

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

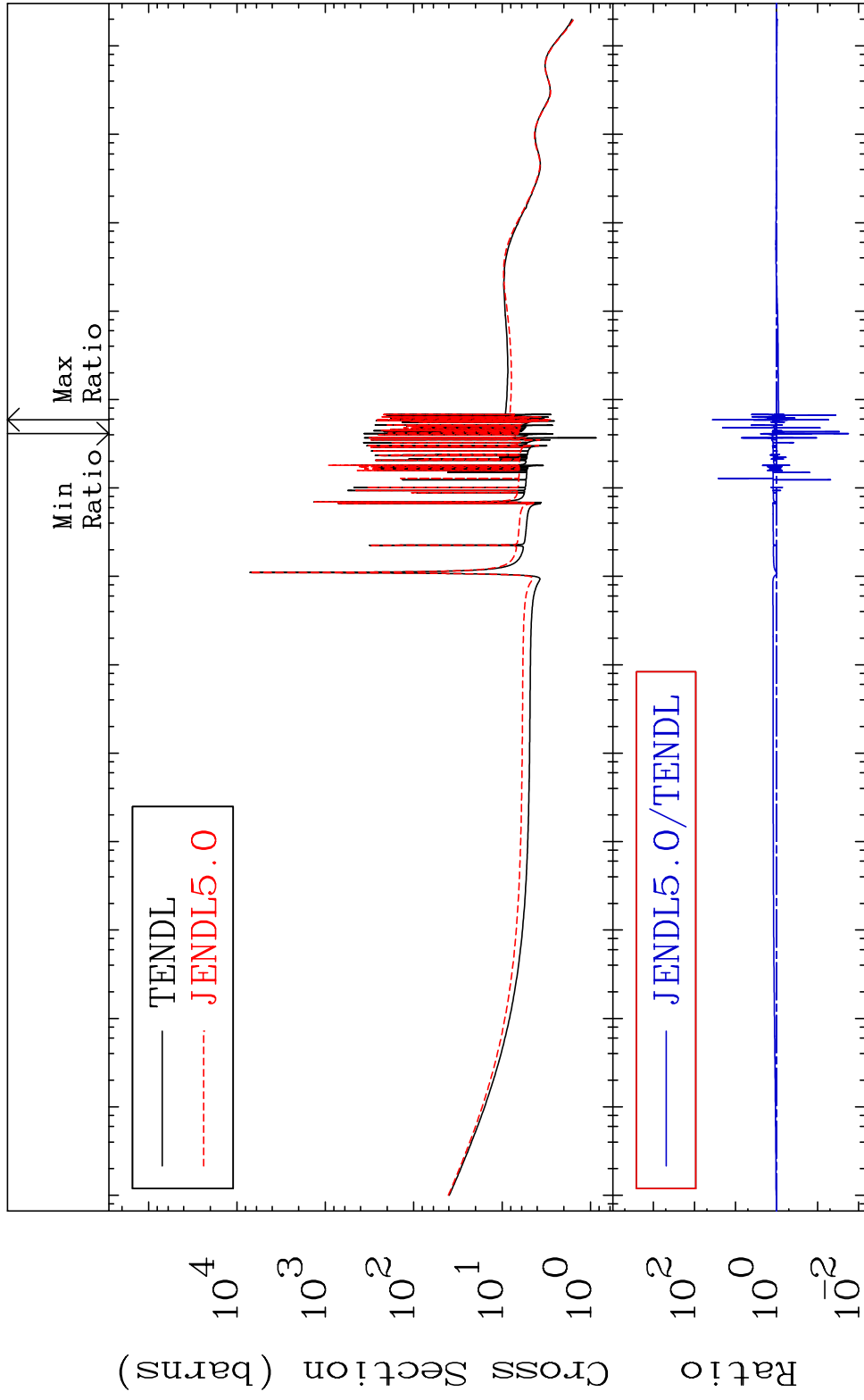
Press Mouse Button to Start

MAT 4034

Total

40-Zr-93

Cross Section -98.21 To 3565. %



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

1

Incident Energy (eV)

