') Level 44-Ru-104
 Cross Section -100.0 To 9999. %



MAT 4449 (n, n') Continuum 44-Ru-104
 Cross Section -100.0 To 103.9 %



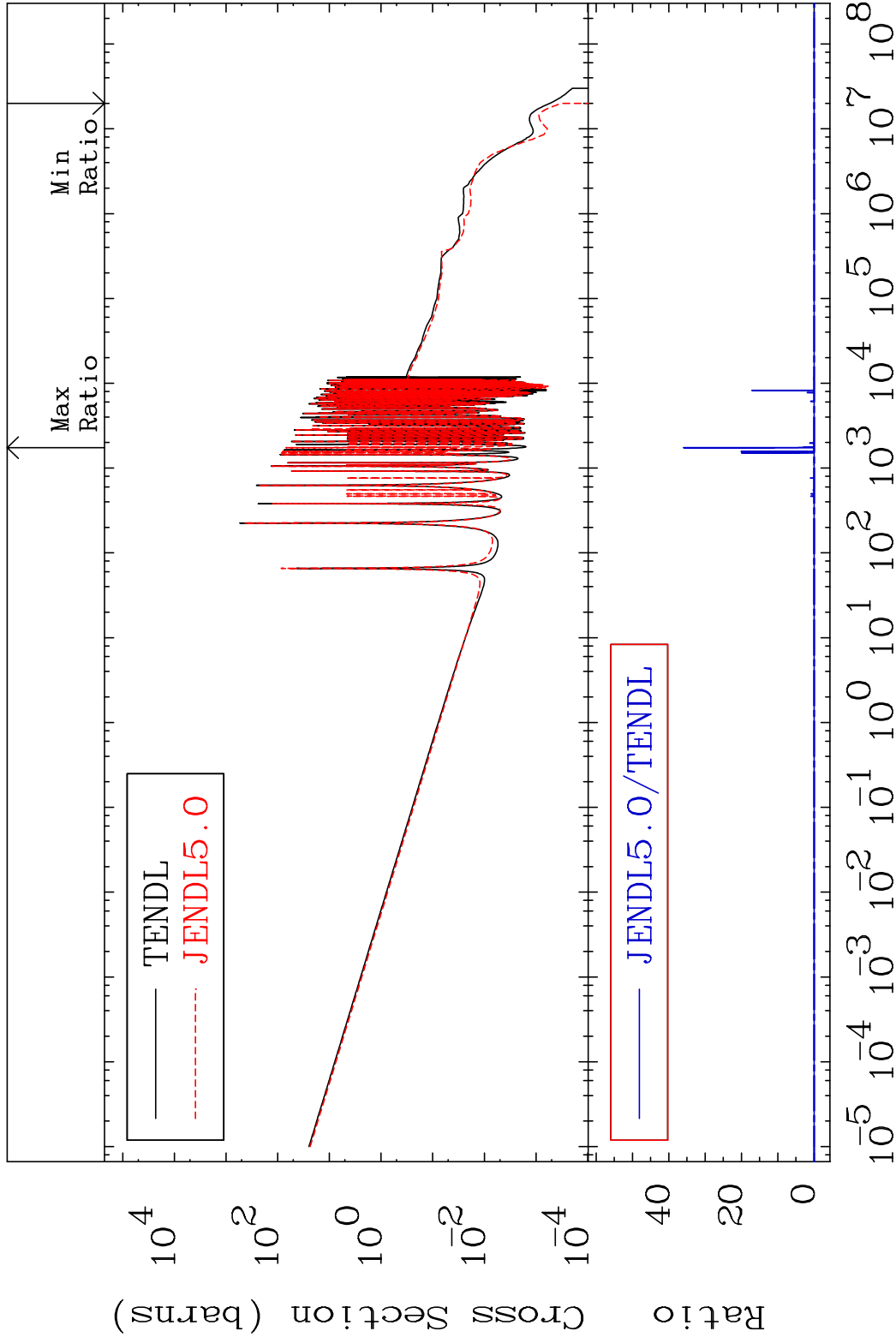
40 Incident Energy (eV) 44-Ru-104

MAT 4449

(n, γ)

44-Ru-104

Cross Section -100.0 To 9999. %



41

Incident Energy (eV)

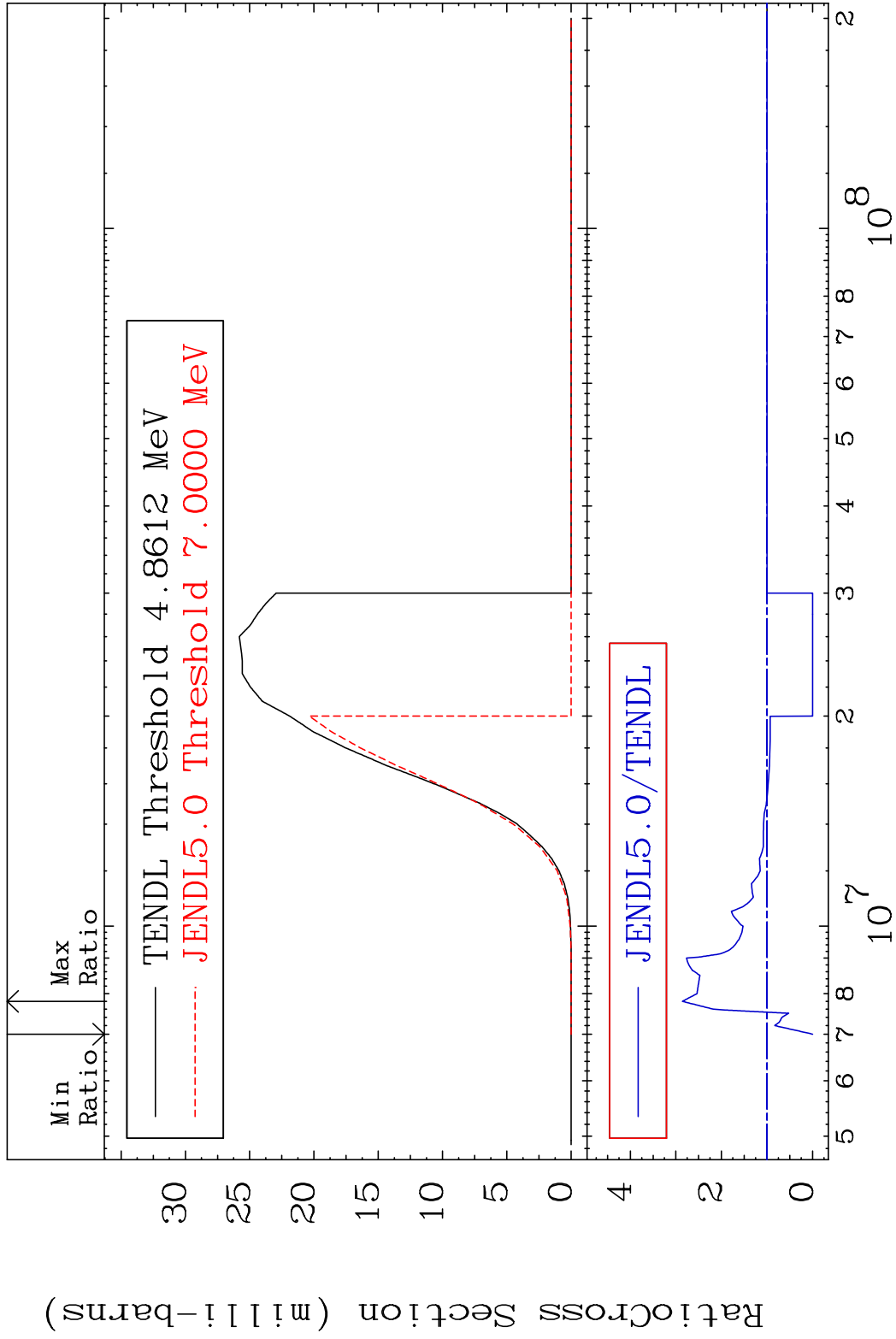
44-Ru-104

MAT 4449

(n,p)

44-Ru-104

Cross Section -100.0 To 185.8 %

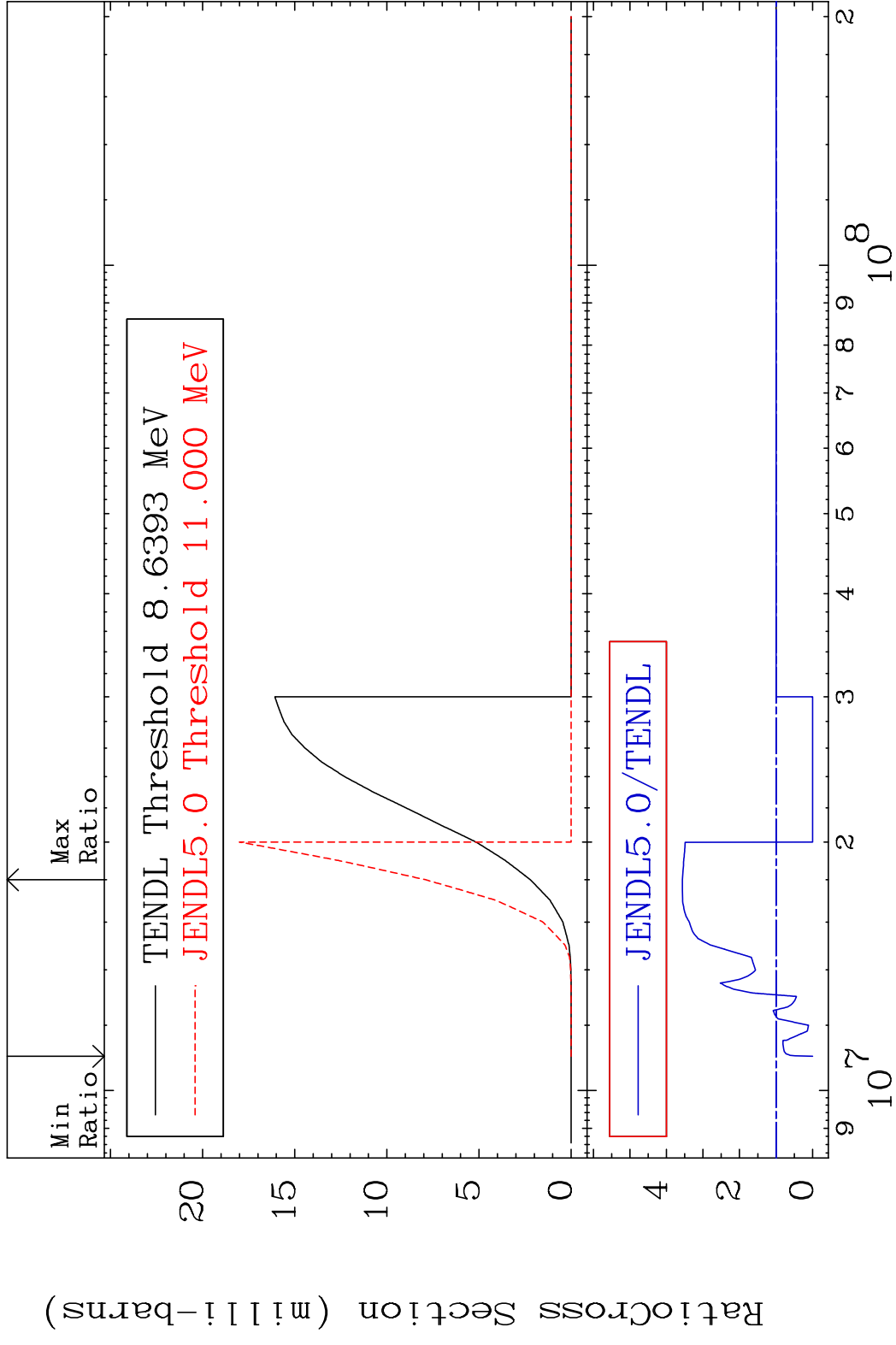


42

Incident Energy (eV)

44-Ru-104

MAT 4449 (n,d) 44-Ru-104
 Cross Section -100.0 To 256.5 %



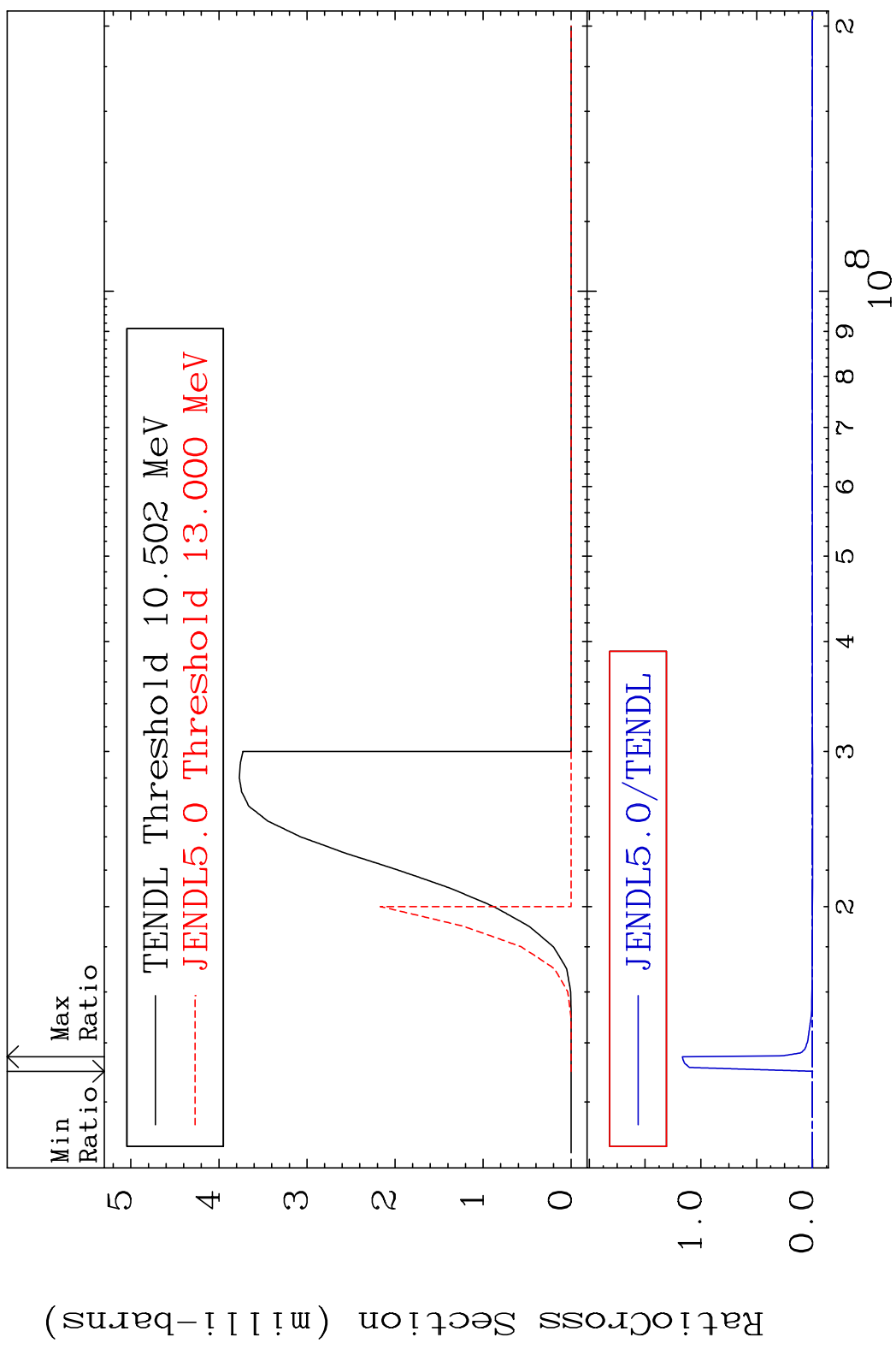
43 44-Ru-104

MAT 4449

(n, t)

44-Ru-104

Cross Section -100.0 To 9999. %



44

Incident Energy (eV)

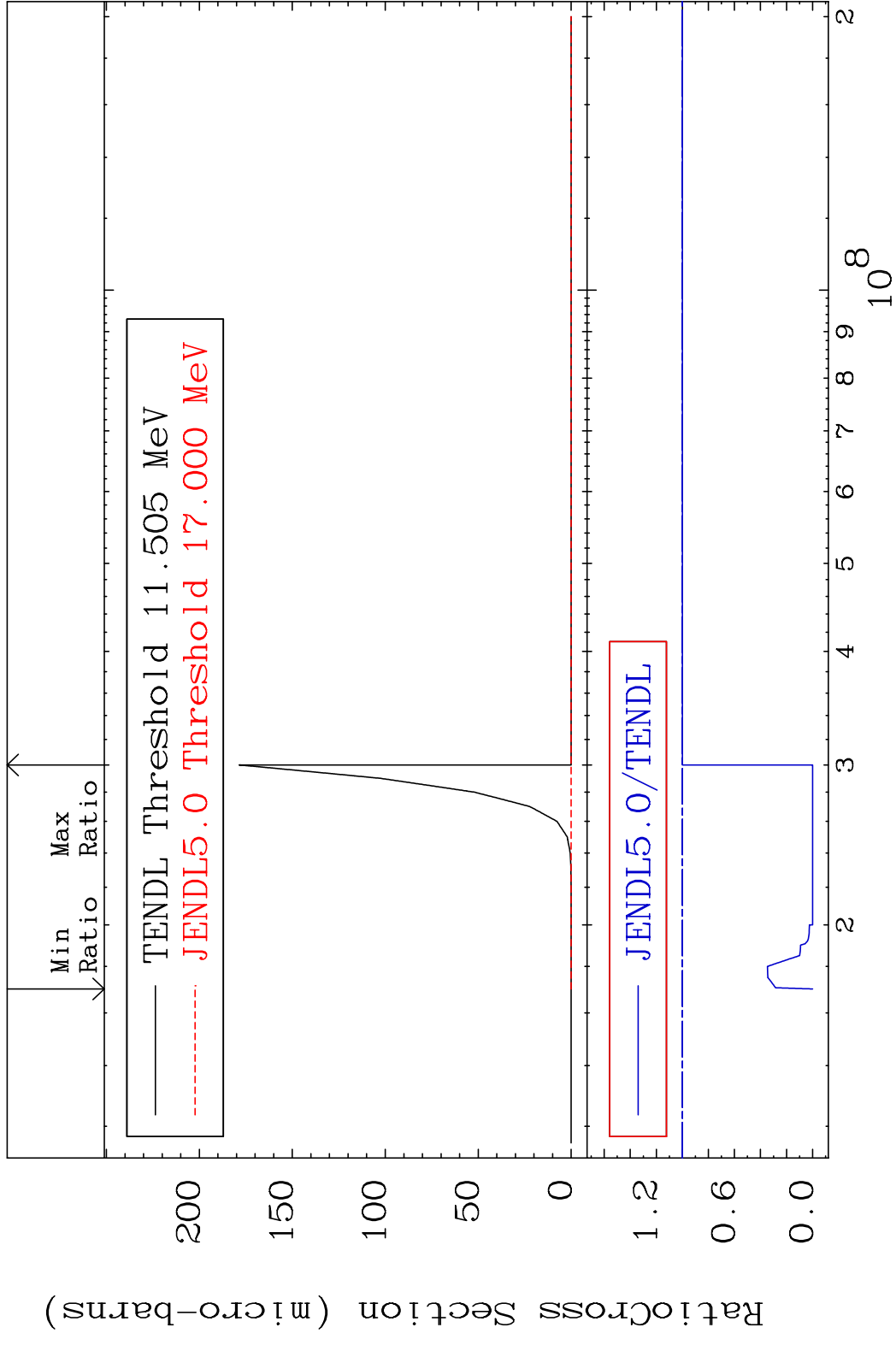
44-Ru-104

MAT 4449

(n, He-3)

44-Ru-104

Cross Section -100.0 To 0.000 %

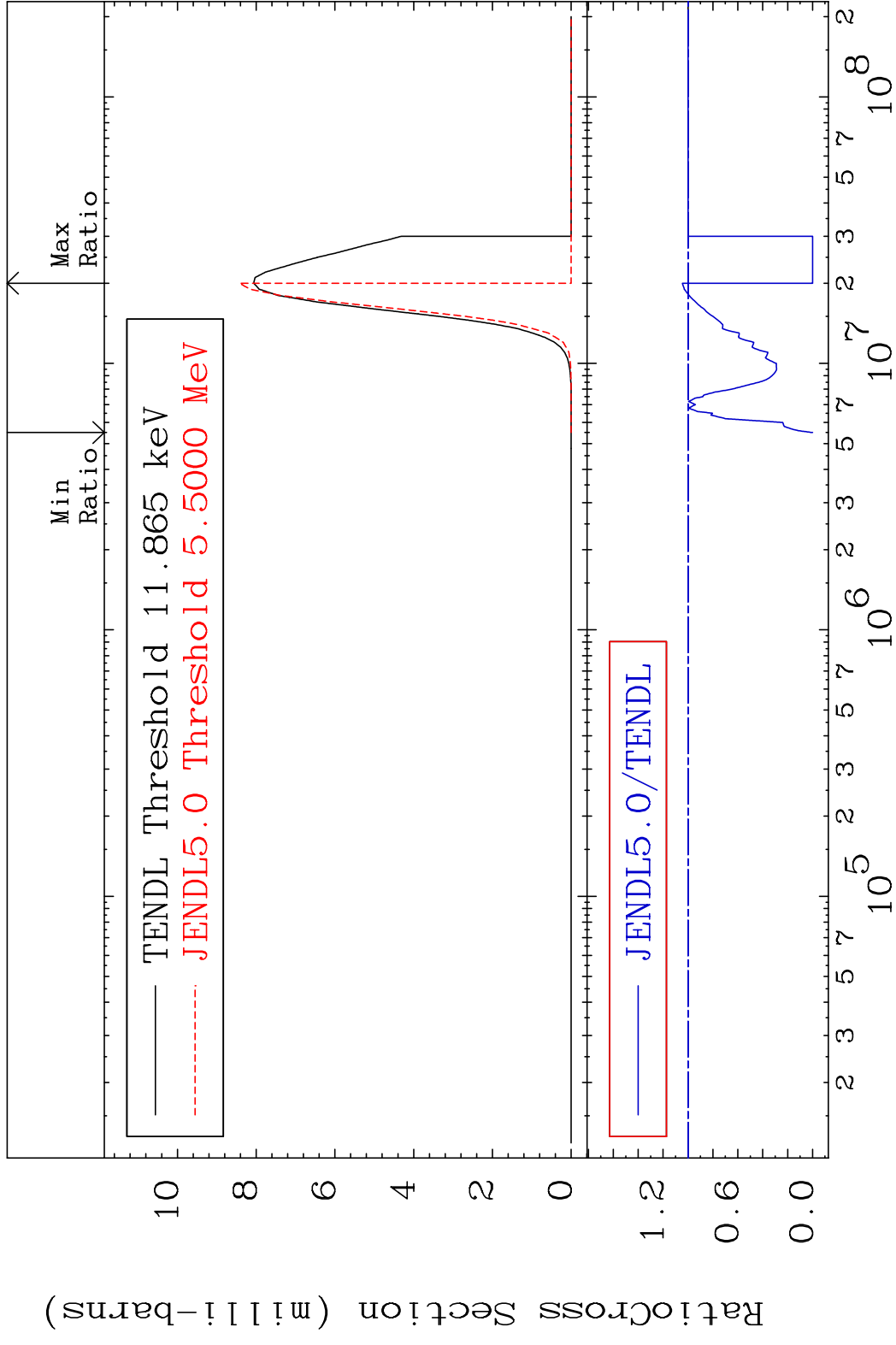


MAT 4449

44-Ru-104

(n, α)

Cross Section -100.0 To 4.532 %

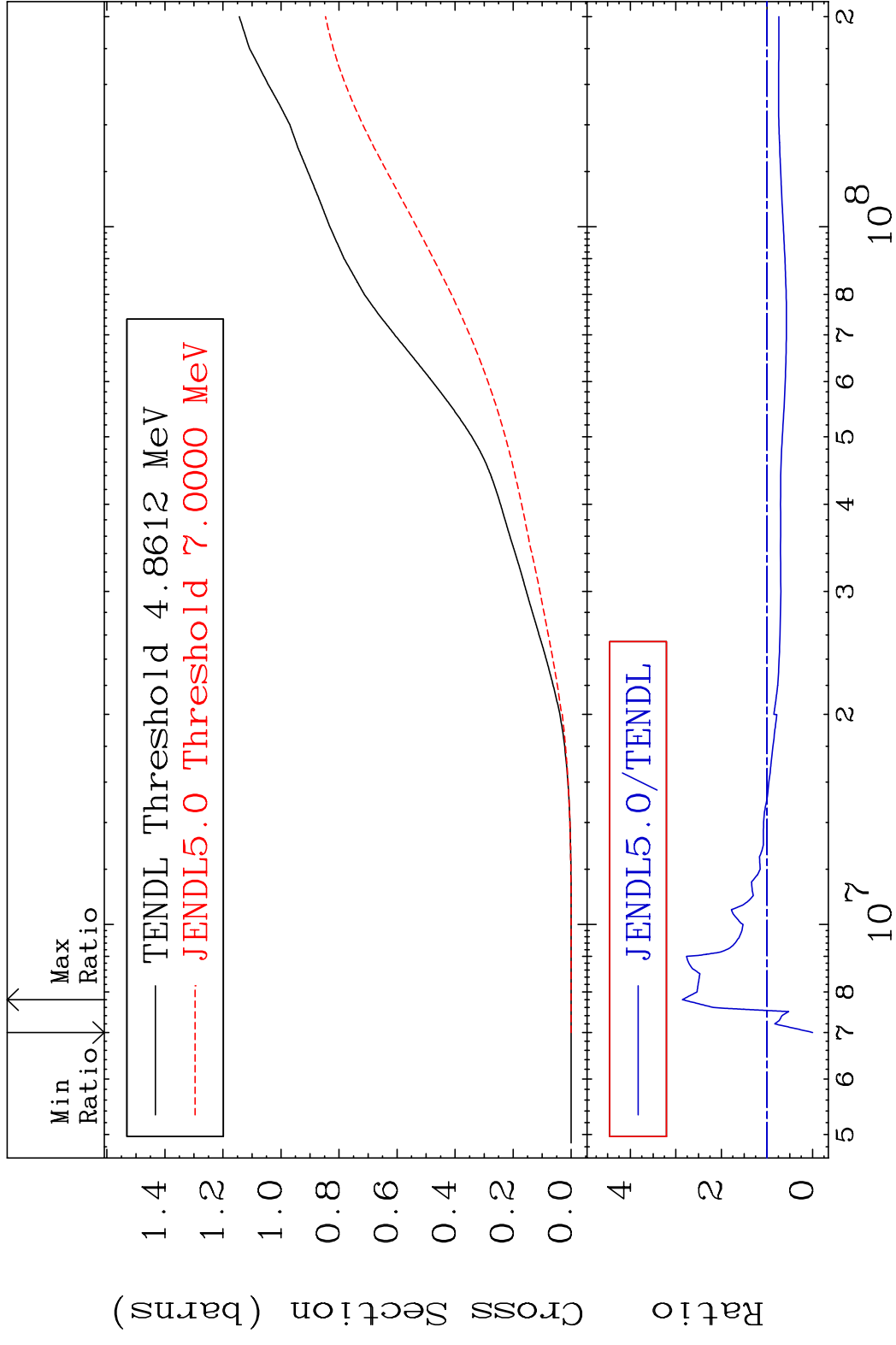


MAT 4449

Hydrogen Production

44-Ru-104

Cross Section -100.0 To 185.8 %

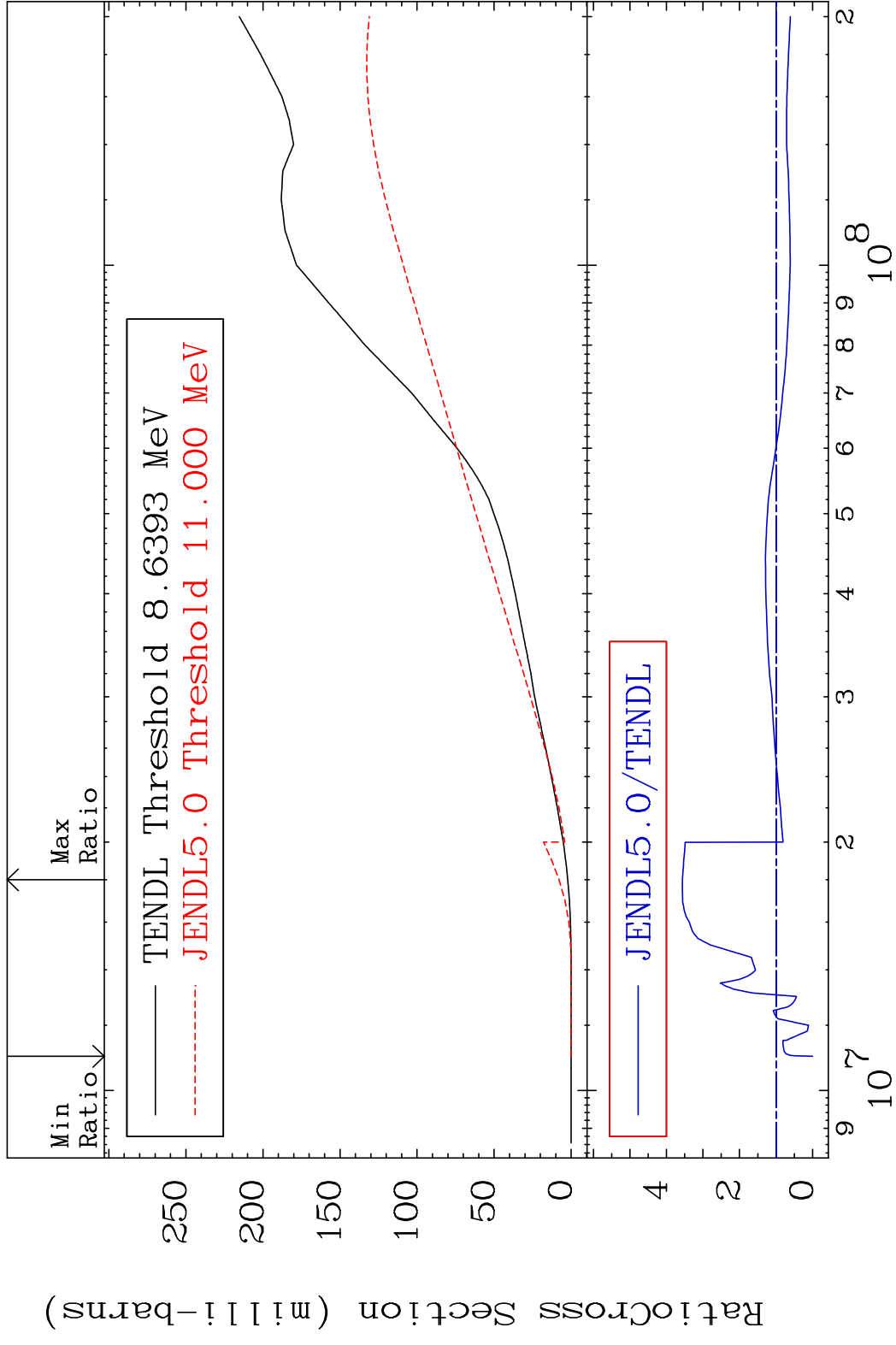


47

Incident Energy (eV)

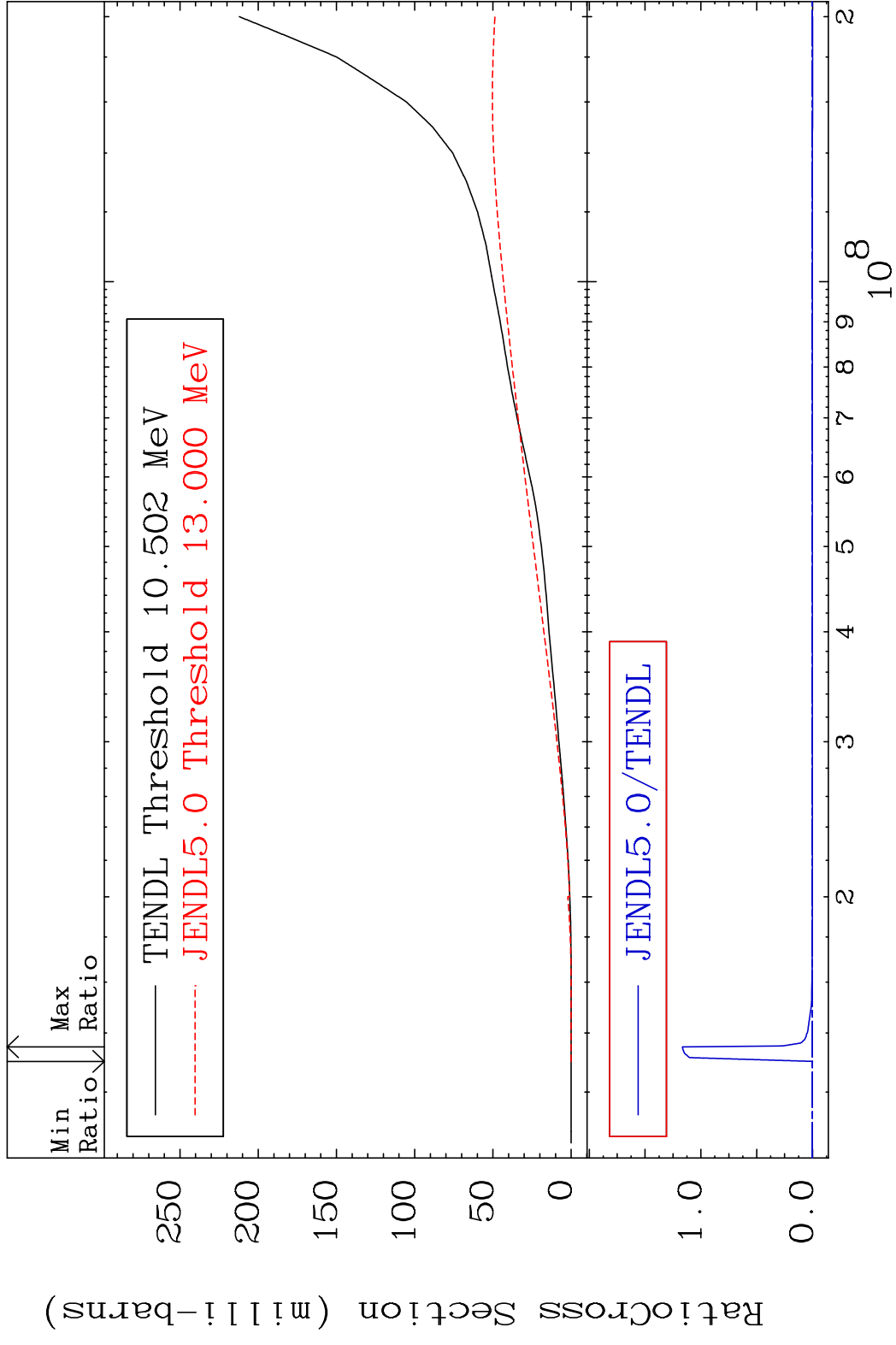
44-Ru-104

MAT 4449 Deuterium Production 44-Ru-104
 Cross Section -100.0 To 256.5 %



48 Incident Energy (eV) 44-Ru-104

MAT 4449 Tritium Production 44-Ru-104
 Cross Section -100.0 To 9999. %



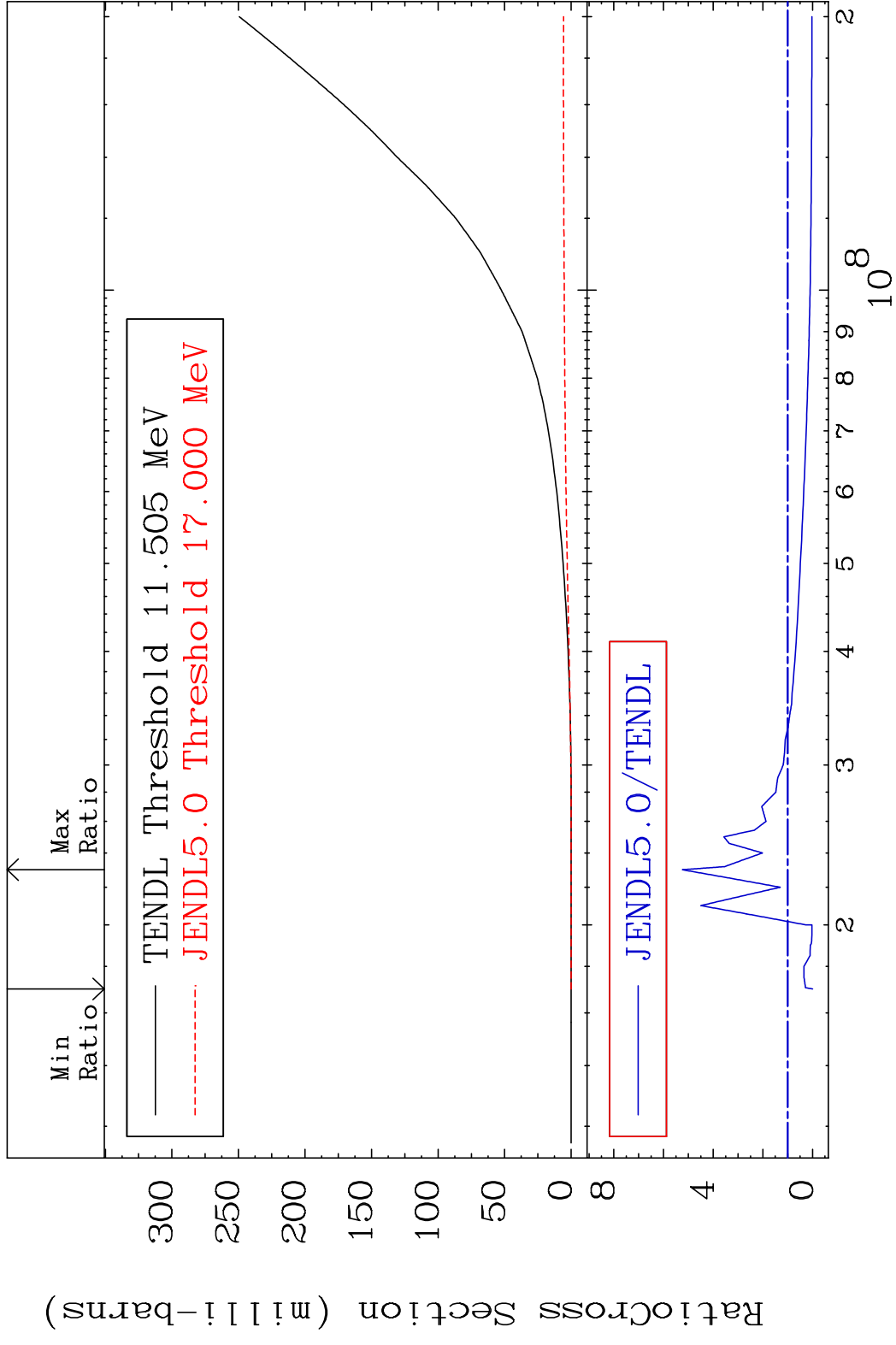
49 Incident Energy (eV) 44-Ru-104

MAT 4449

He-3 Production

44-Ru-104

Cross Section -100.0 To 424.2 %



50

Incident Energy (eV)

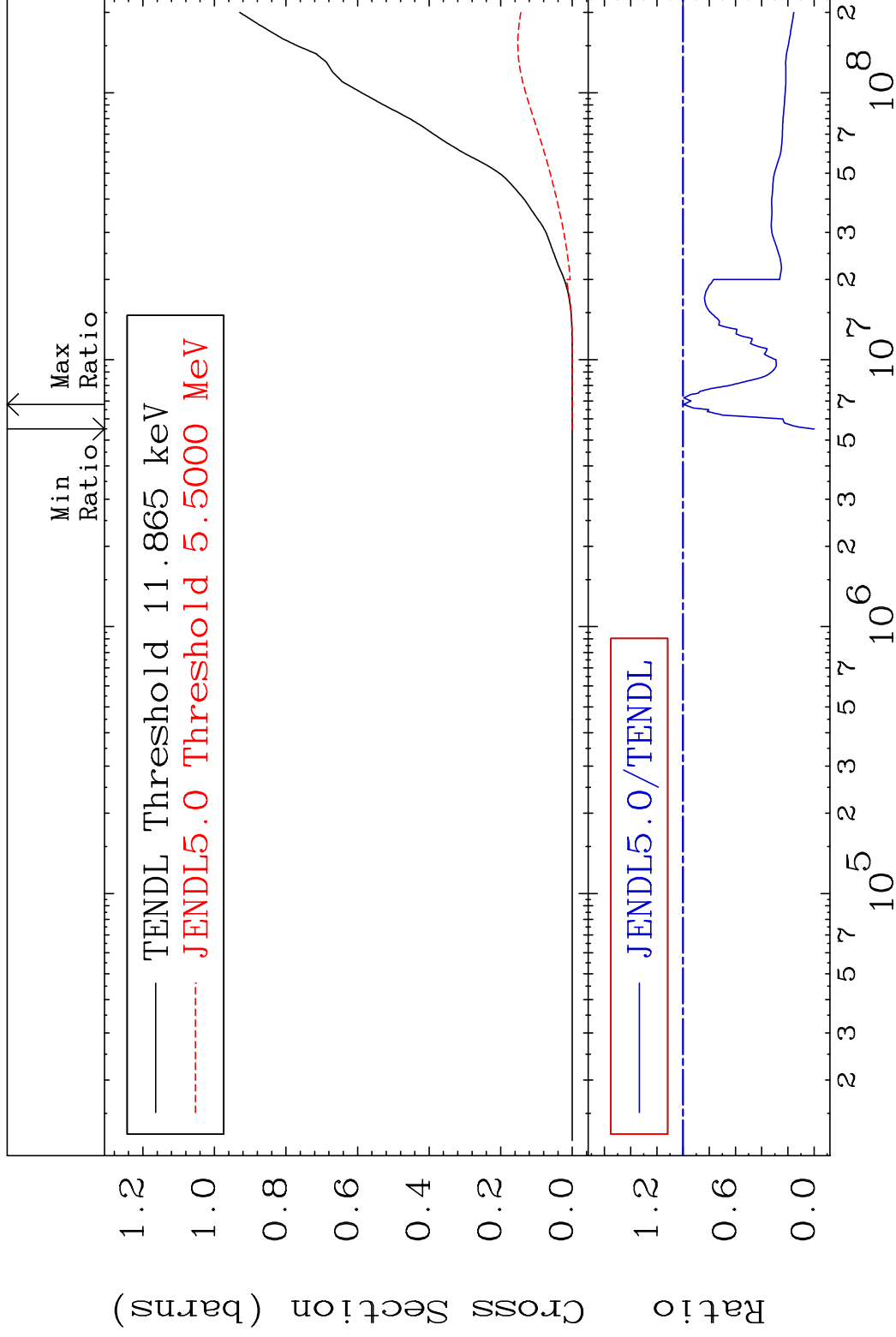
44-Ru-104

MAT 4449

He-4 Production

44-Ru-104

Cross Section -100.0 To -0.437%

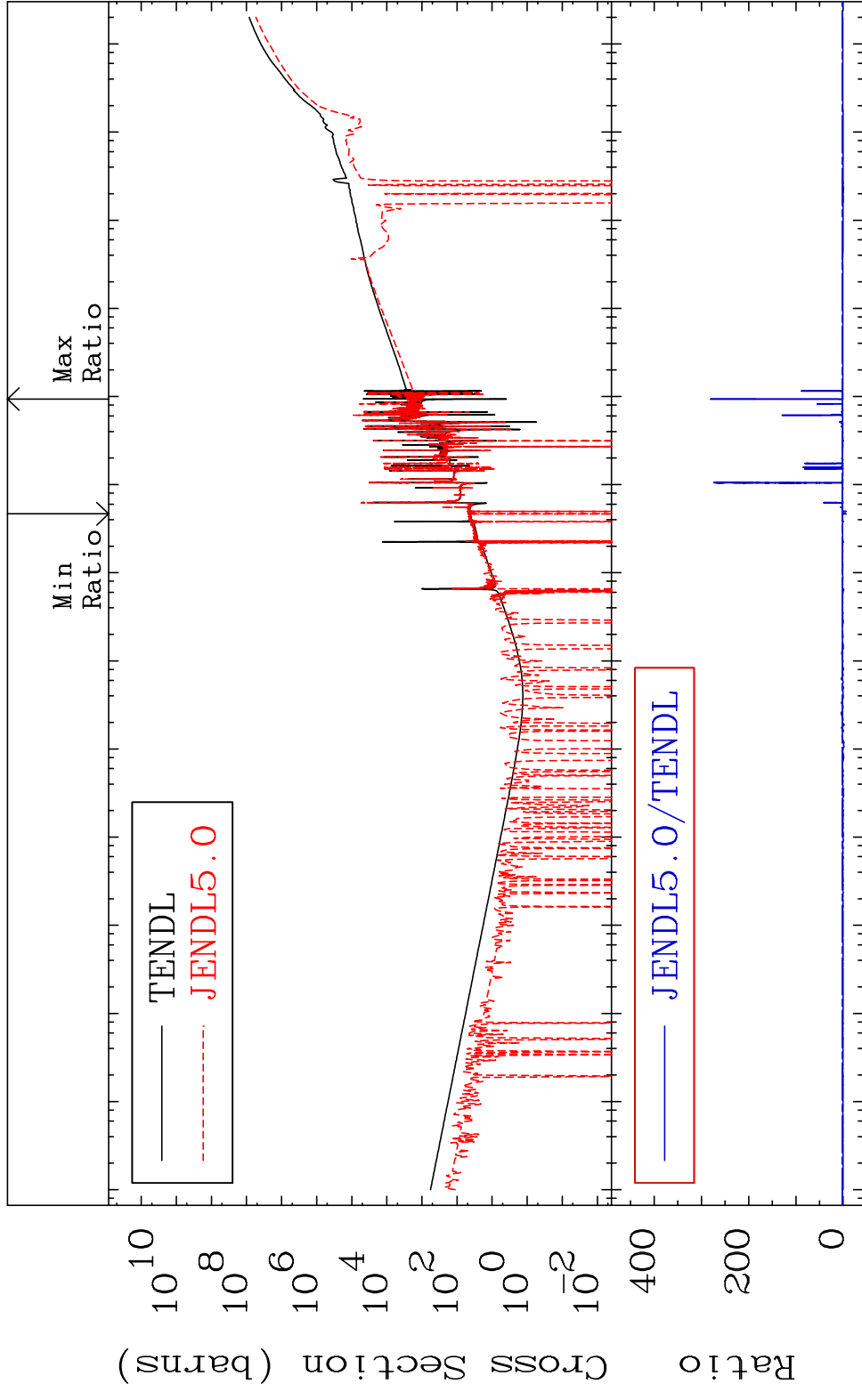


51

Incident Energy (eV)