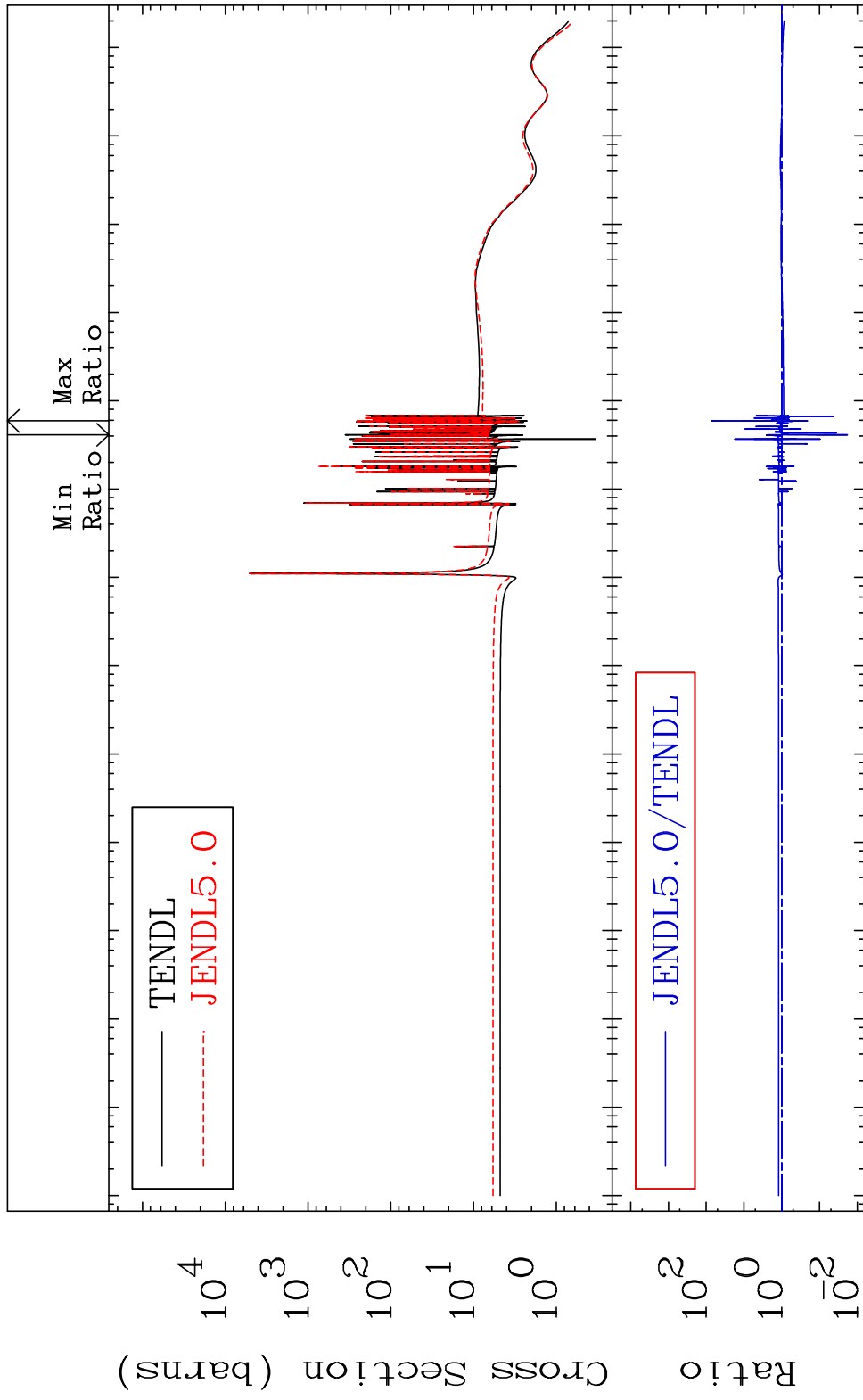
40-Zr-93

MAT 4034

Elastic

40-Zr-93

Cross Section -98.16 To 7123. %

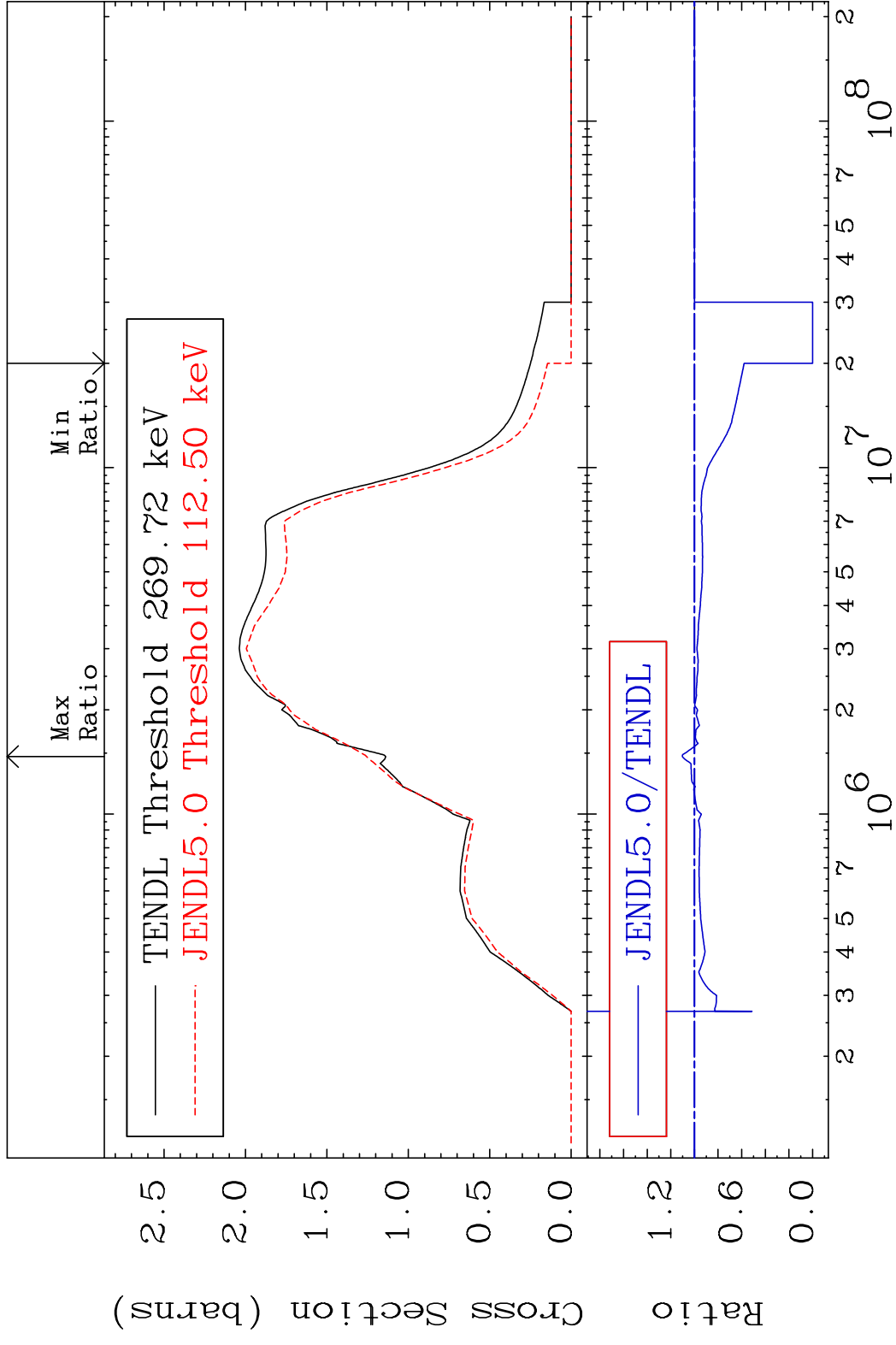


2

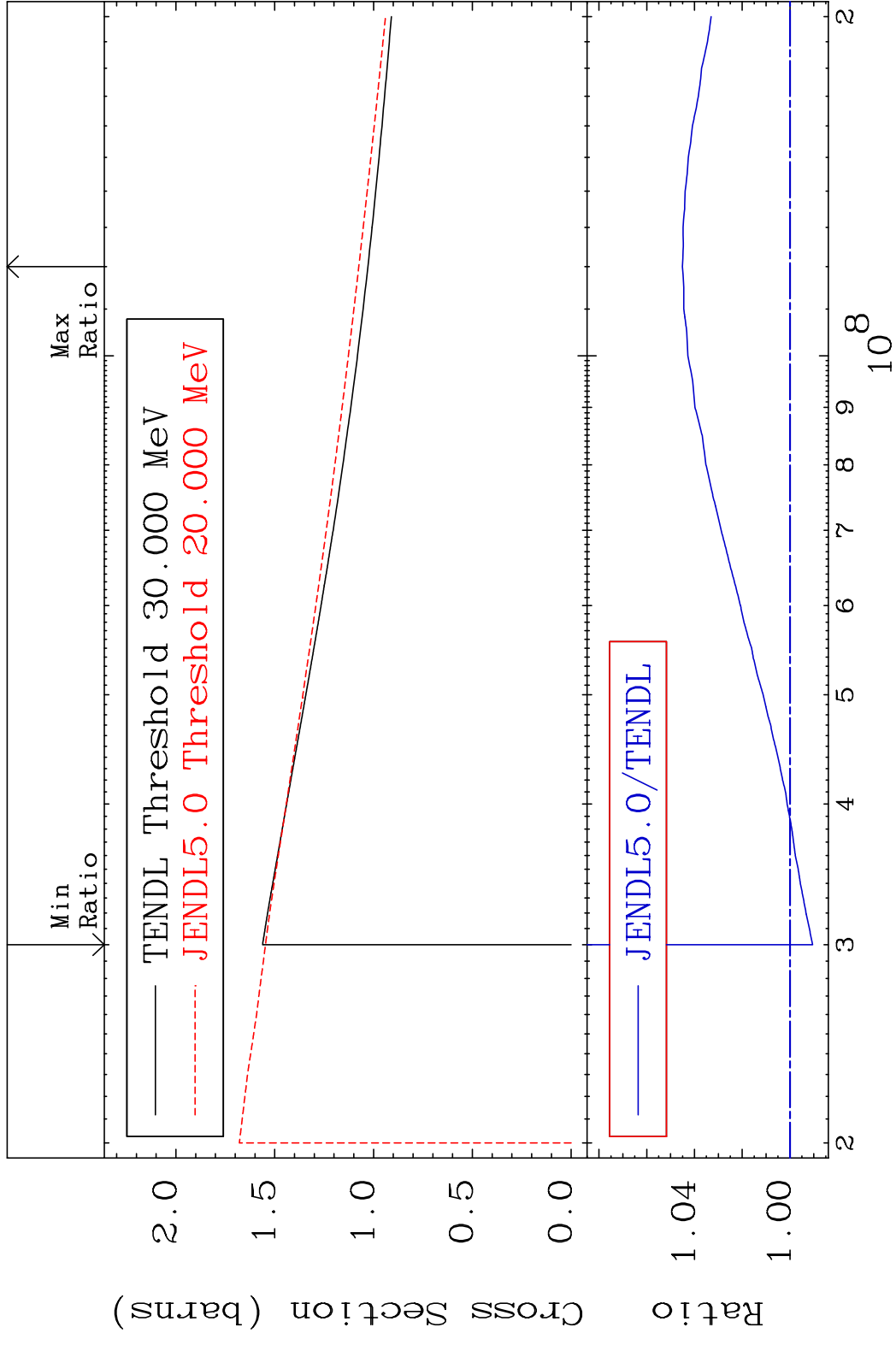
Incident Energy (eV)