44-Ru-104

MAT 4449 Kerma total (eV-barns) 44-Ru-104
 Cross Section -769.3 To 9999. %

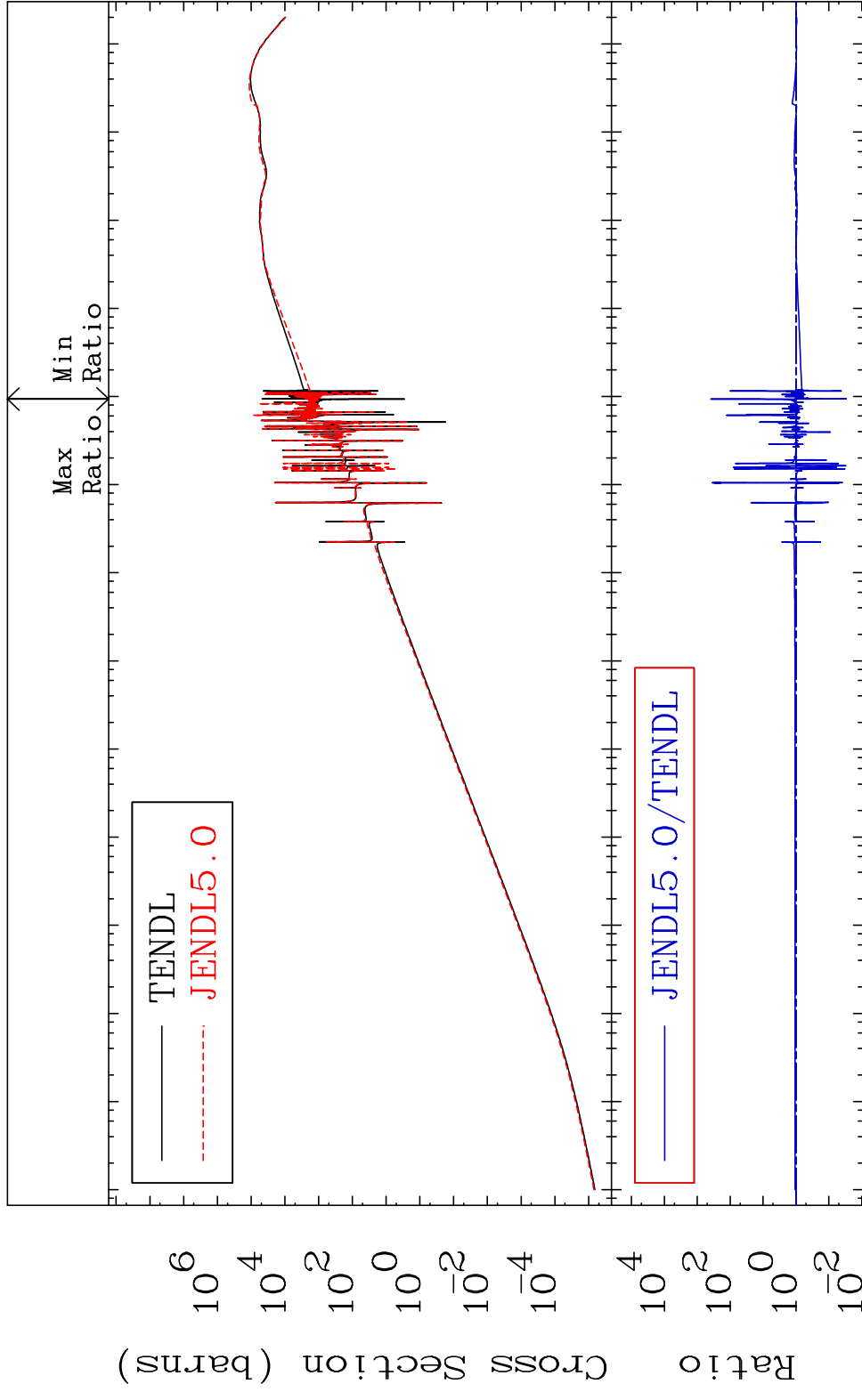


52 Incident Energy (eV) 44-Ru-104

MAT 4449

Kerma elastic Cross Section -97.04 To 9999. %

44-Ru-104



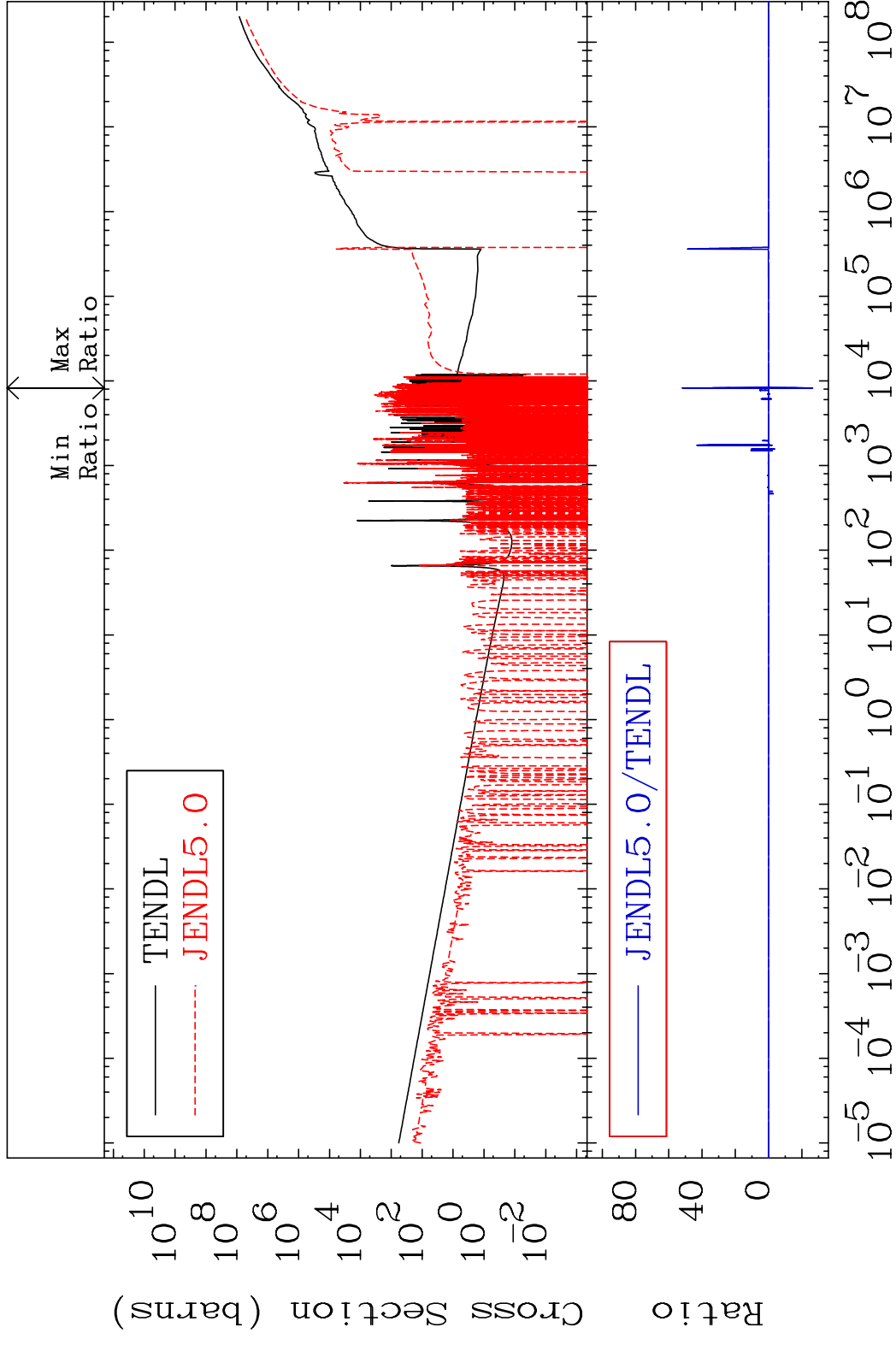
10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

53

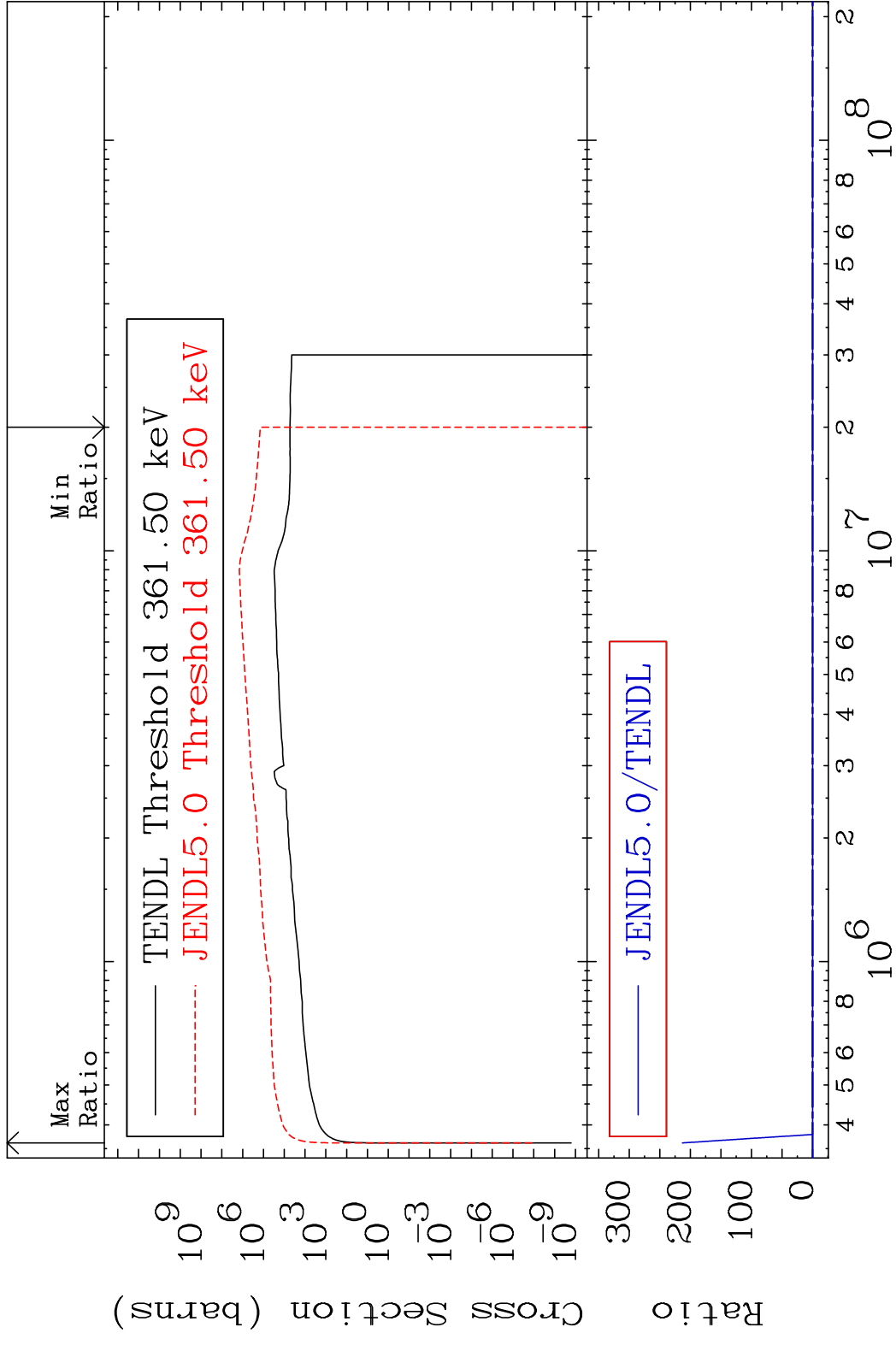
Incident Energy (eV)

44-Ru-104

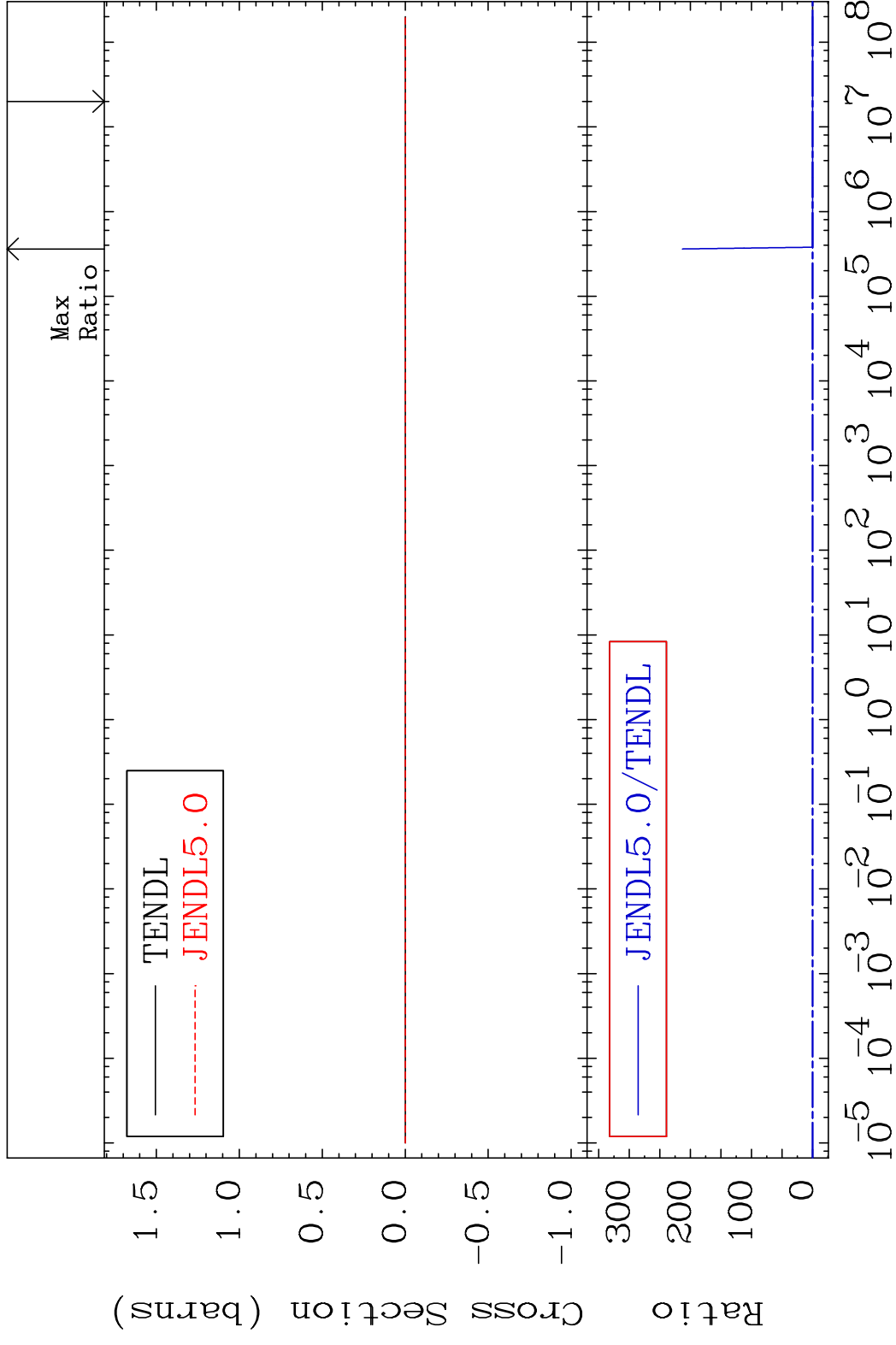
MAT 4449 Kerma non-elastic (all but mt2) 44-Ru-104
 Cross Section -9999. To 9999. %



MAT 4449 Kerma inelastic (mt51-91) 44-Ru-104
 Cross Section -100.0 To 9999. %



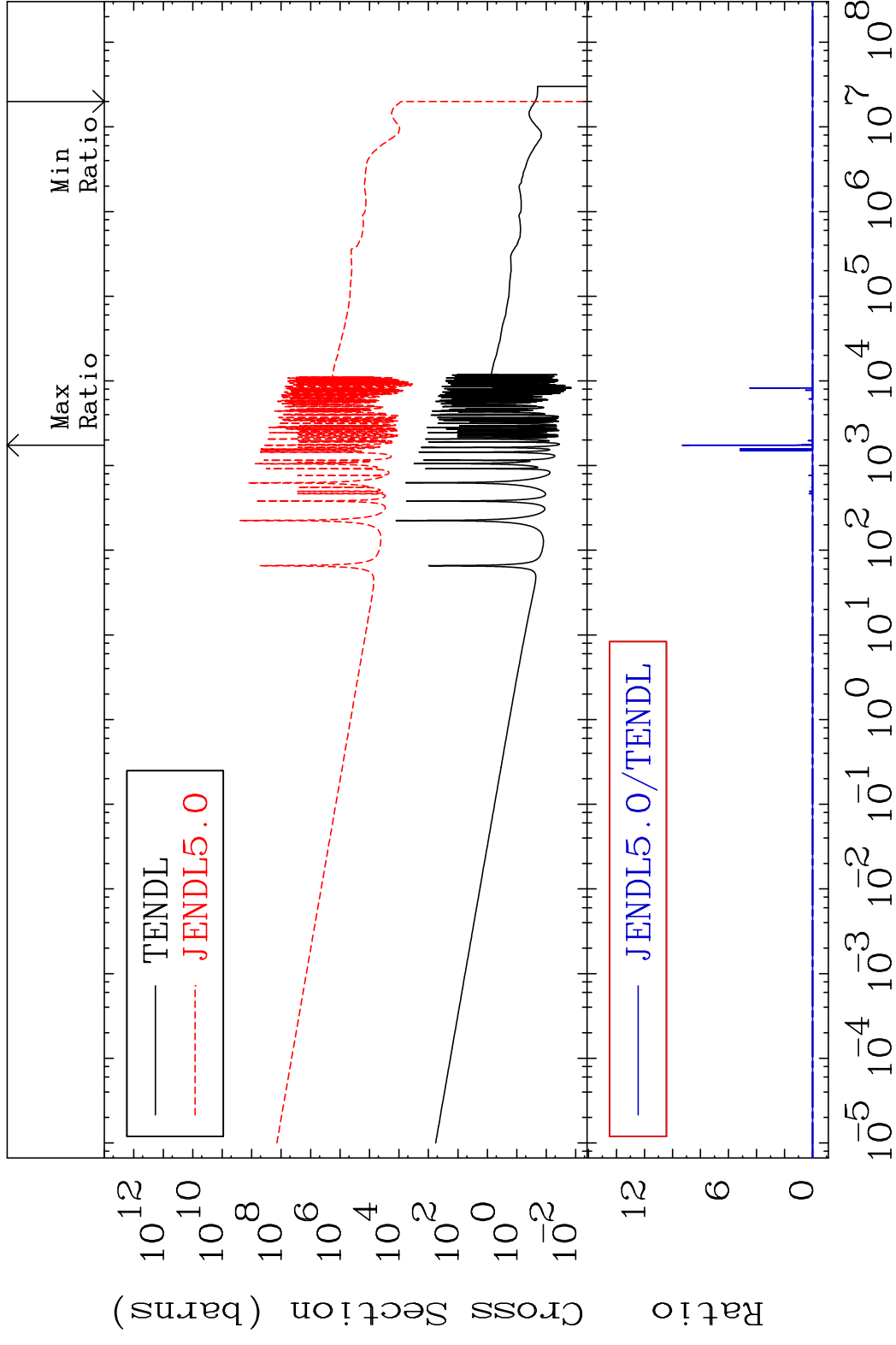
MAT 4449 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-104
 Cross Section -100.0 To 9999. %



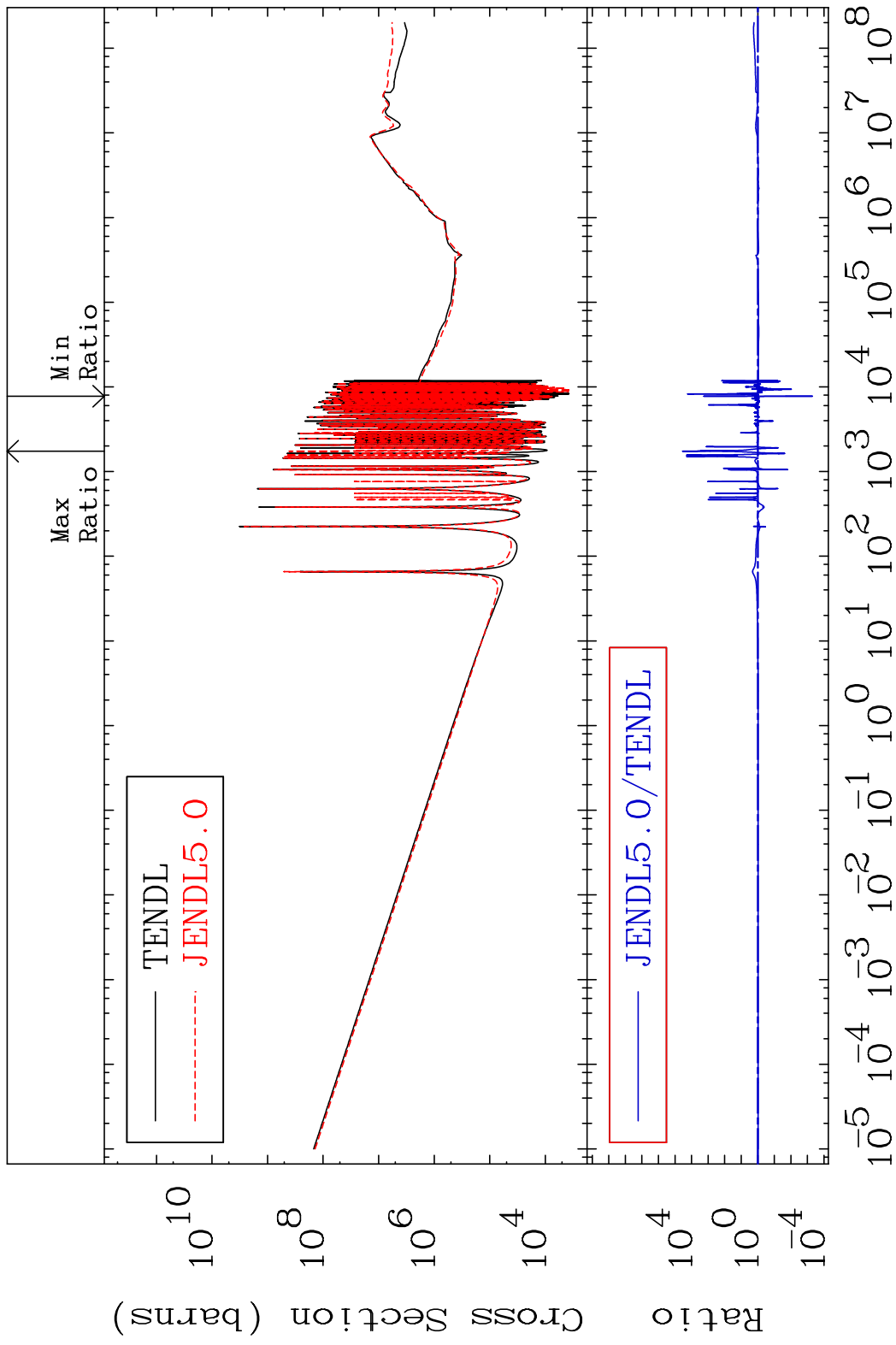
MAT 4449

Kerma capture (mt102) 44-Ru-104

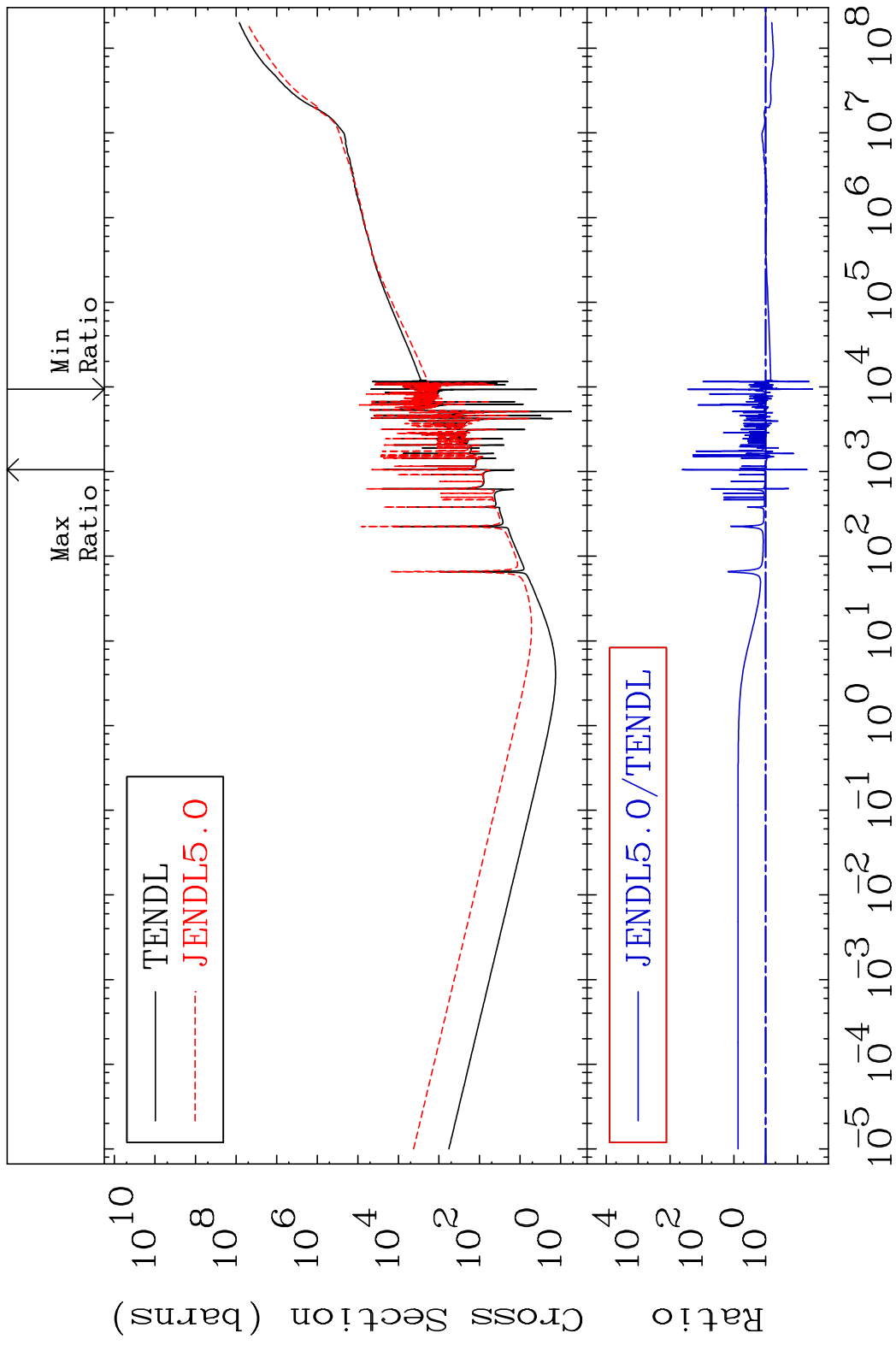
Cross Section -100.0 To 9999. %



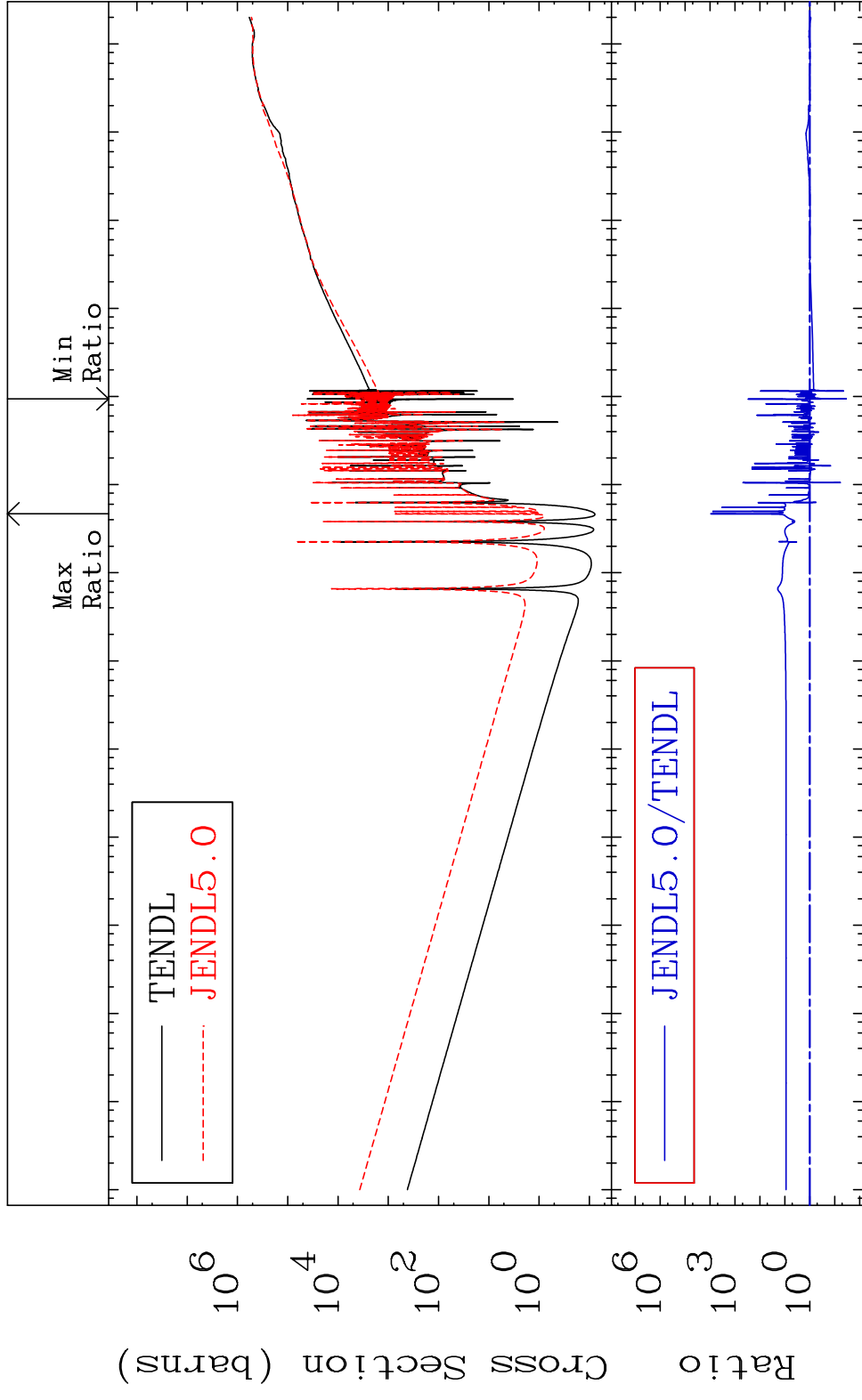
MAT 4449 Total photon (eV-barns) 44-Ru-104
 Cross Section -99.95 To 9999. %



MAT 4449 Total kinematic kerma (high limit) 44-Ru-104
 Cross Section -96.60 To 9999. %



MAT 4449 Dpa total (eV-barns) 44-Ru-104
Cross Section -96.60 To 9999. %



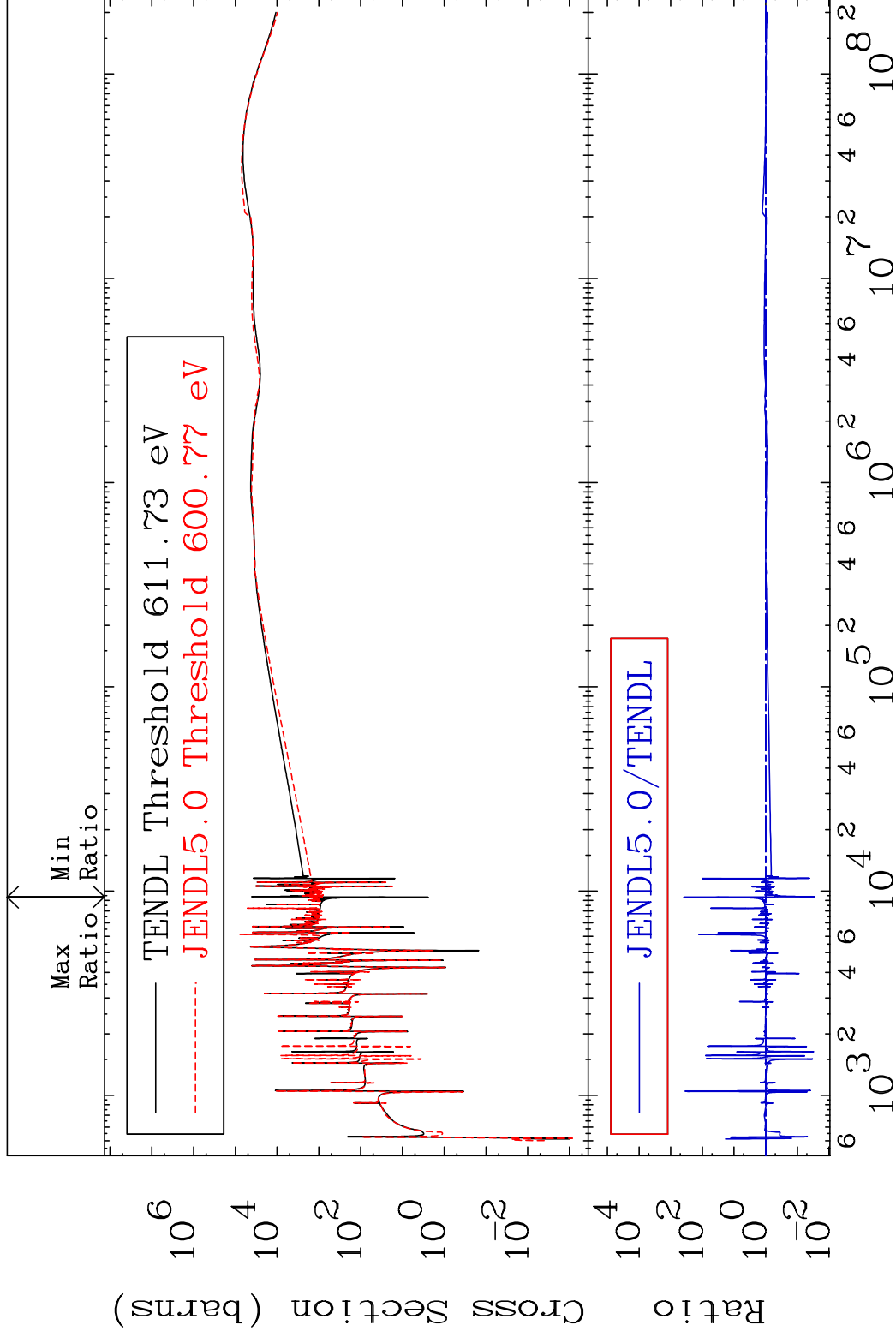
60 Incident Energy (eV) 44-Ru-104

MAT 4449

Dpa elastic (mt2)

44-Ru-104

Cross Section -97.04 To 9999. %

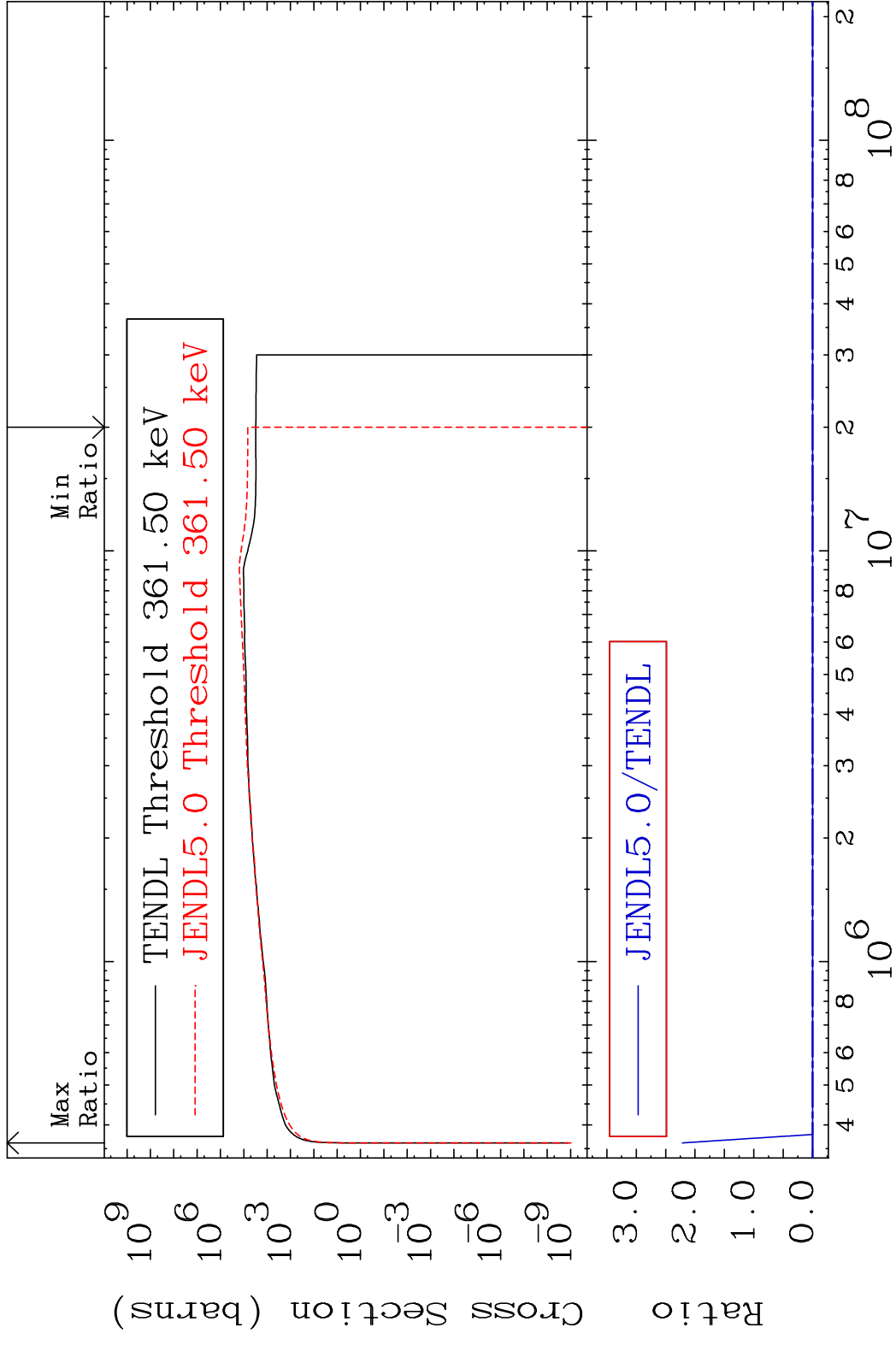


61

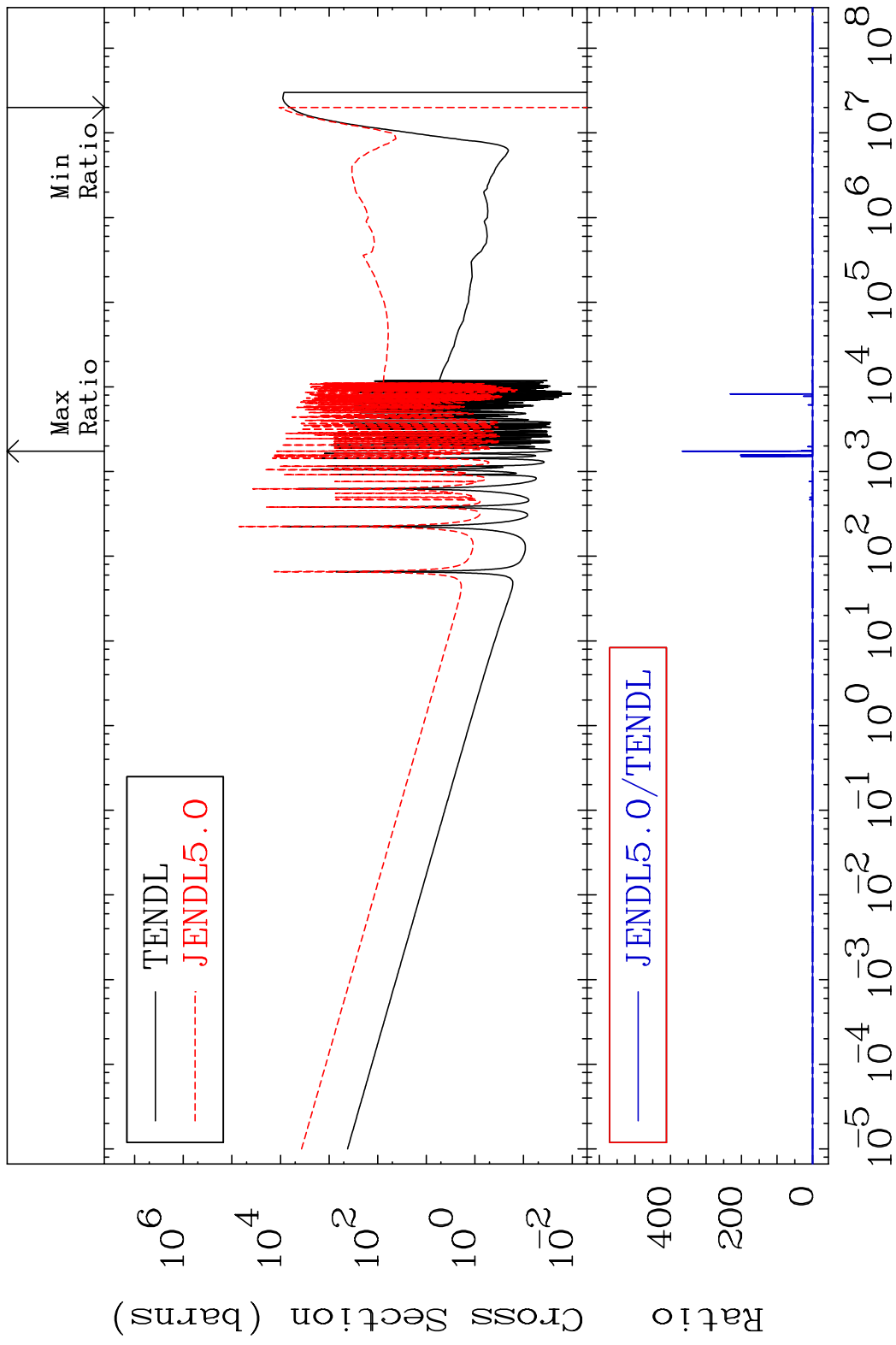
Incident Energy (eV)