40-Zr-93

MAT 4034 Inelastic Cross Section -100.0 To 10.23 % 40-Zr-93

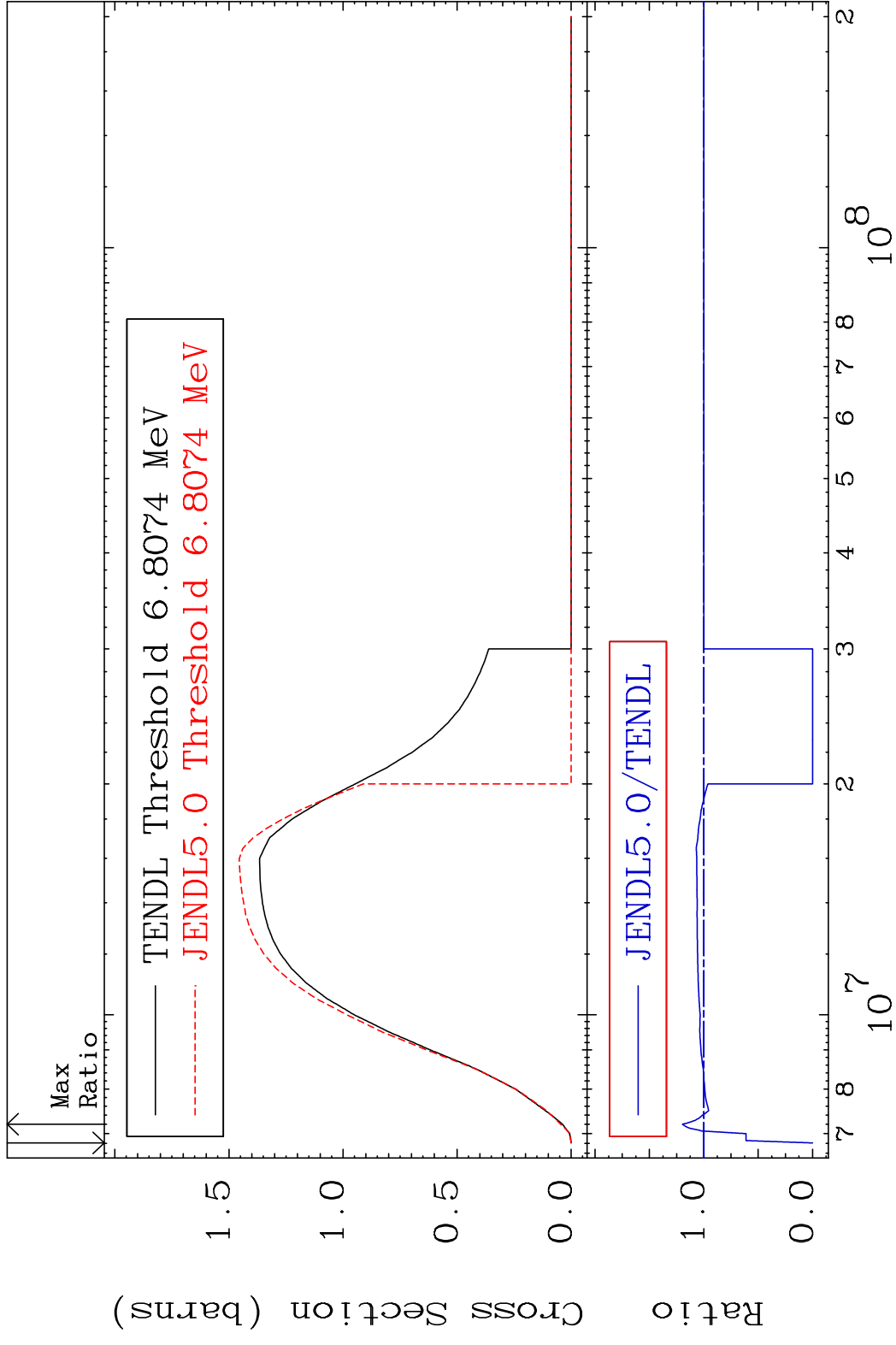


MAT 4034 (n, remainder) 40-Zr-93
 Cross Section -0.947 To 4.508 %



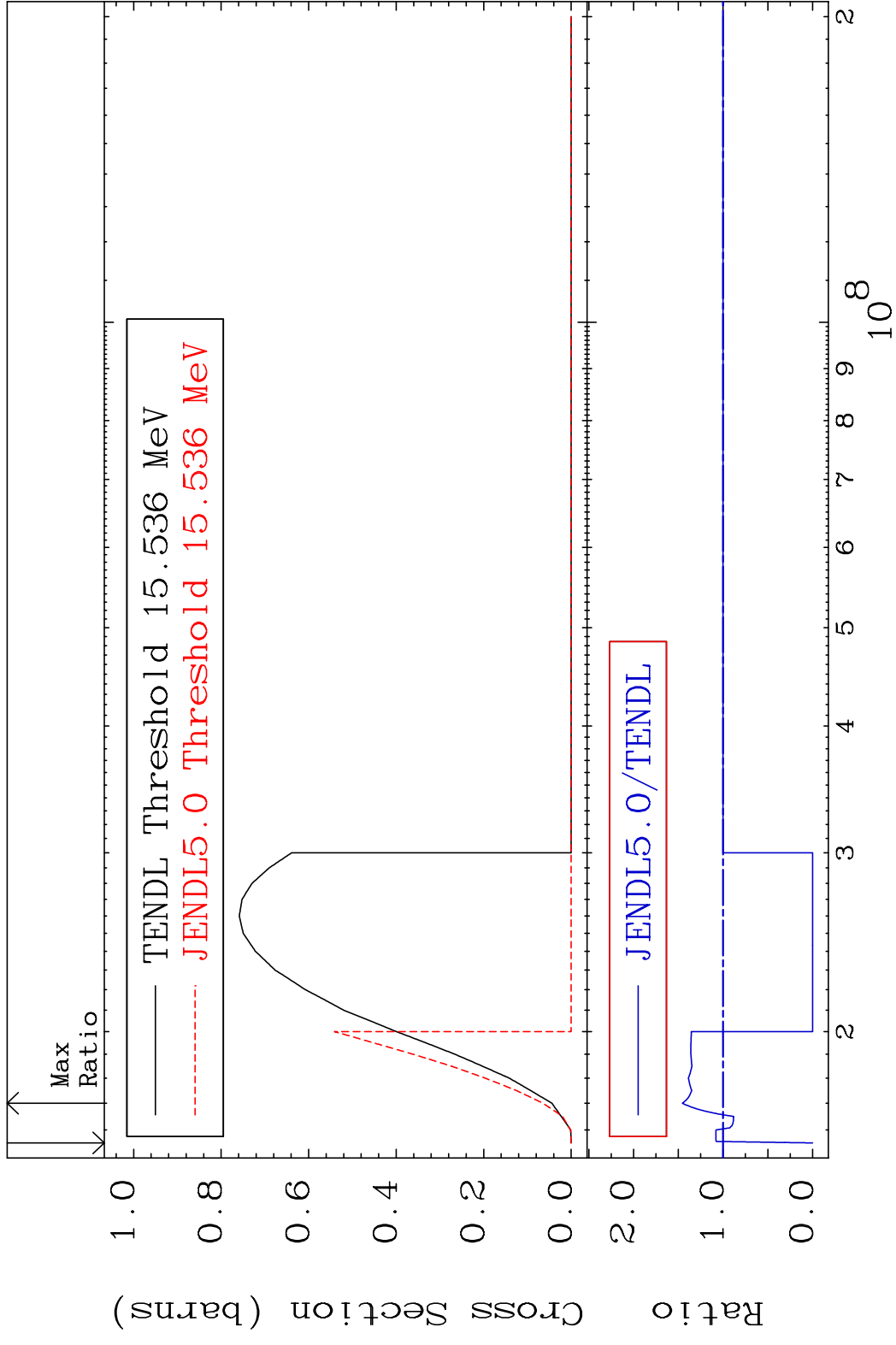
4 Incident Energy (eV) 40-Zr-93