44-Ru-104

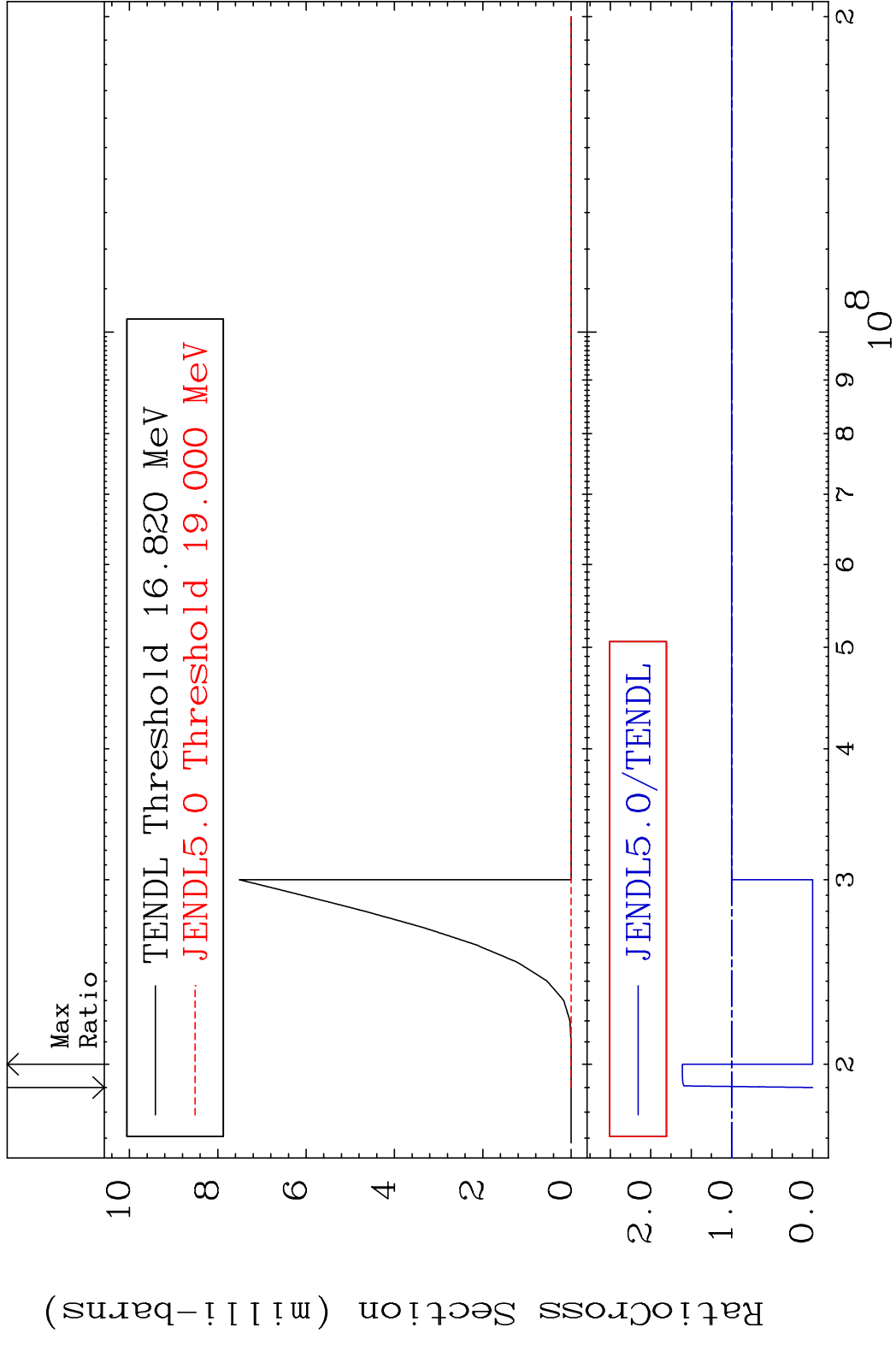
MAT 4449 Dpa inelastic (mt51-91) 44-Ru-104
 Cross Section -100.0 To 9999. %

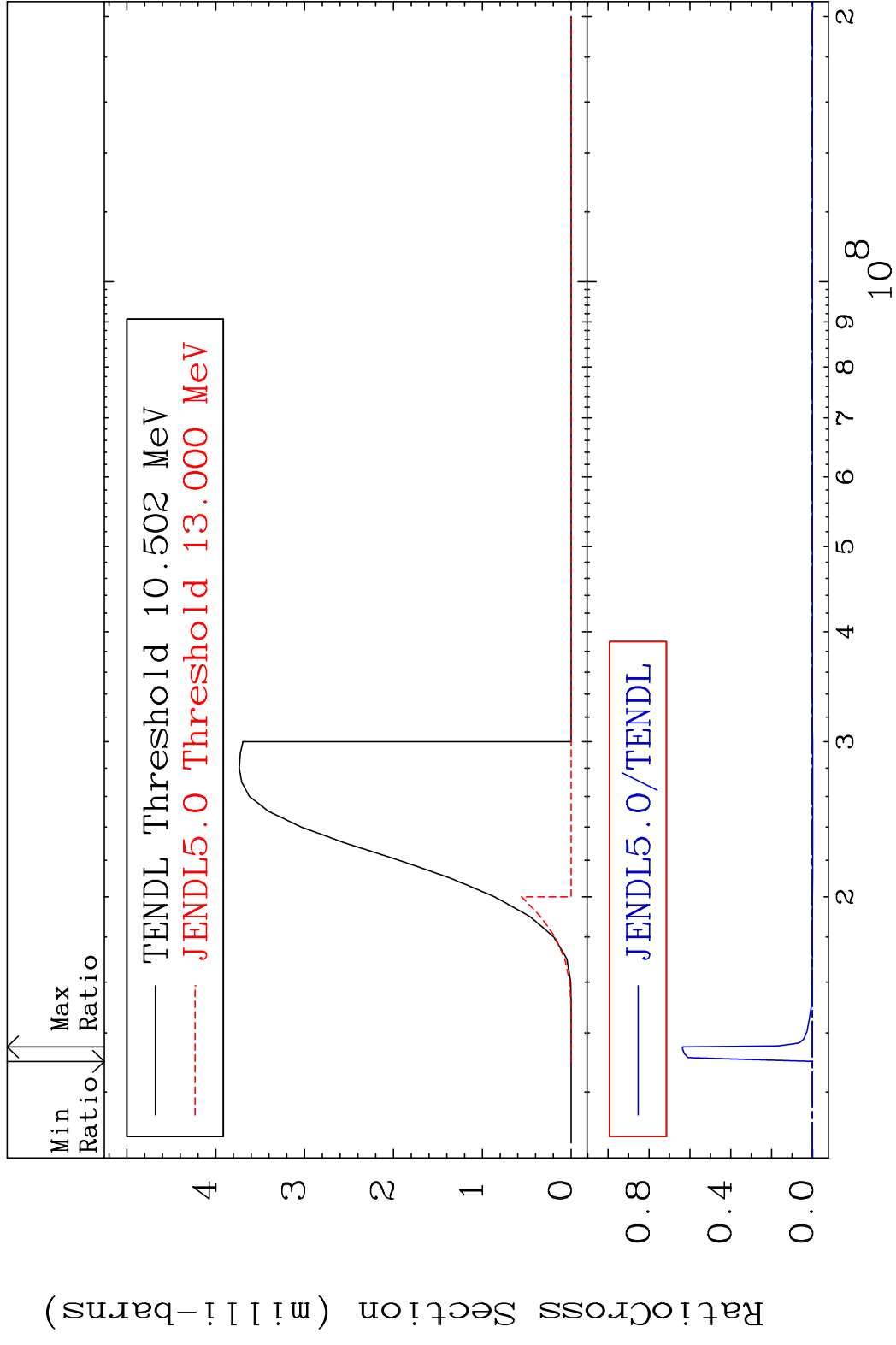


MAT 4449 Dpa disappearance (mt102 -120) 44-Ru-104
 Cross Section -100.0 To 9999. %



MAT 4449 (n, n') d:43-Tc-102g 44-Ru-104
 Radionuclide Production Cross Section Ratio 60.90 %



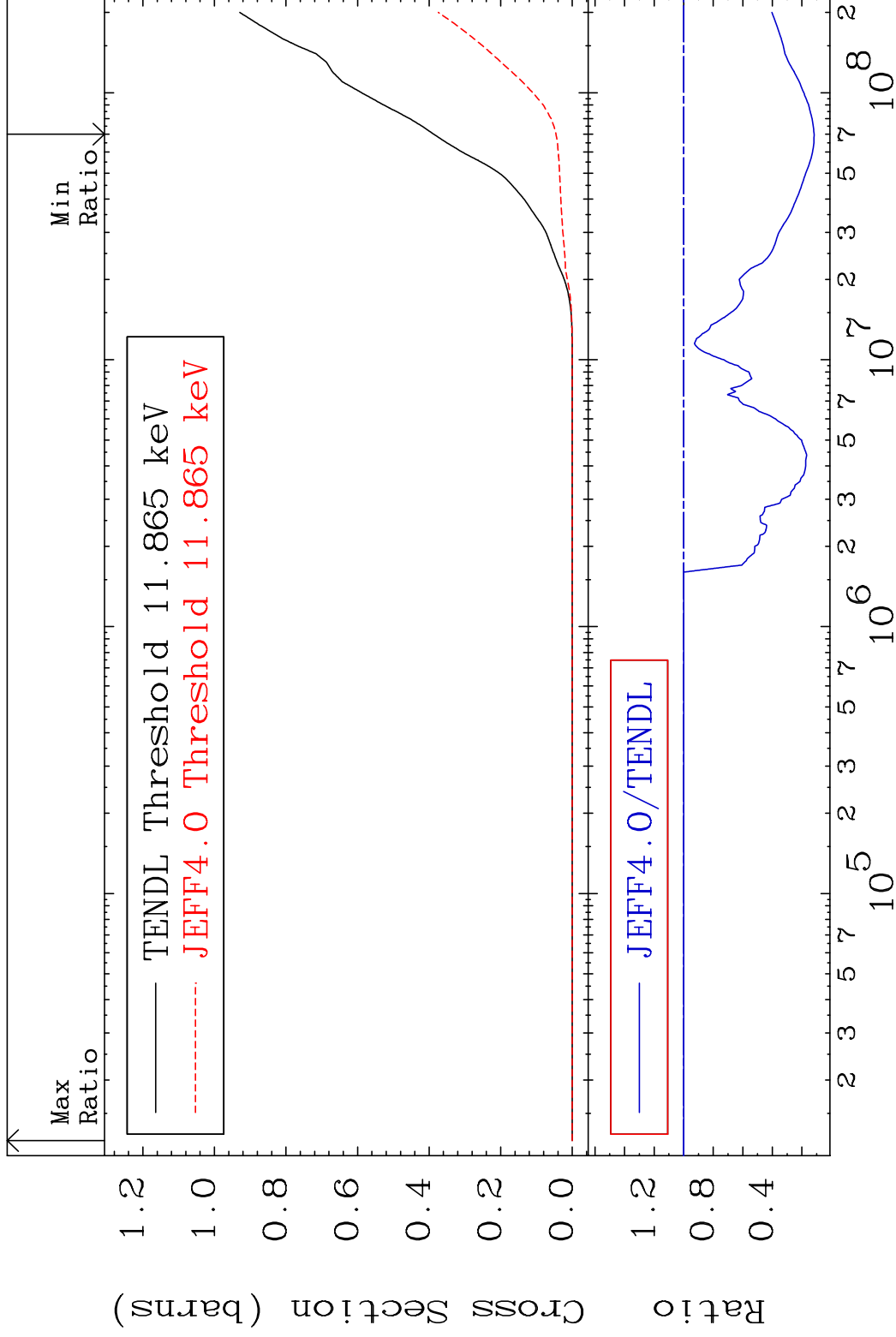


MAT 4449

He-4 Production

44-Ru-104

Cross Section -88.28 To 0.000 %



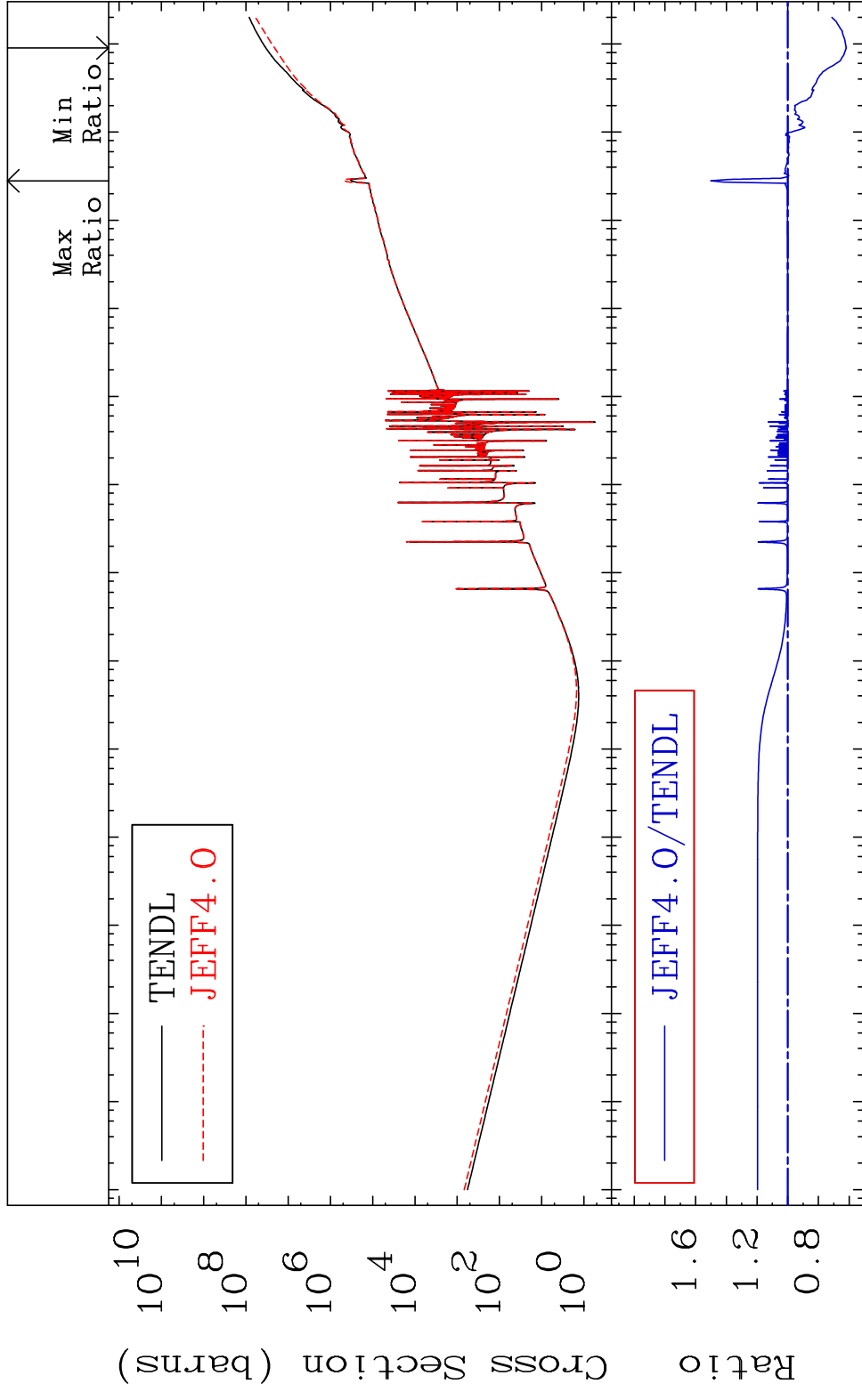
66

Incident Energy (eV)

44-Ru-104

MAT 4449

Kerma total (eV-barns) 44-Ru-104
Cross Section -38.18 To 50.16 %



67

Incident Energy (eV)

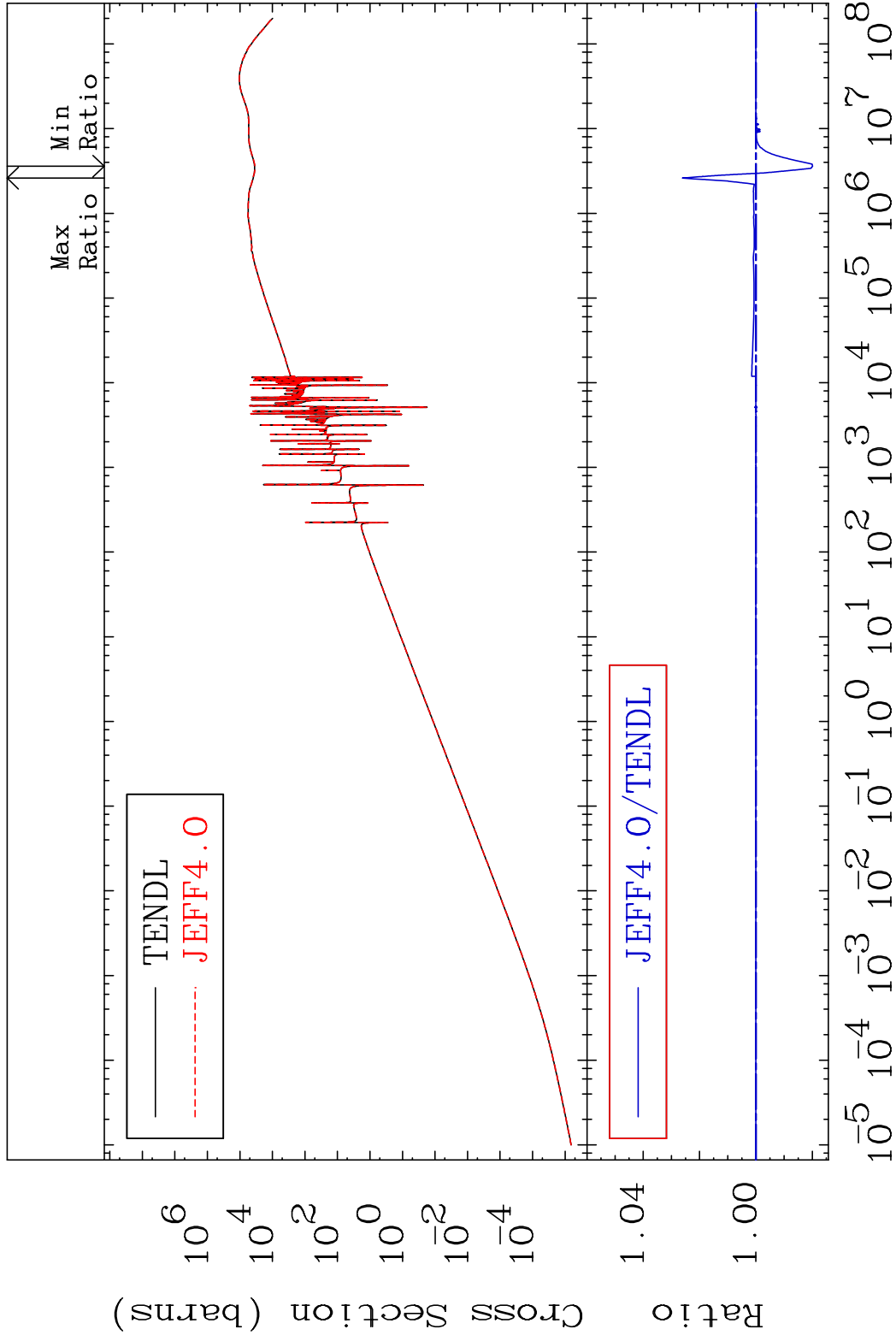
44-Ru-104

MAT 4449

Kerma elastic

44-Ru-104

Cross Section -2.010 To 2.611 %

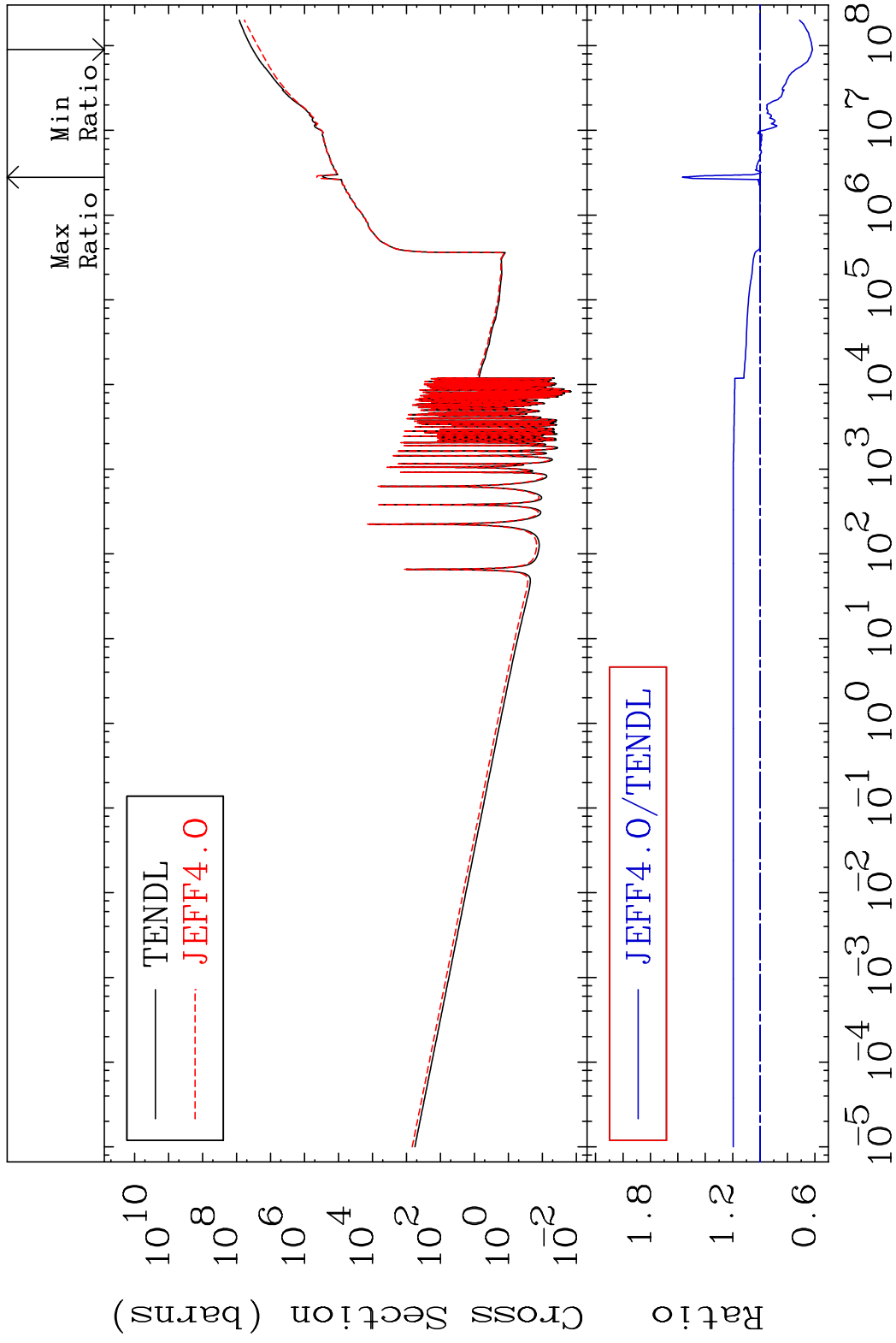


68

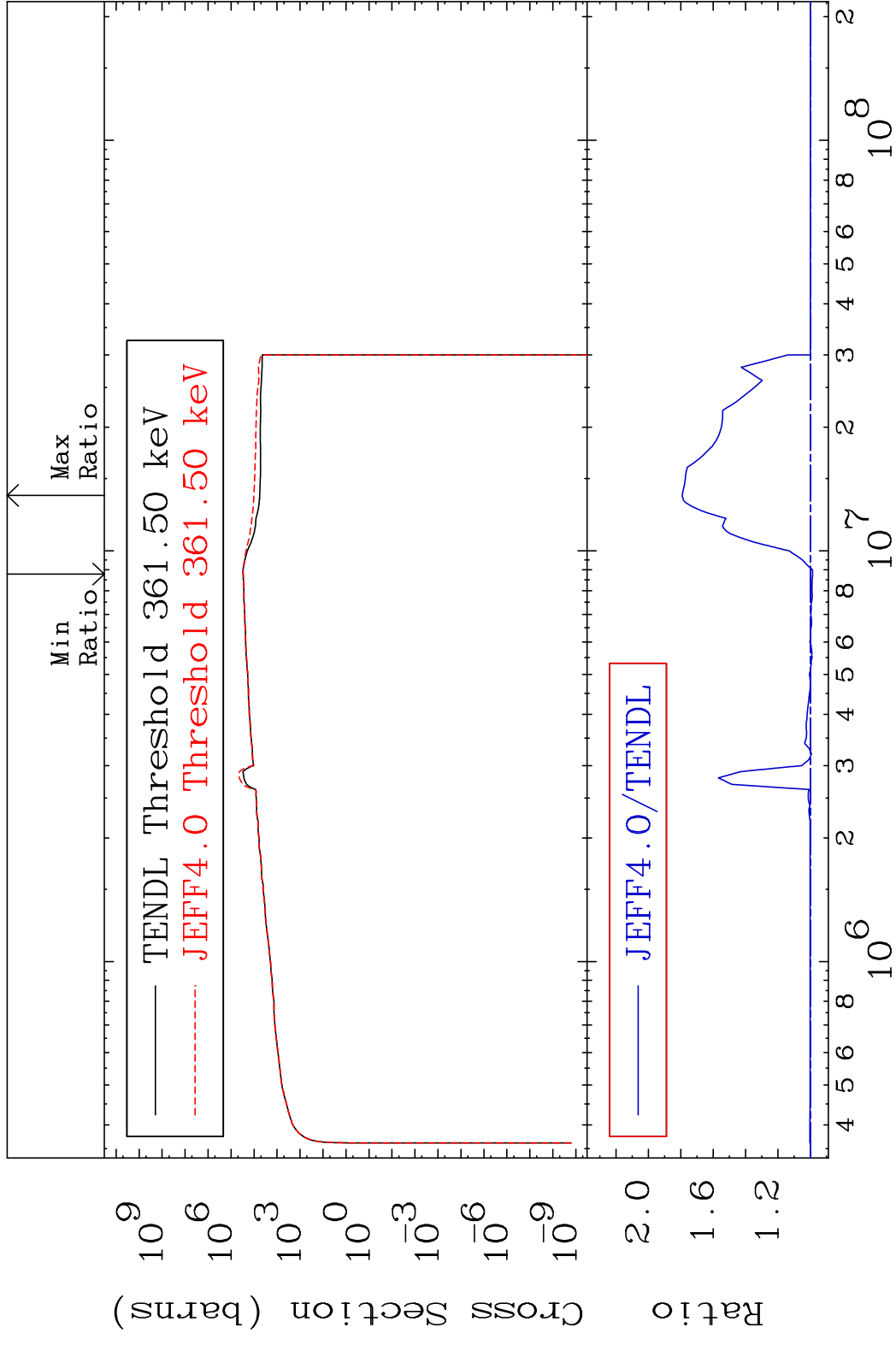
Incident Energy (eV)

44-Ru-104

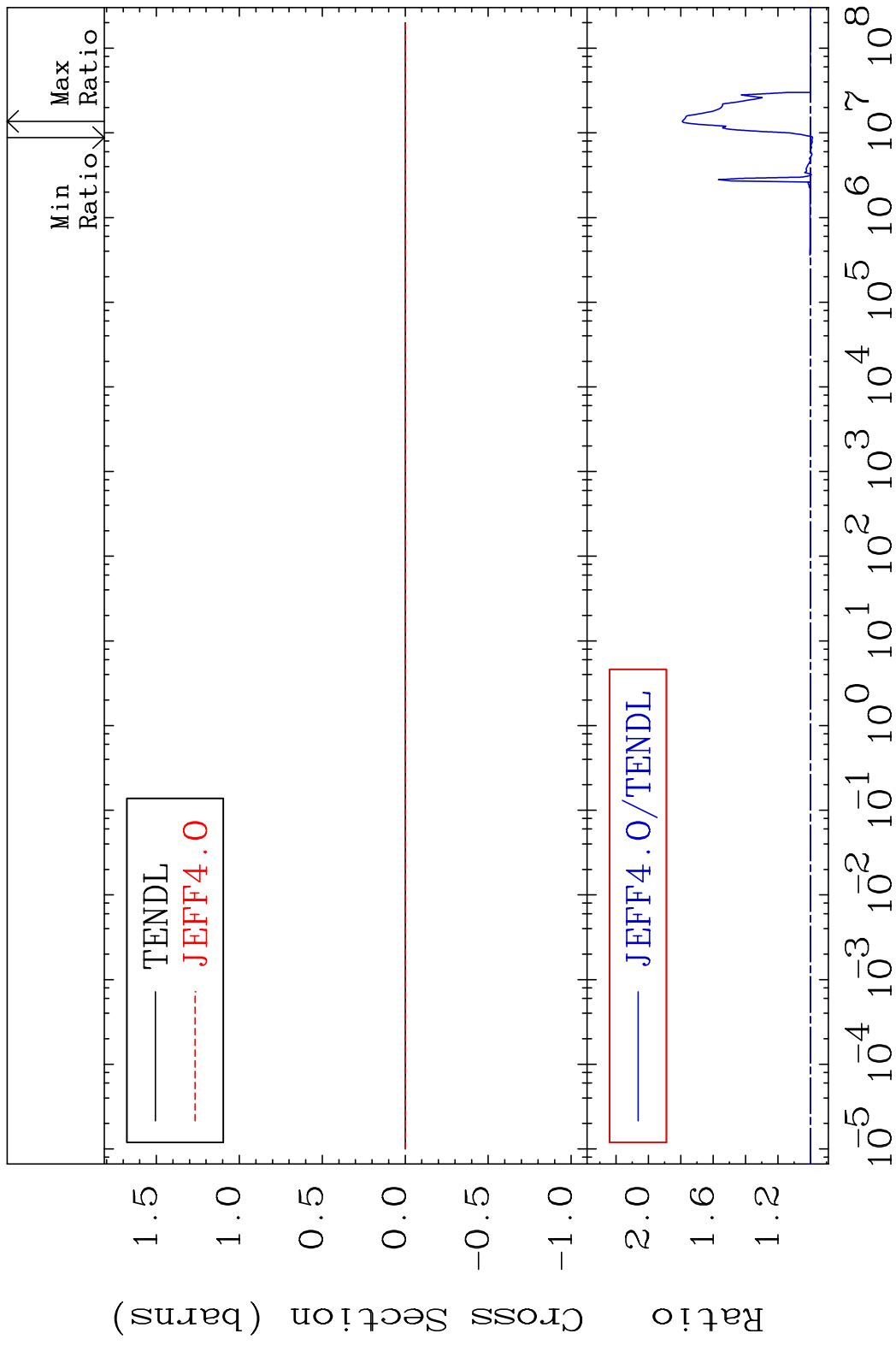
MAT 4449 Kerma non-elastic (all but mt2) 44-Ru-104
 Cross Section -38.24 To 56.73 %



MAT 4449 Kerma inelastic (mt51-91) 44-Ru-104
 Cross Section -1.341 To 79.05 %



MAT 4449 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-104
 Cross Section -1.341 To 79.05 %

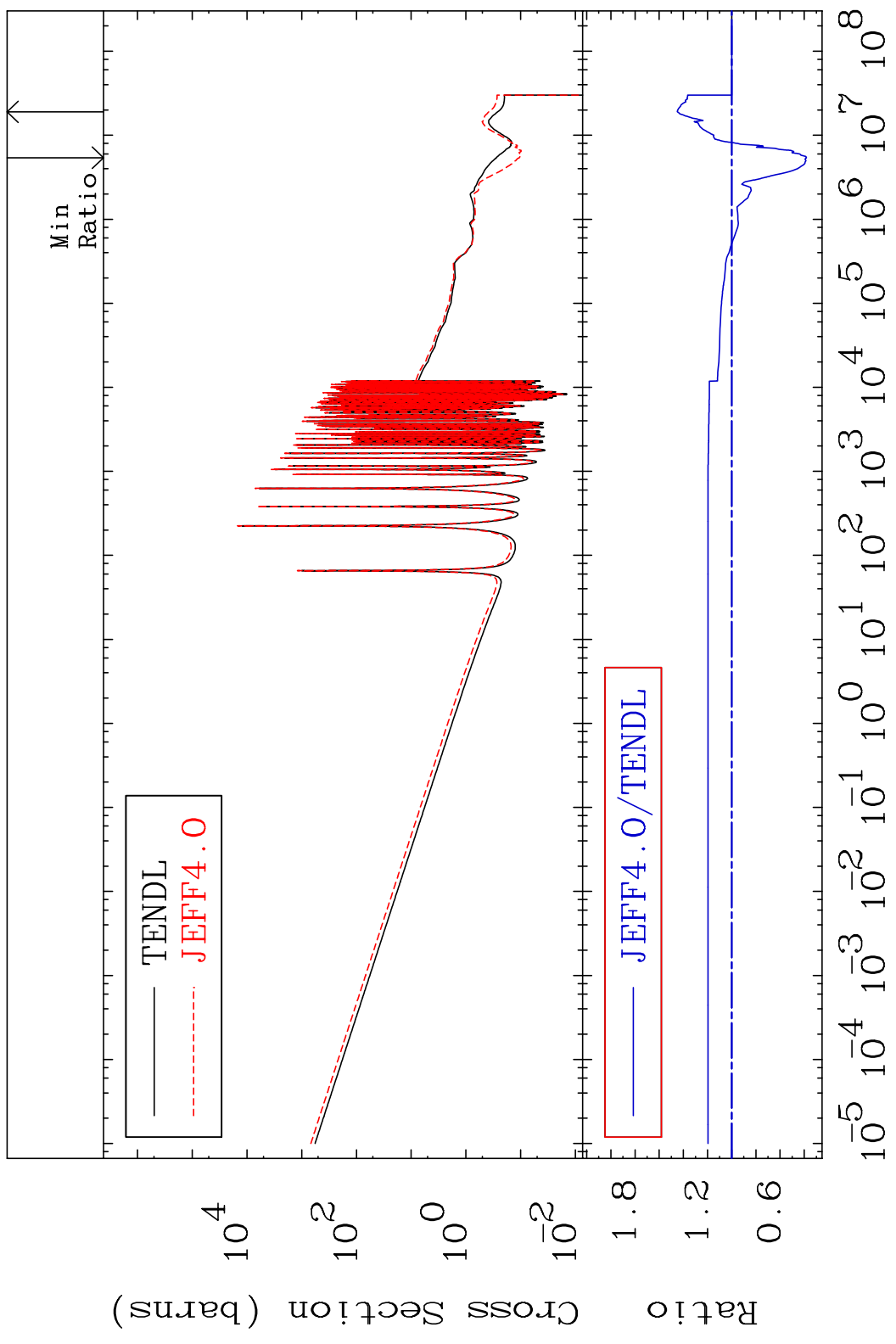


MAT 4449

Kerma capture (mt102)

44-Ru-104

Cross Section -61.78 To 45.13 %

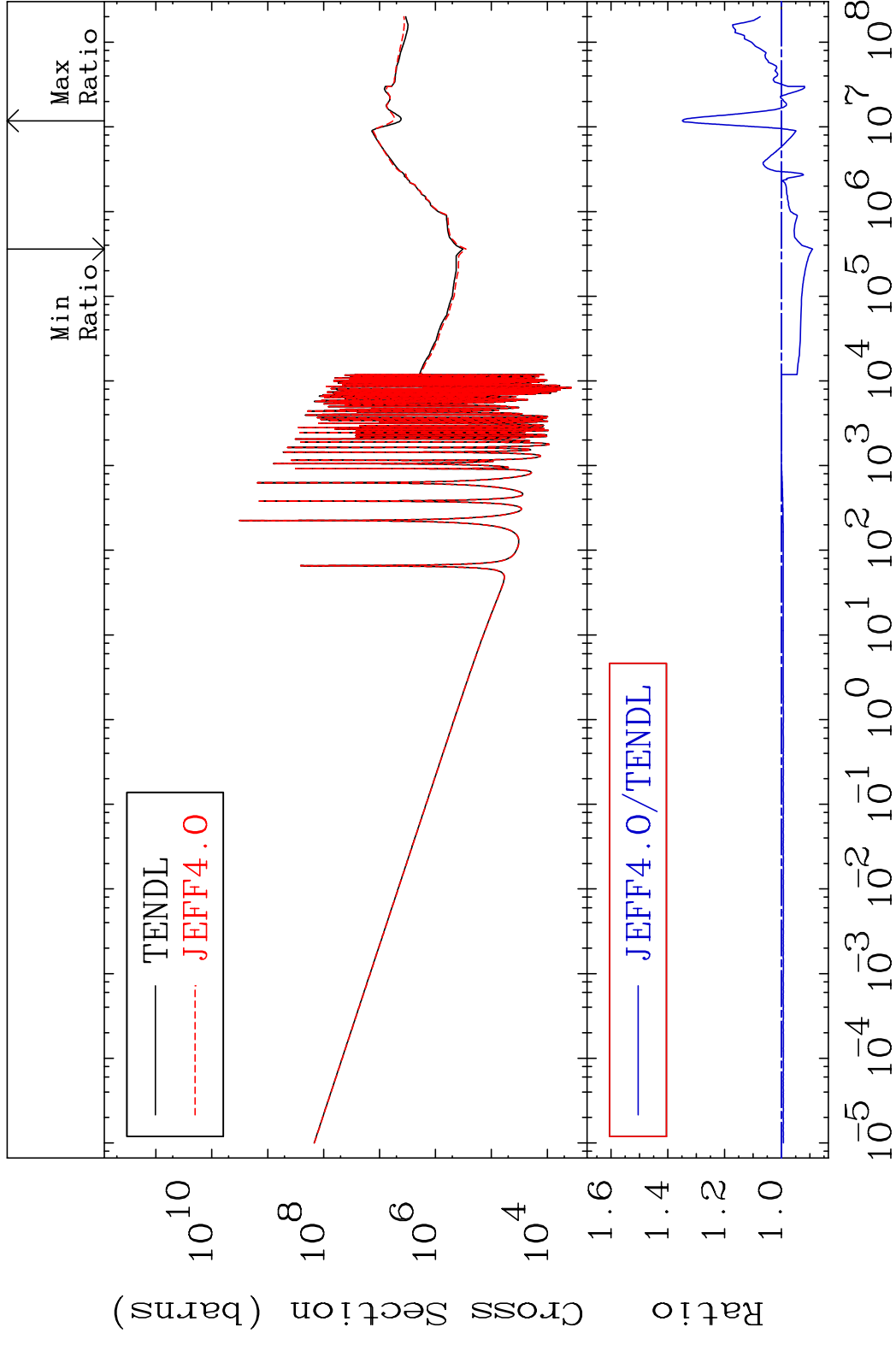


72

Incident Energy (eV)

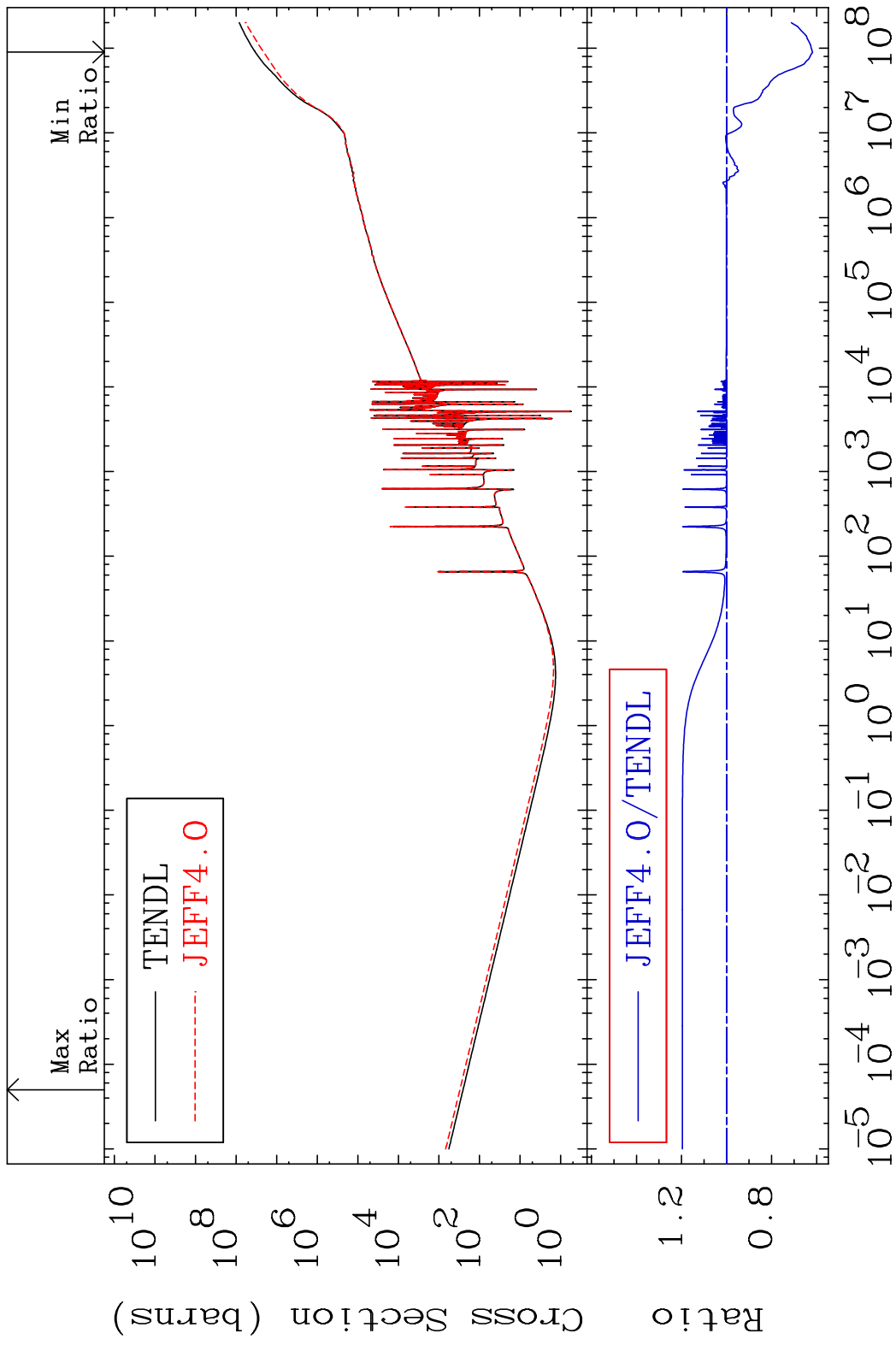
44-Ru-104

MAT 4449 Total photon (eV-barns) 44-Ru-104
 Cross Section -10.96 To 34.89 %



73 Incident Energy (eV) 44-Ru-104

MAT 4449 Total kinematic kerma (high limit) 44-Ru-104
 Cross Section -38.18 To 19.63 %

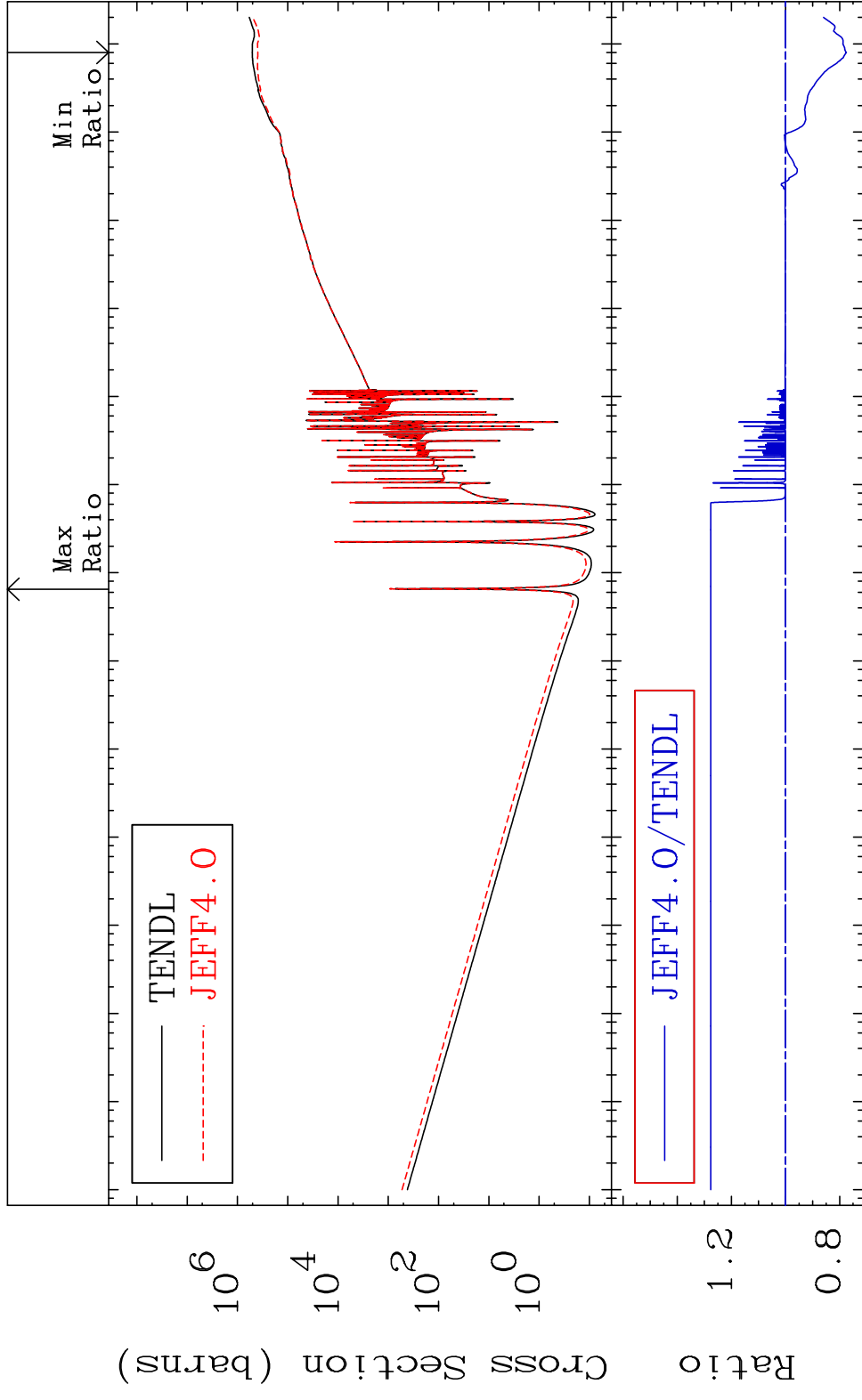


MAT 4449

Dpa total (eV-barns)

44-Ru-104

Cross Section -22.48 To 27.64 %



75

Incident Energy (eV)