MAT 4034 (n,2n) 40-Zr-93
 Cross Section -100.0 To 19.72 %

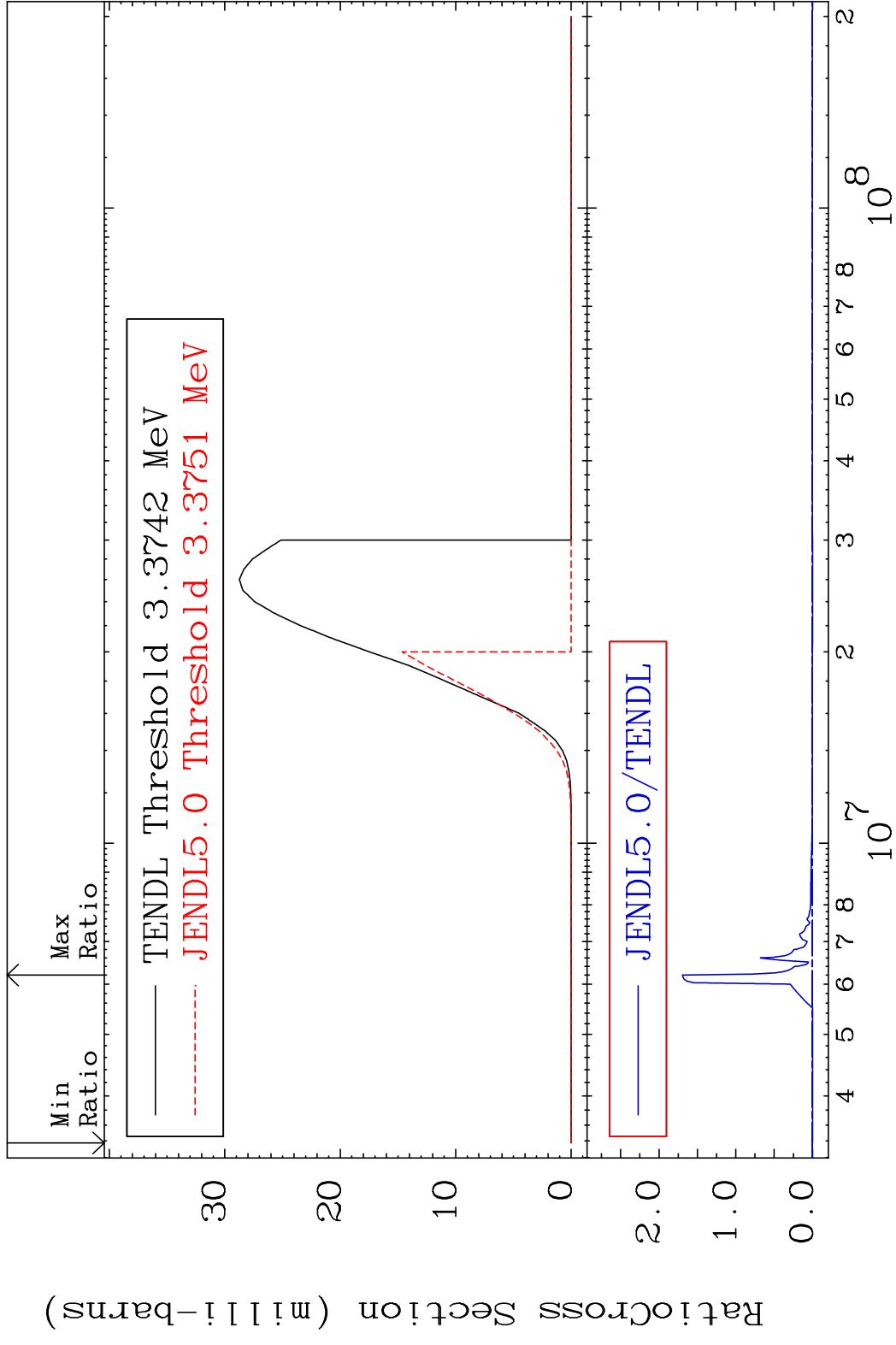


5 7 8 10 2 40-Zr-93

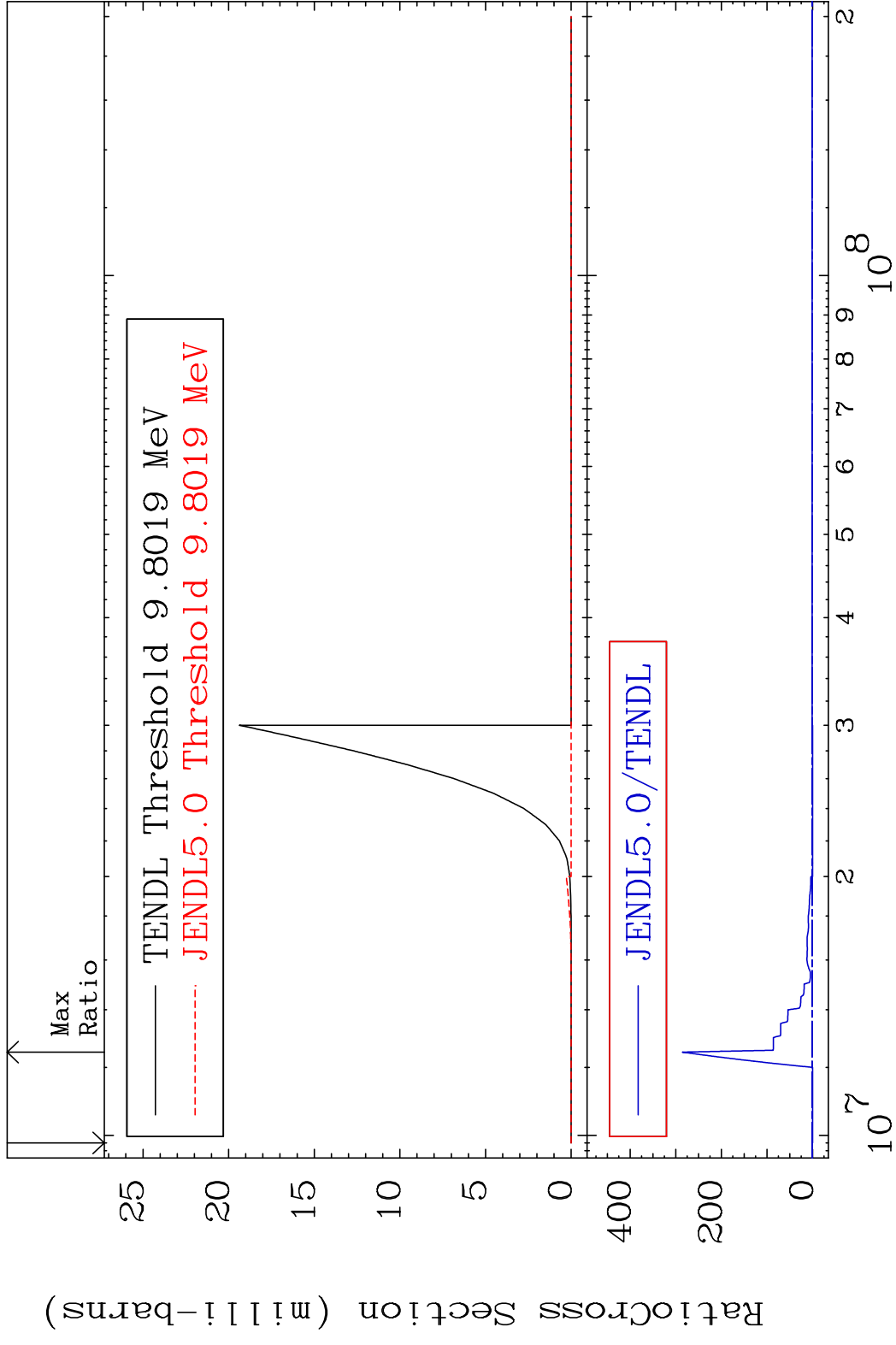
MAT 4034 (n,3n) 40-Zr-93
 Cross Section -100.0 To 45.48 %