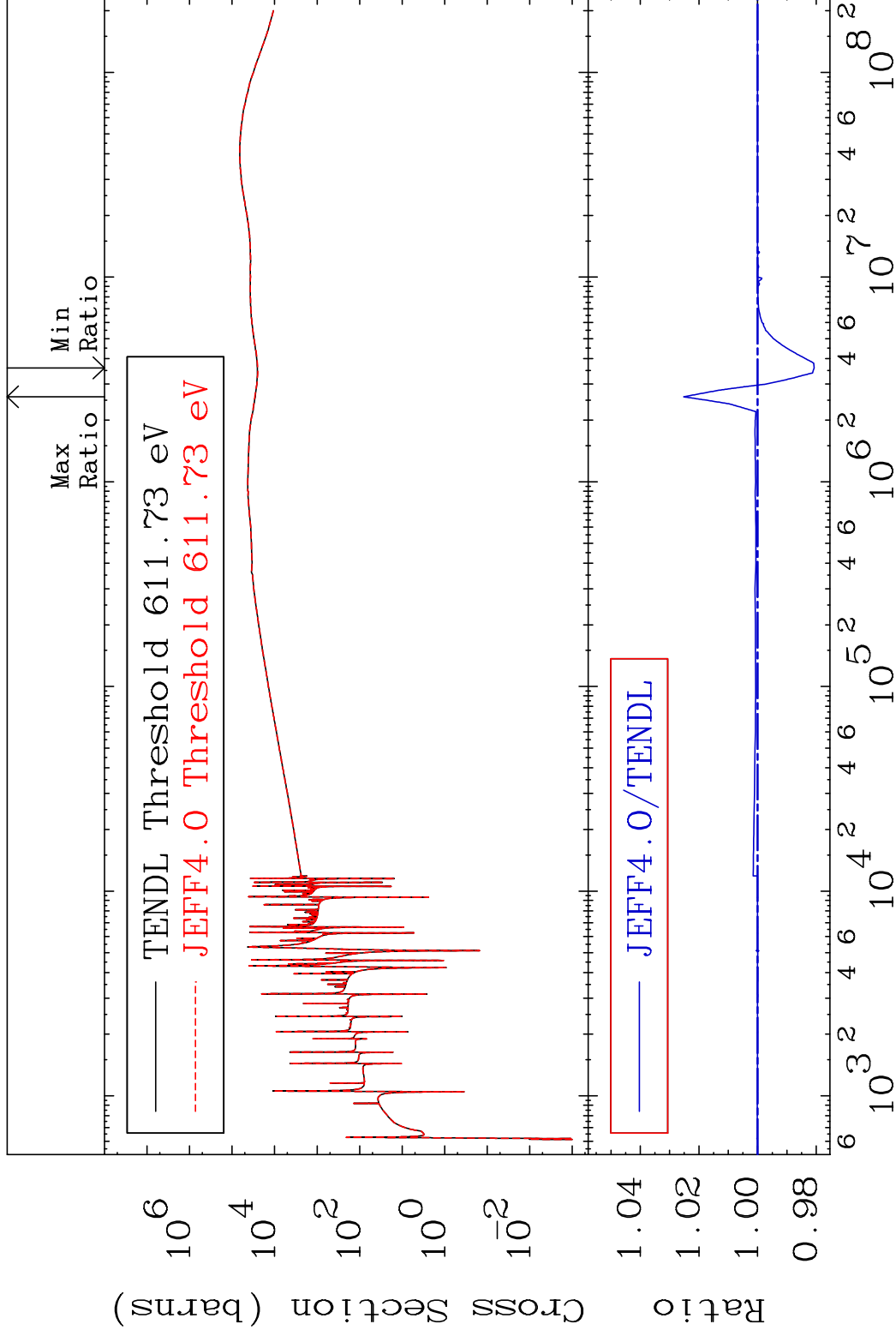
44-Ru-104

MAT 4449

Dpa elastic (mt2)

44-Ru-104

Cross Section -1.928 To 2.520 %

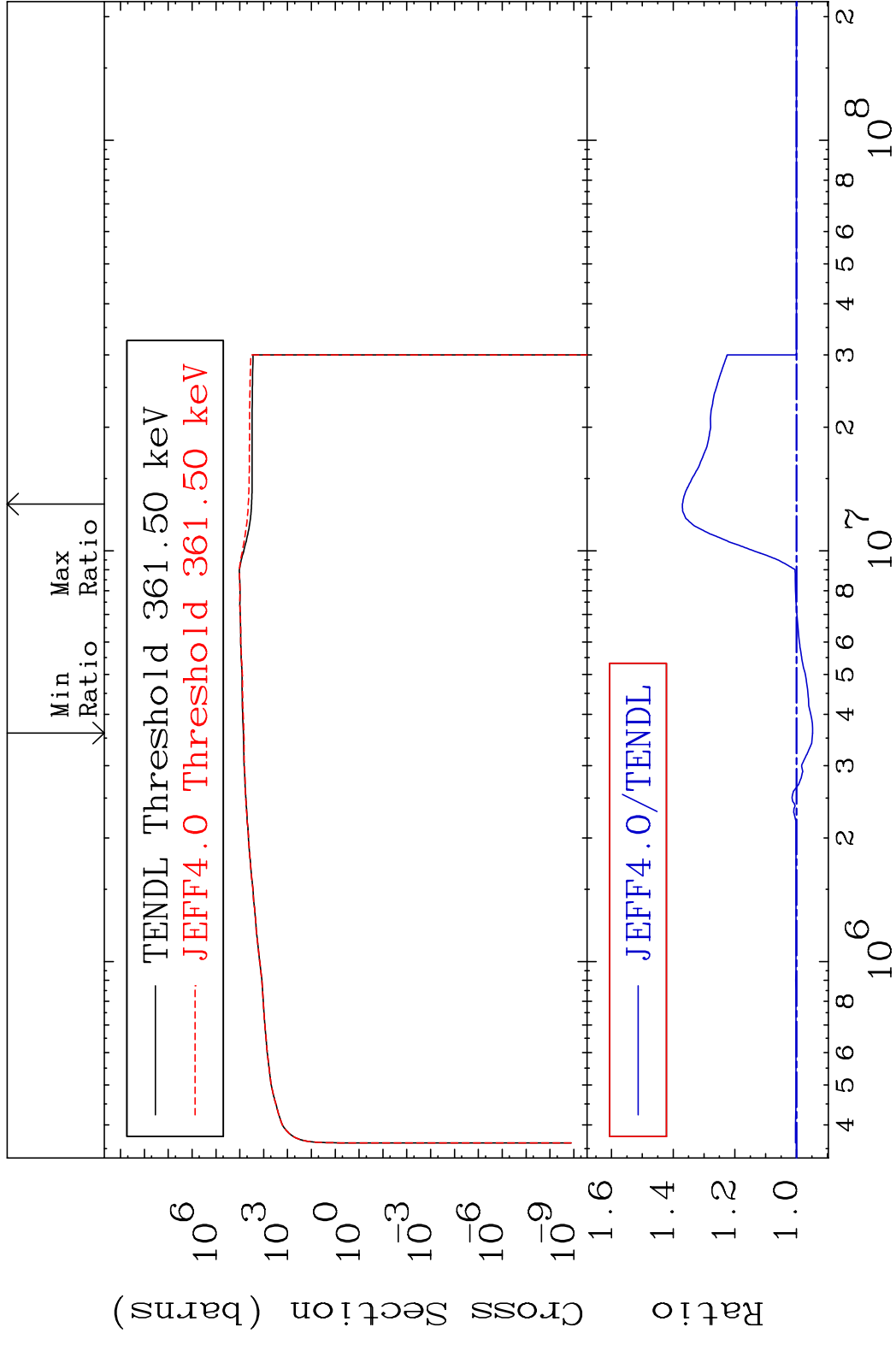


76

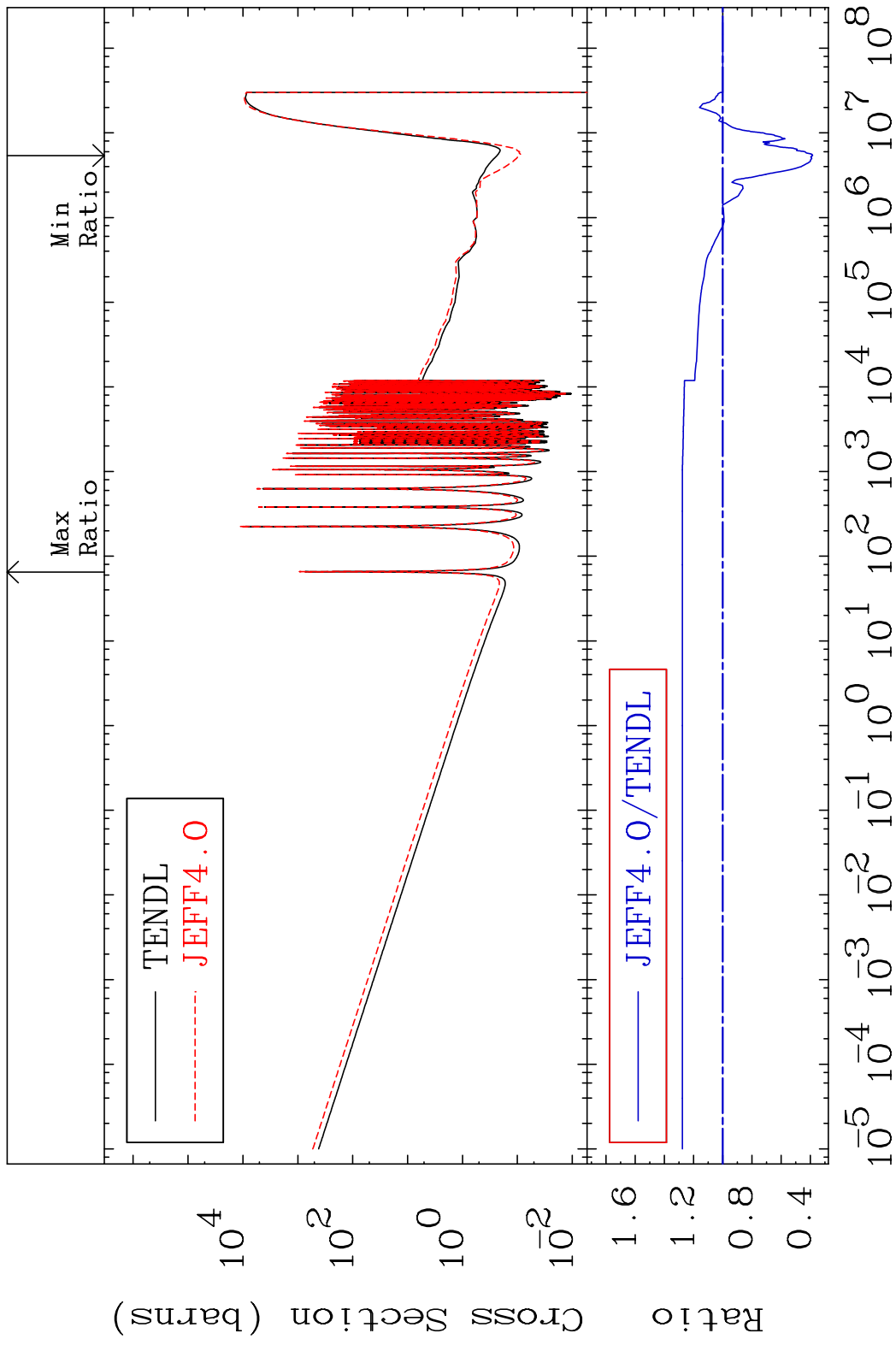
Incident Energy (eV)

44-Ru-104

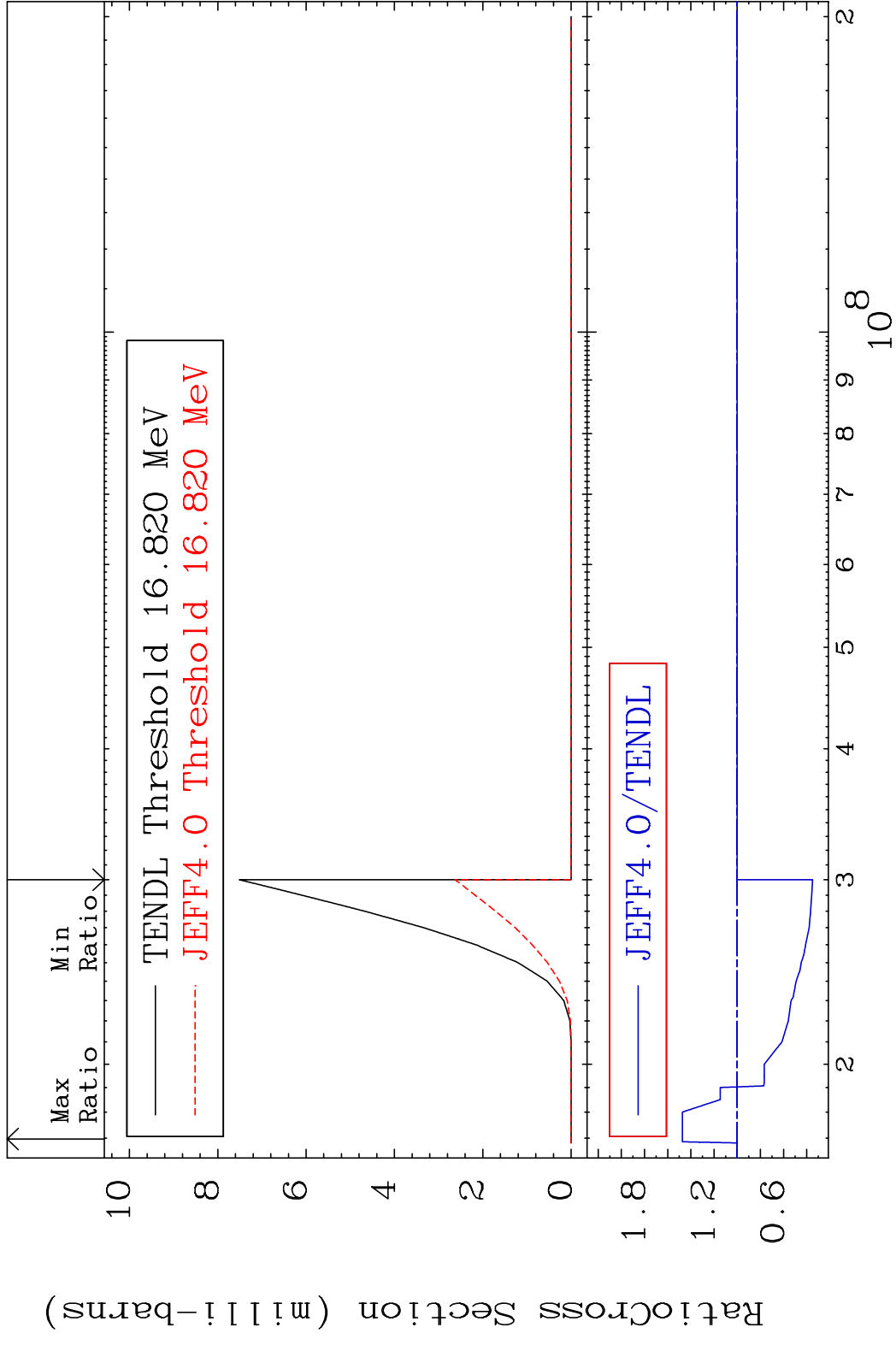
MAT 4449 Dpa inelastic (mt51-91) 44-Ru-104
 Cross Section -5.201 To 37.02 %



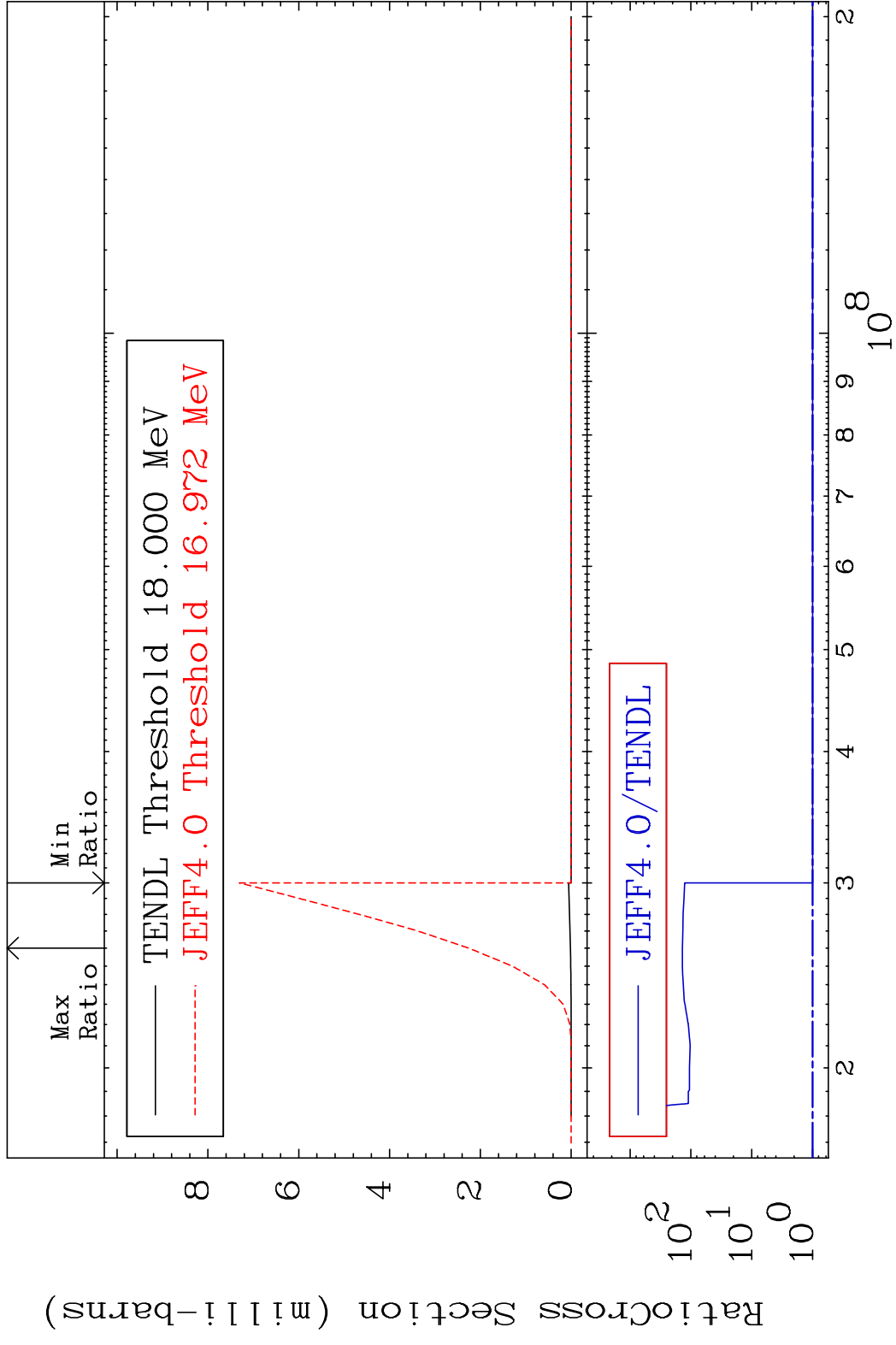
MAT 4449 Dpa disappearance (mt102 -120) 44-Ru-104
 Cross Section -61.51 To 27.64 %

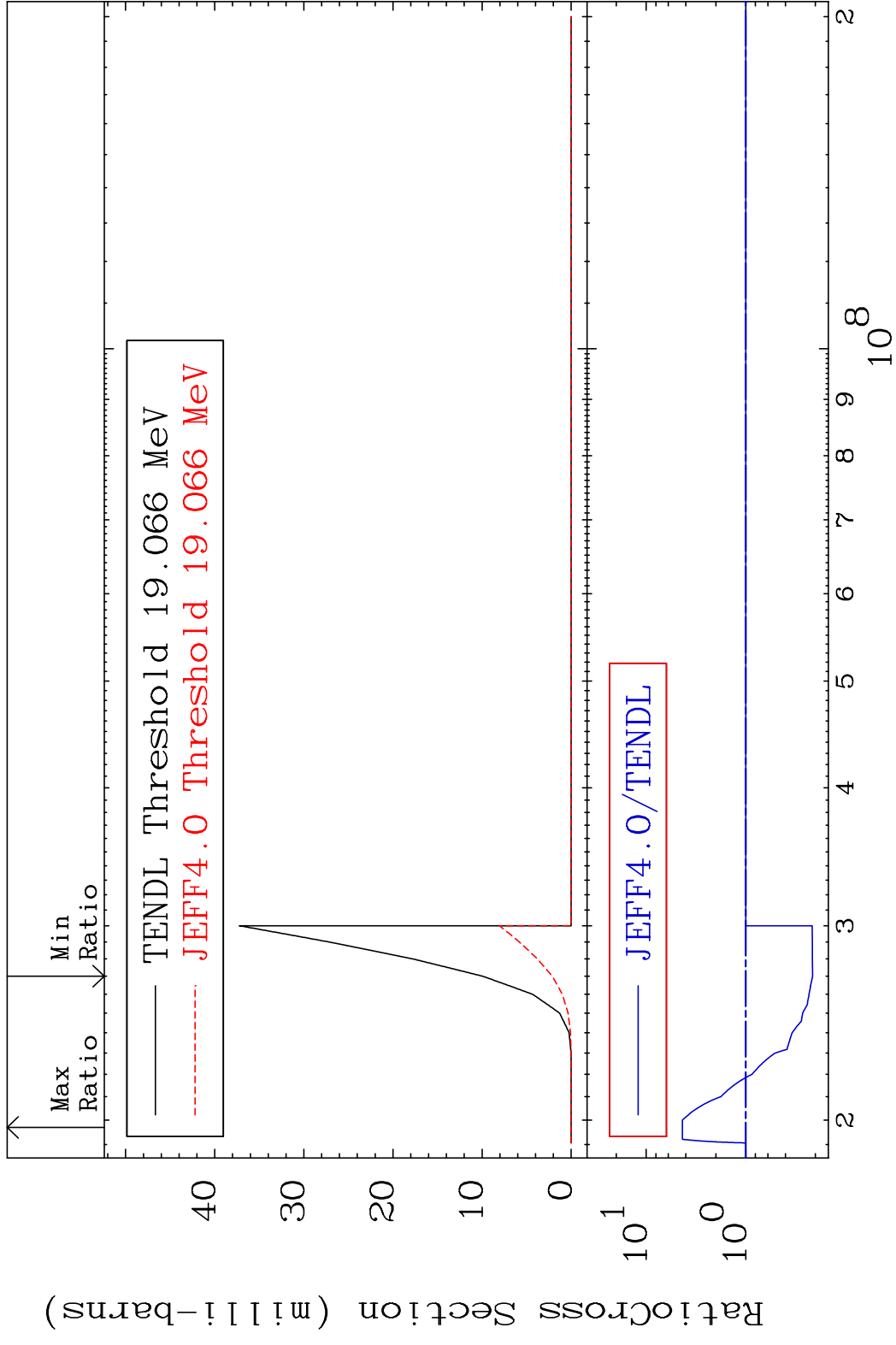


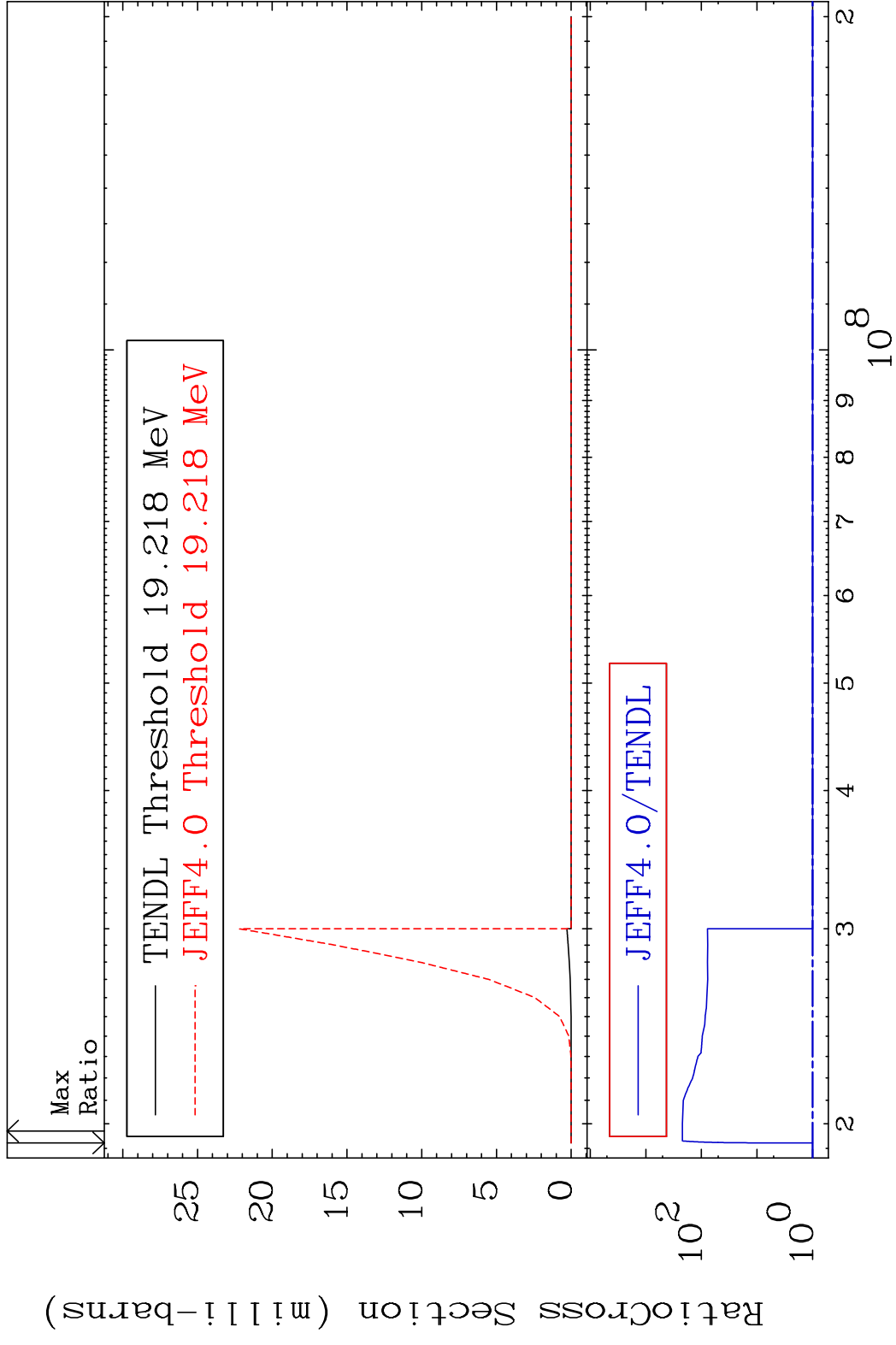
MAT 4449 (n, n') d:43-Tc-102g 44-Ru-104
 Radionuclide Production Cross Section 47.35 %