MAT 4034 (n, n') α 40-Zr-93
 Cross Section -100.0 To 9999. %



MAT 4034 (n,2n) α 40-Zr-93
 Cross Section -100.0 To 9999. %



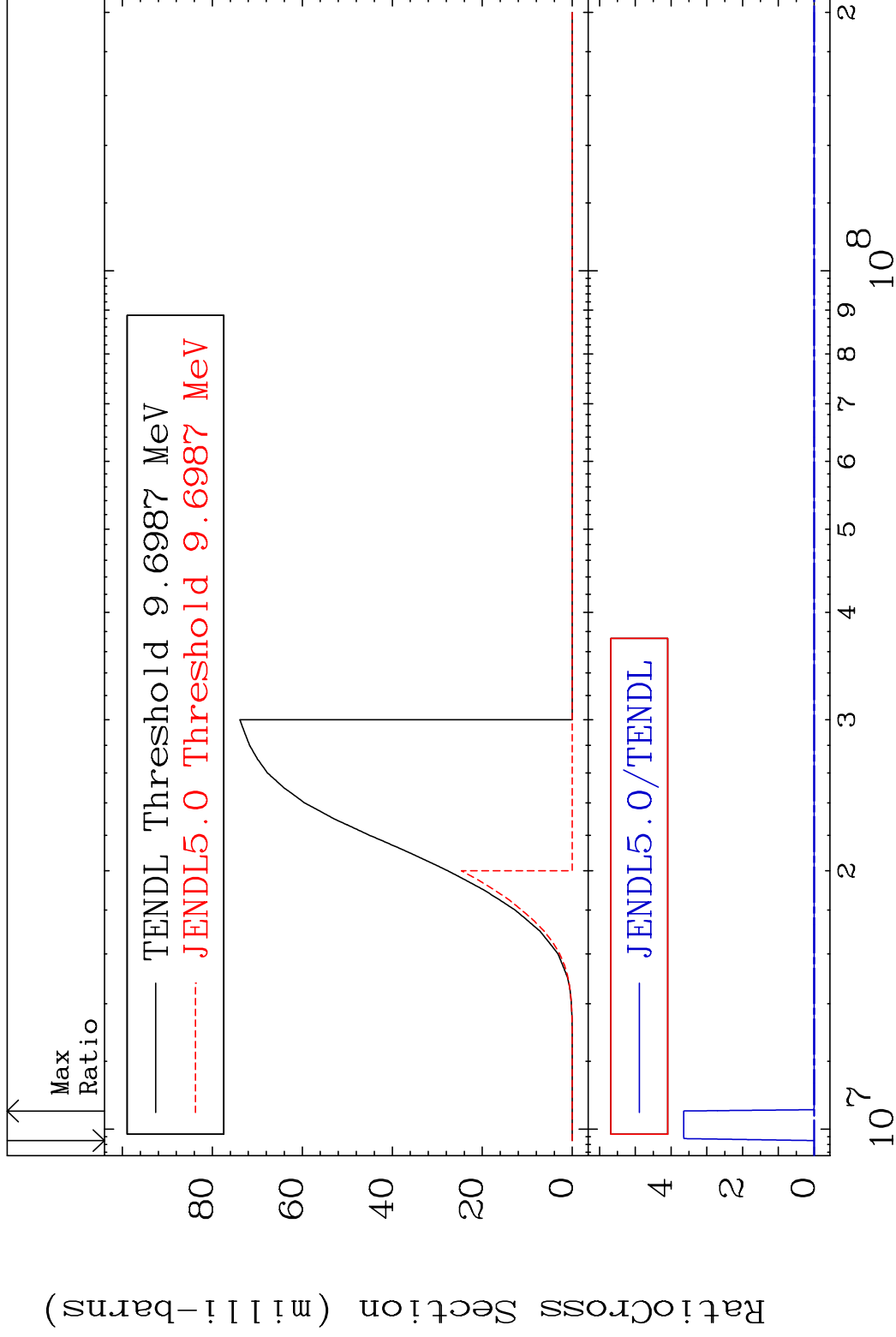
8 Incident Energy (eV) 40-Zr-93

MAT 4034

(n, n') p

40-Zr-93

Cross Section -100.0 To 9999. %

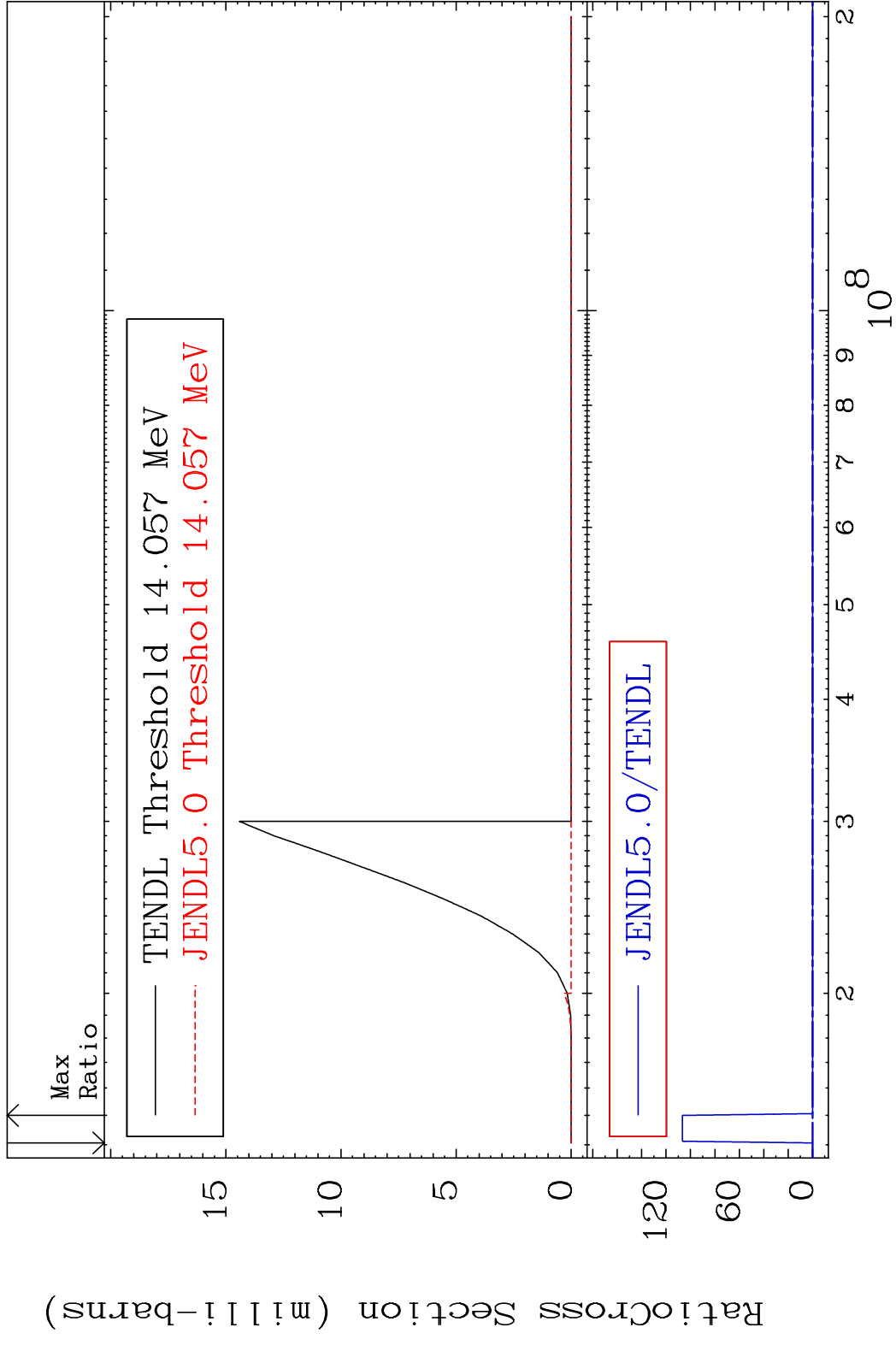


9

Incident Energy (eV)