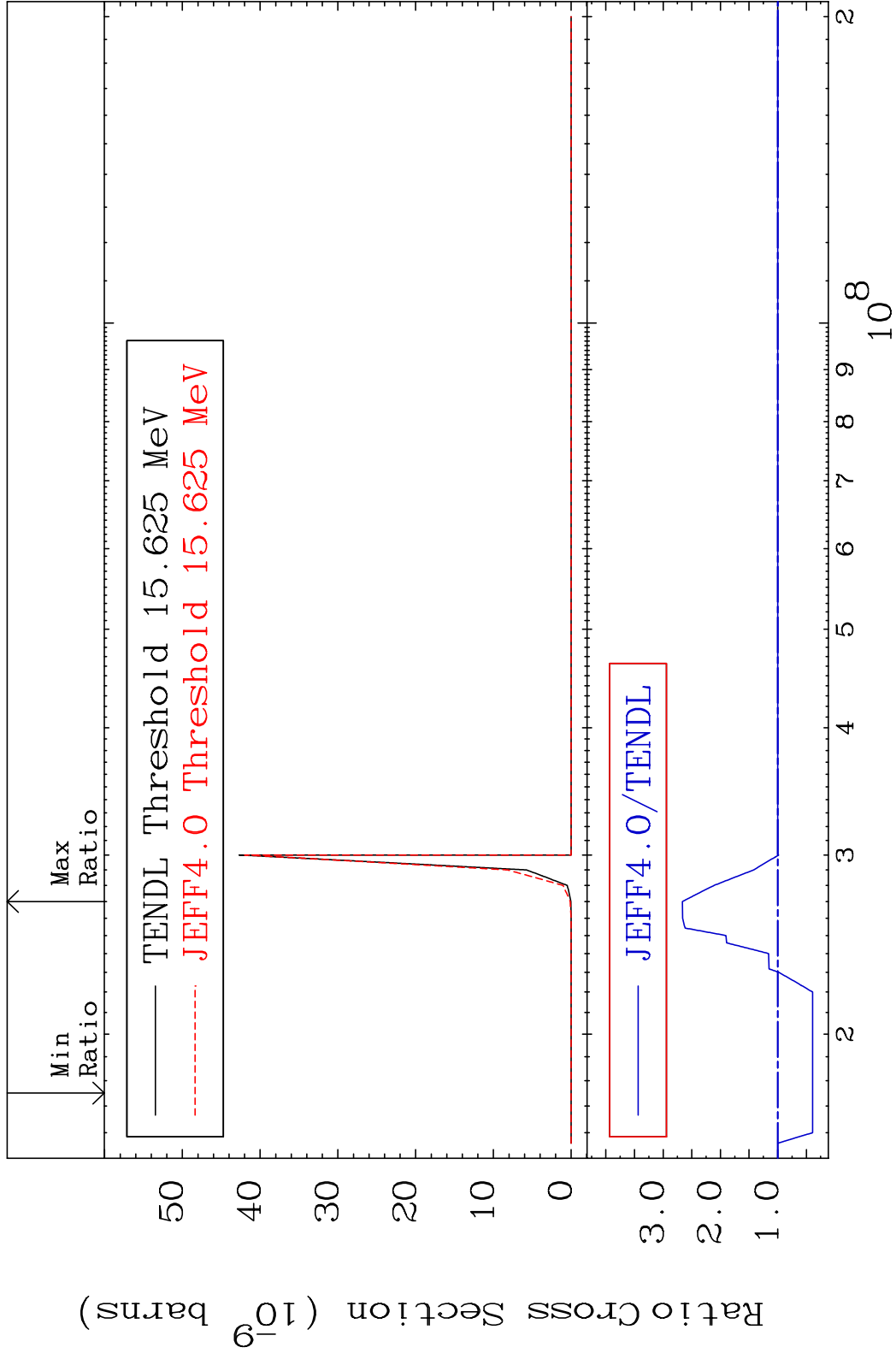


MAT 4449 (n, n') d:43-Tc-102m3 44-Ru-104
 Radionuclide Production Cross Section, %

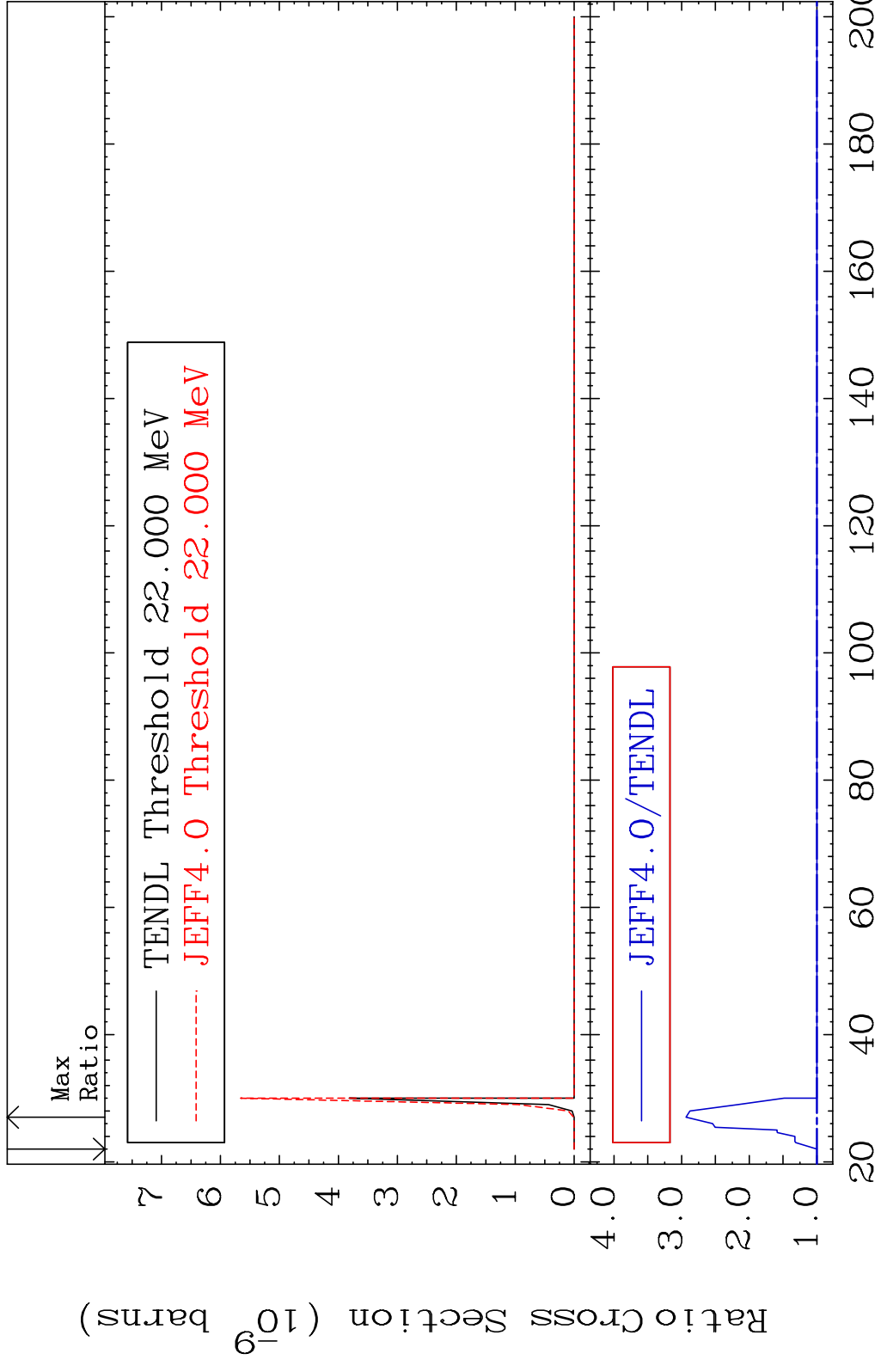




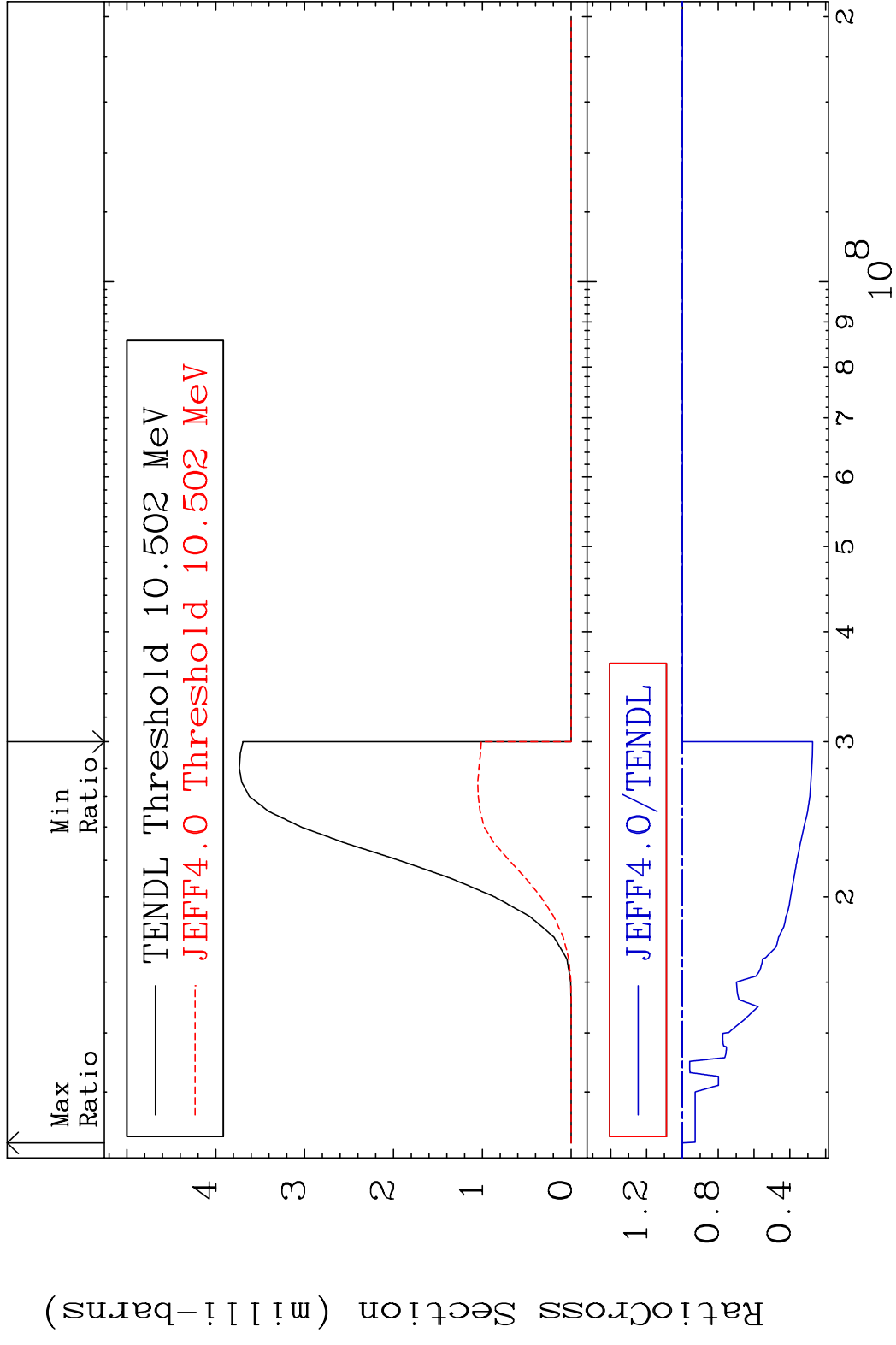


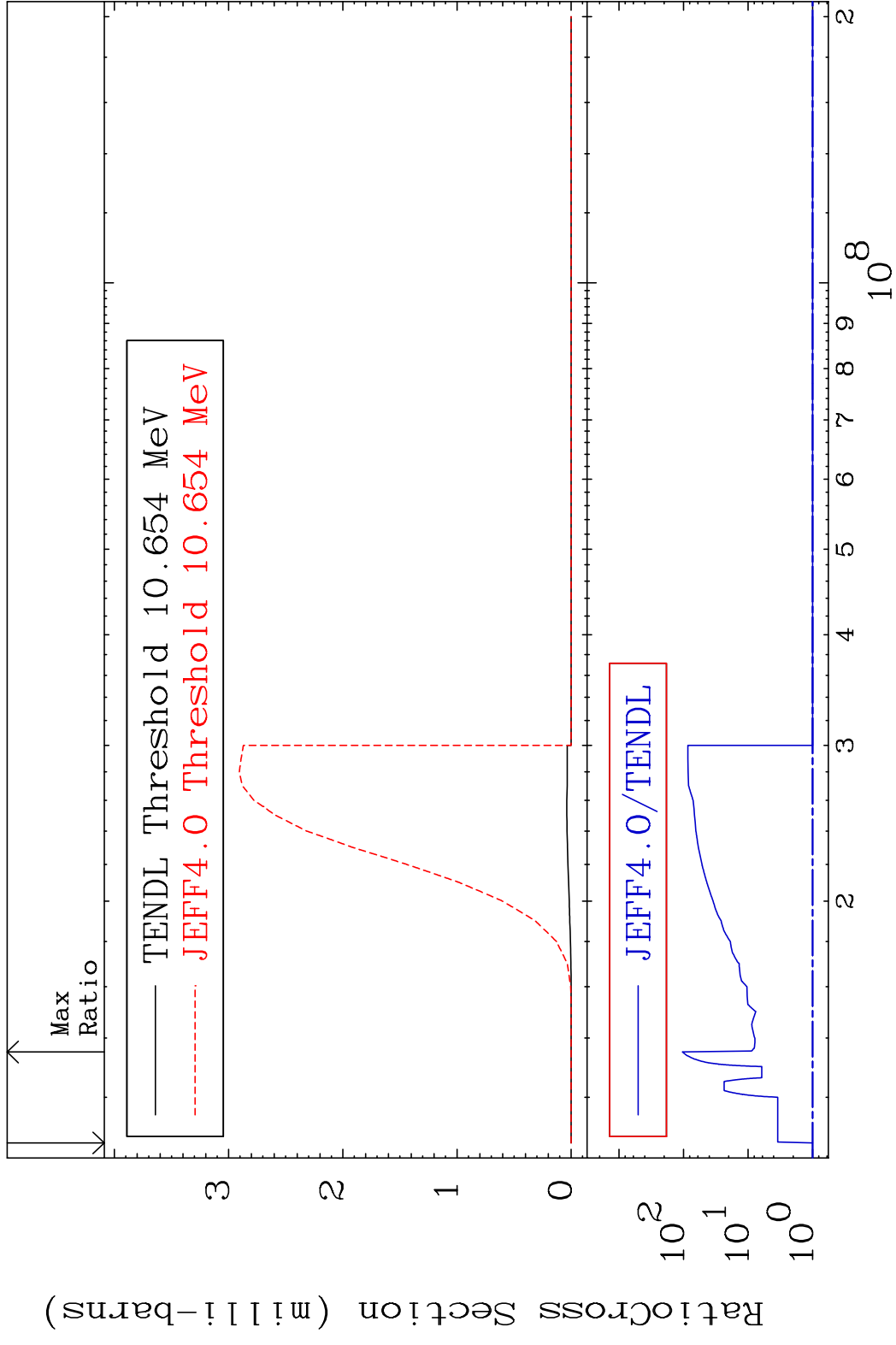


MAT 4449 (n, n') p α : 41-Nb-99m1 44-Ru-104
 Radionuclide Production Cross Section 193.5 %

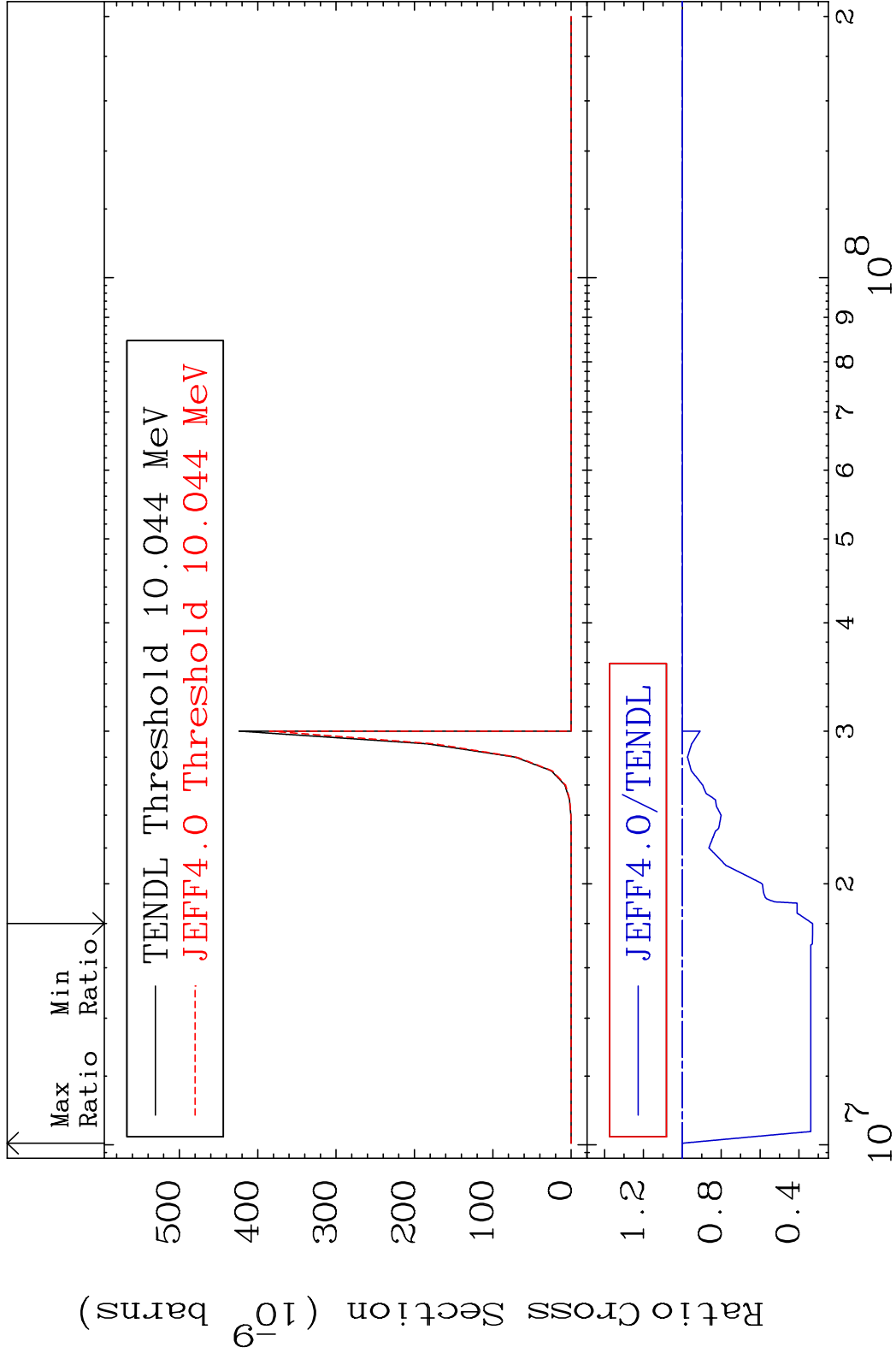


MAT 4449 (n,t):43-Tc-102g 44-Ru-104
 Radionuclide Production Cross Section 726610 0.000 %





MAT 4449 (n,p) α :41-Nb-100g 44-Ru-104
 Radionuclide Production Cross Section 0.000 %



MAT 4449 (n, p) α : 41-Nb-100m4 44-Ru-104
 Radionuclide Production Cross Section 180.01 dth 17.20 %