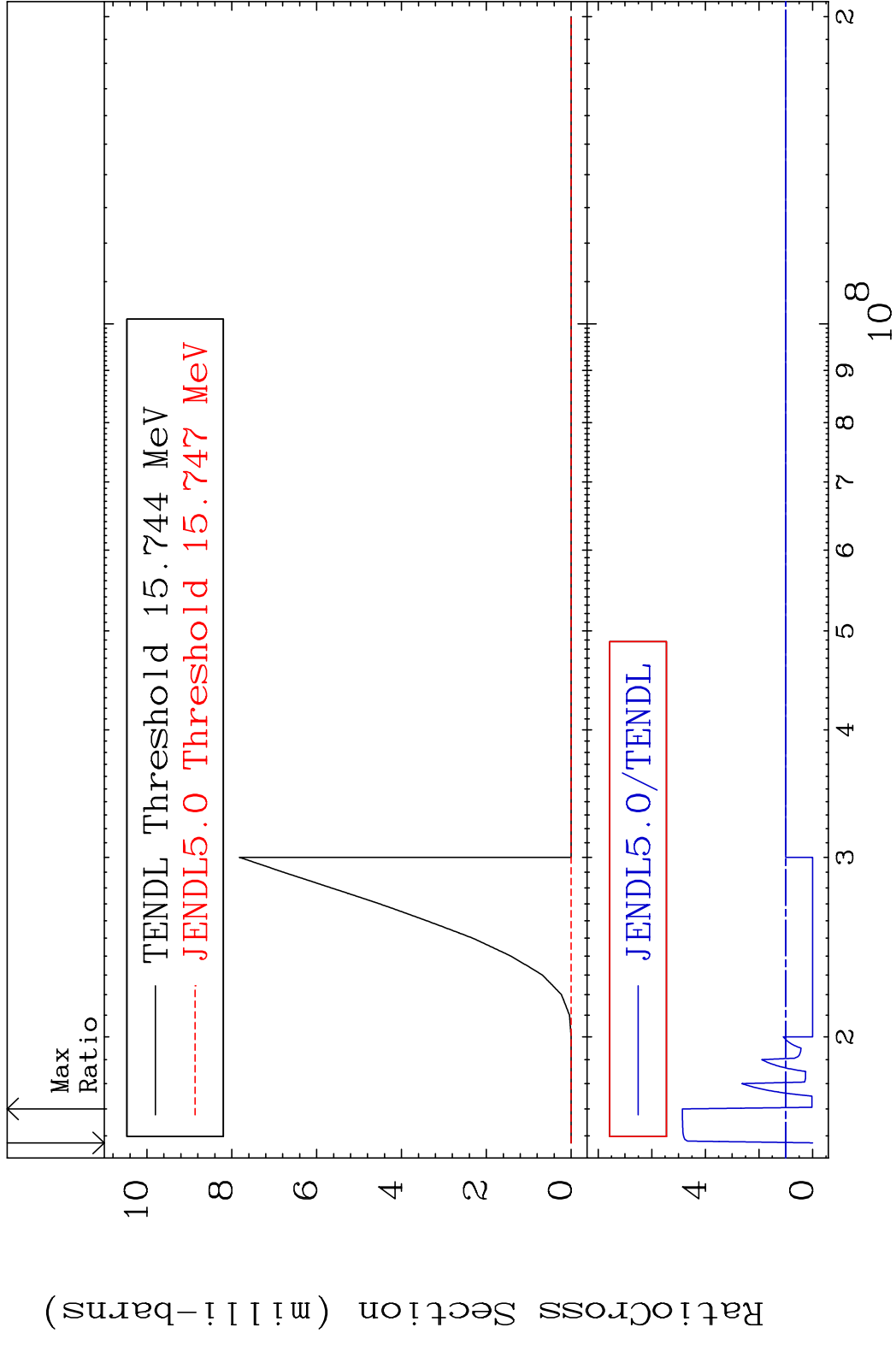
40-Zr-93

MAT 4034 (n, n') d 40-Zr-93
 Cross Section -100.0 To 9999. %

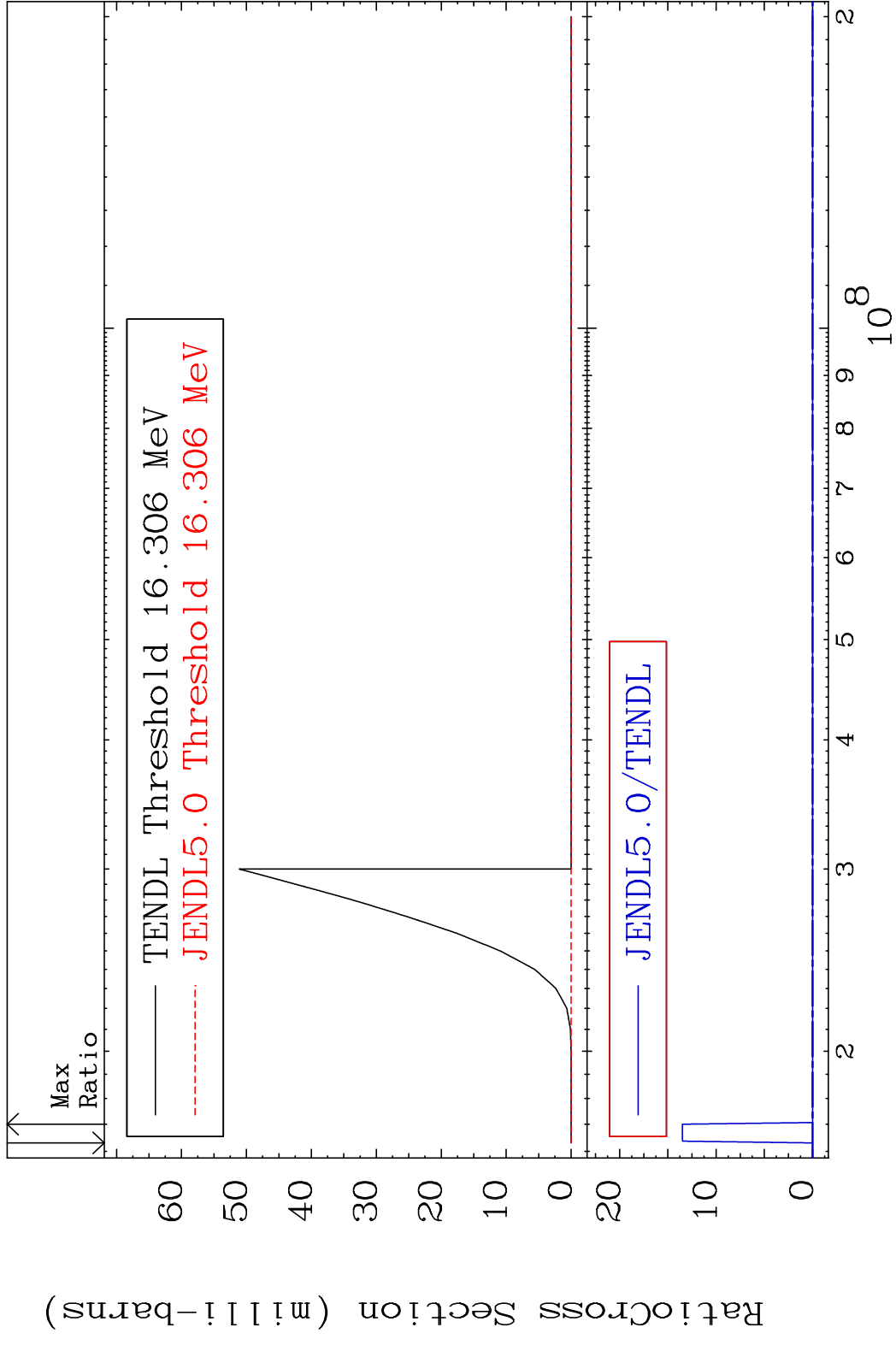


10 Incident Energy (eV) 40-Zr-93

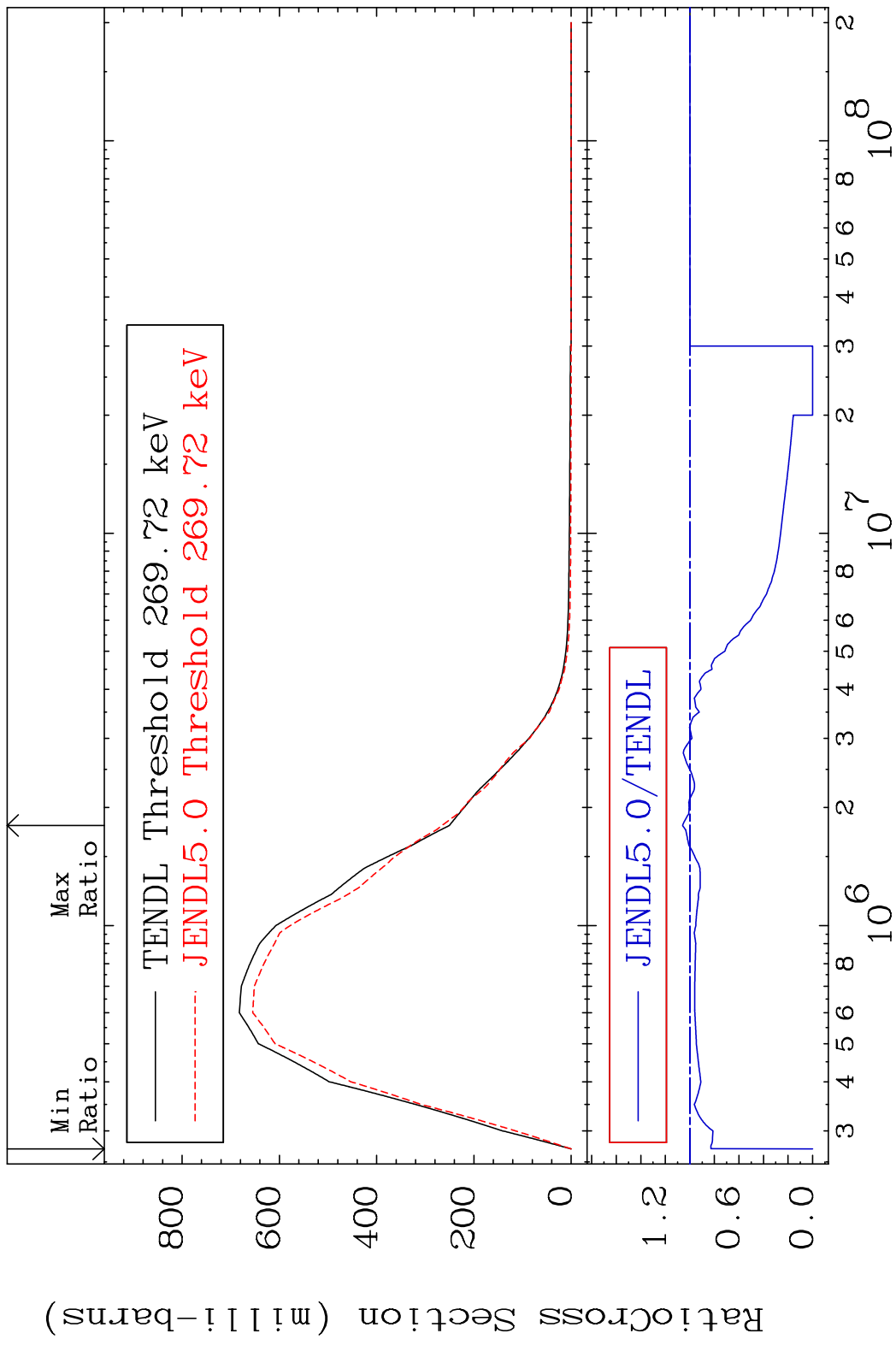
MAT 4034 (n, n') t 40-Zr-93
 Cross Section -100.0 To 385.8 %



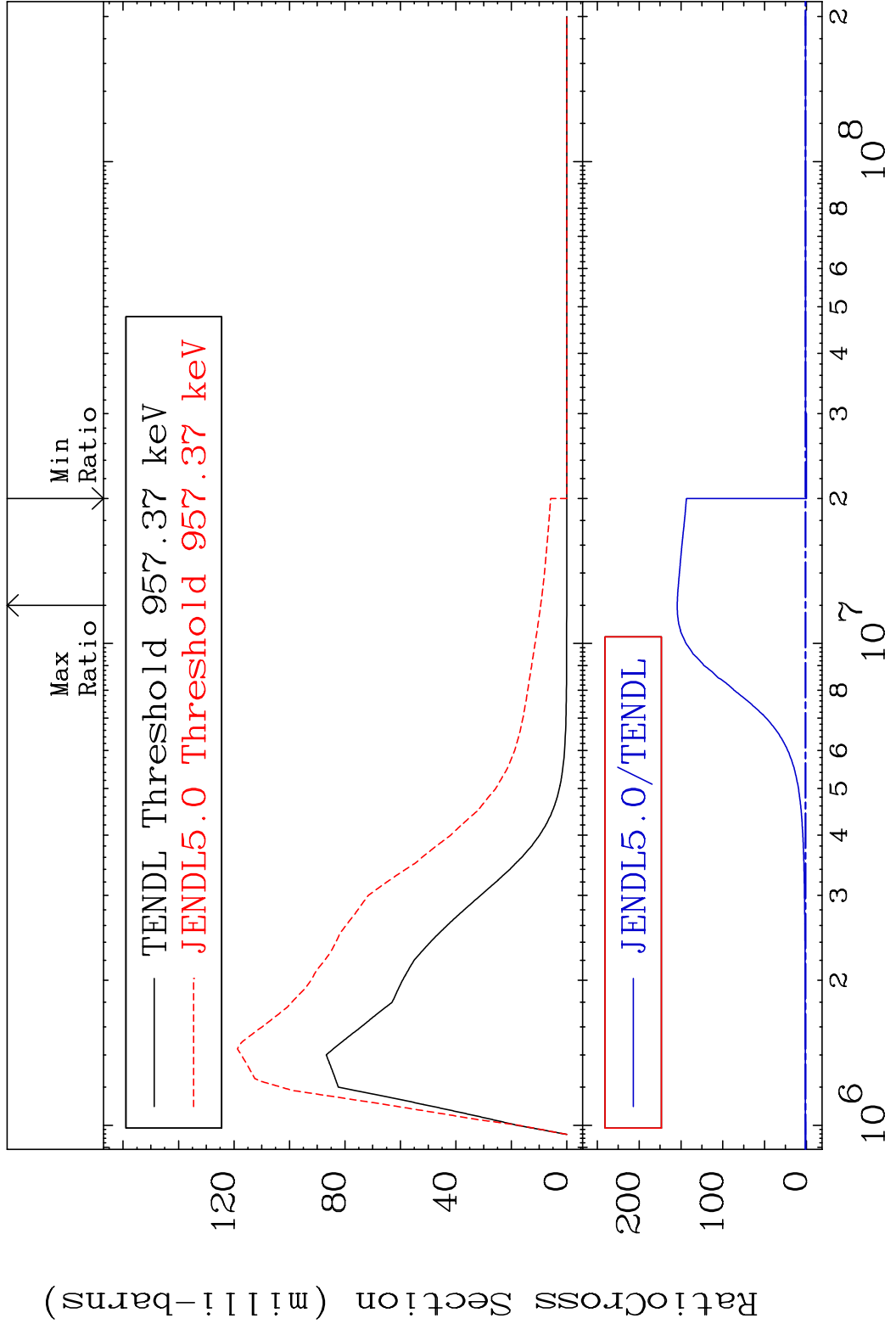
MAT 4034 (n,2n) p 40-Zr-93
 Cross Section -100.0 To 9999. %



MAT 4034 MT= 51 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 6.115 %

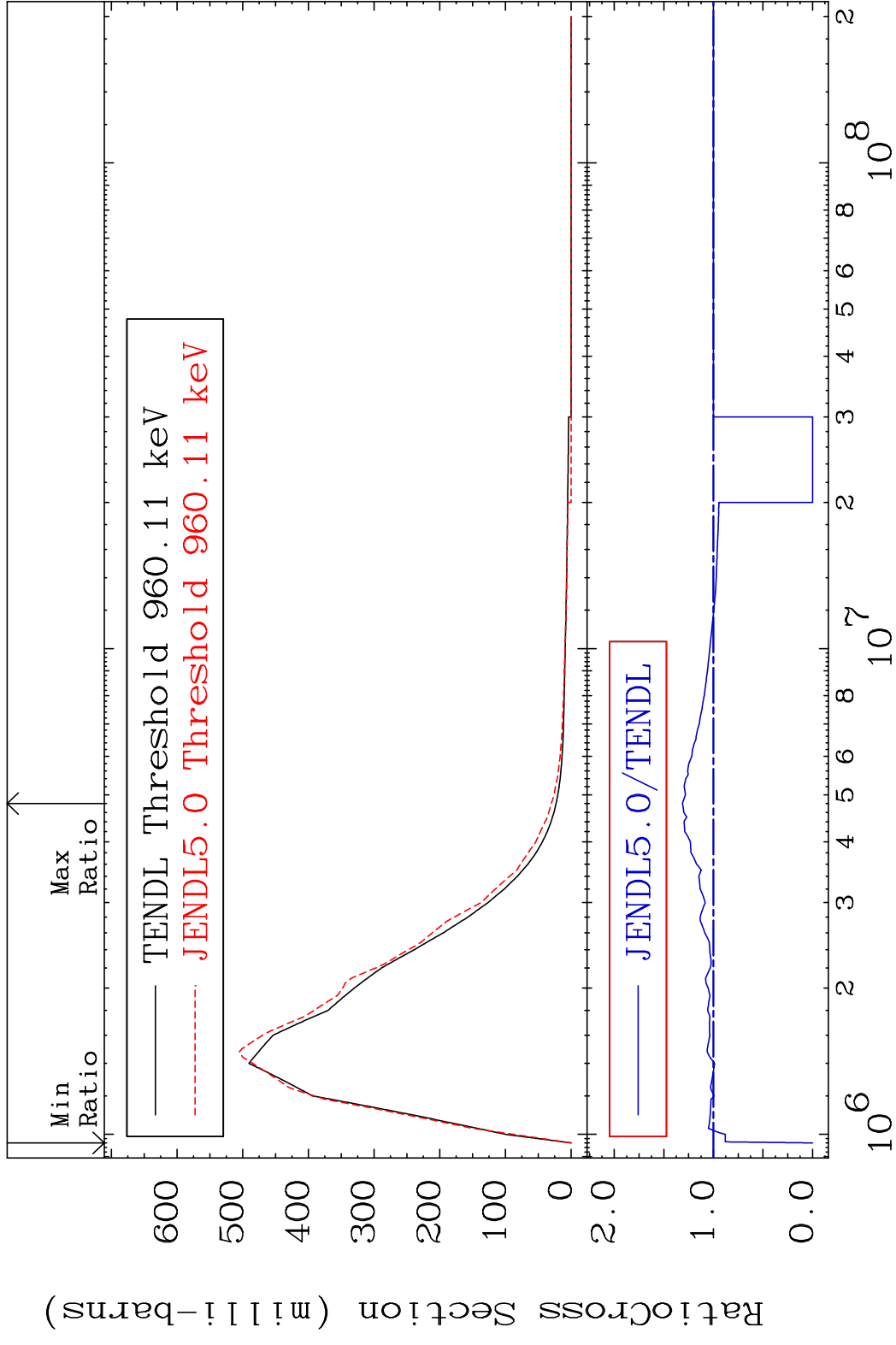


MAT 4034 MT= 52 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 9999. %



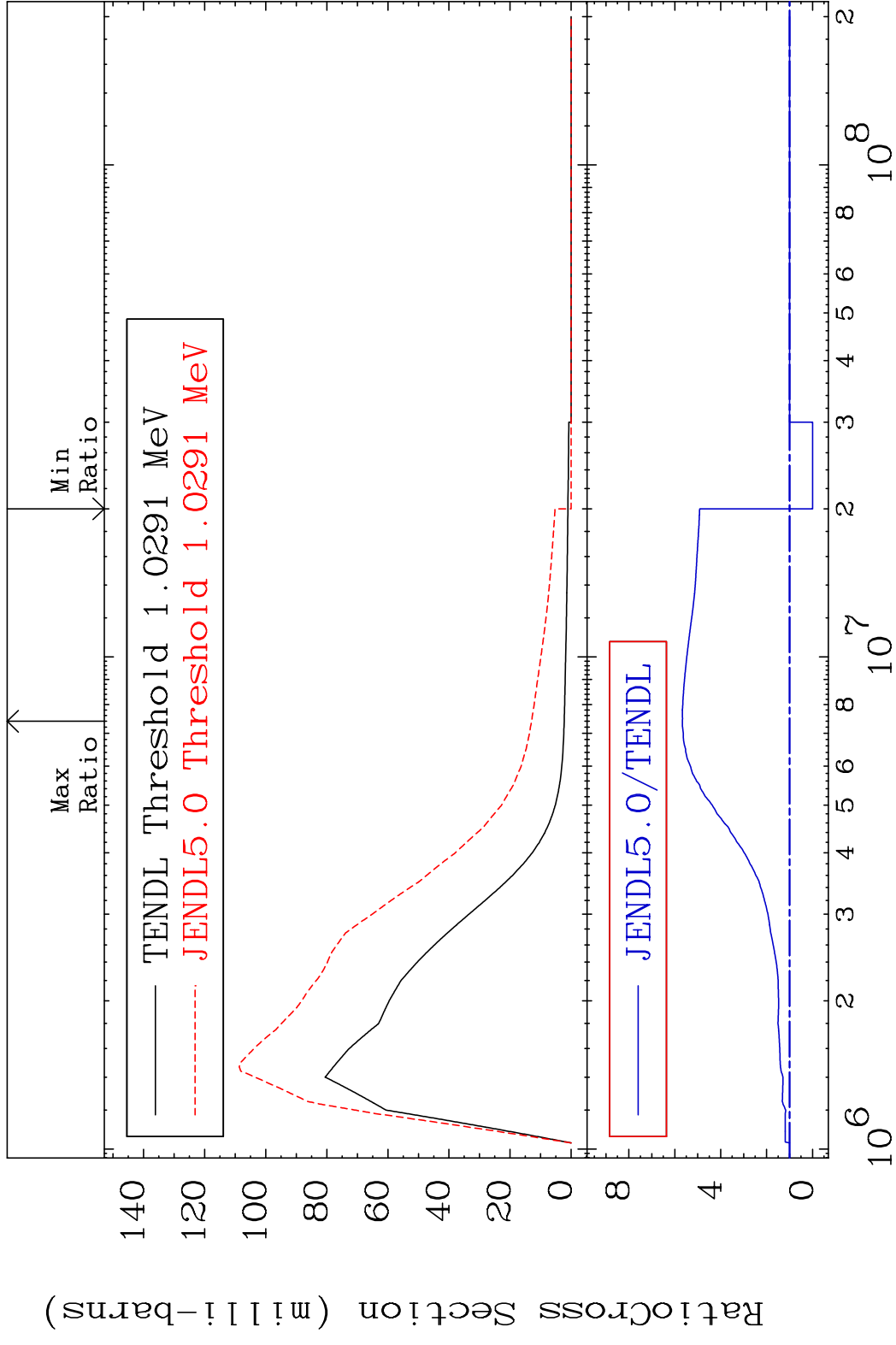
14

MAT 4034 MT= 53 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 31.31 %



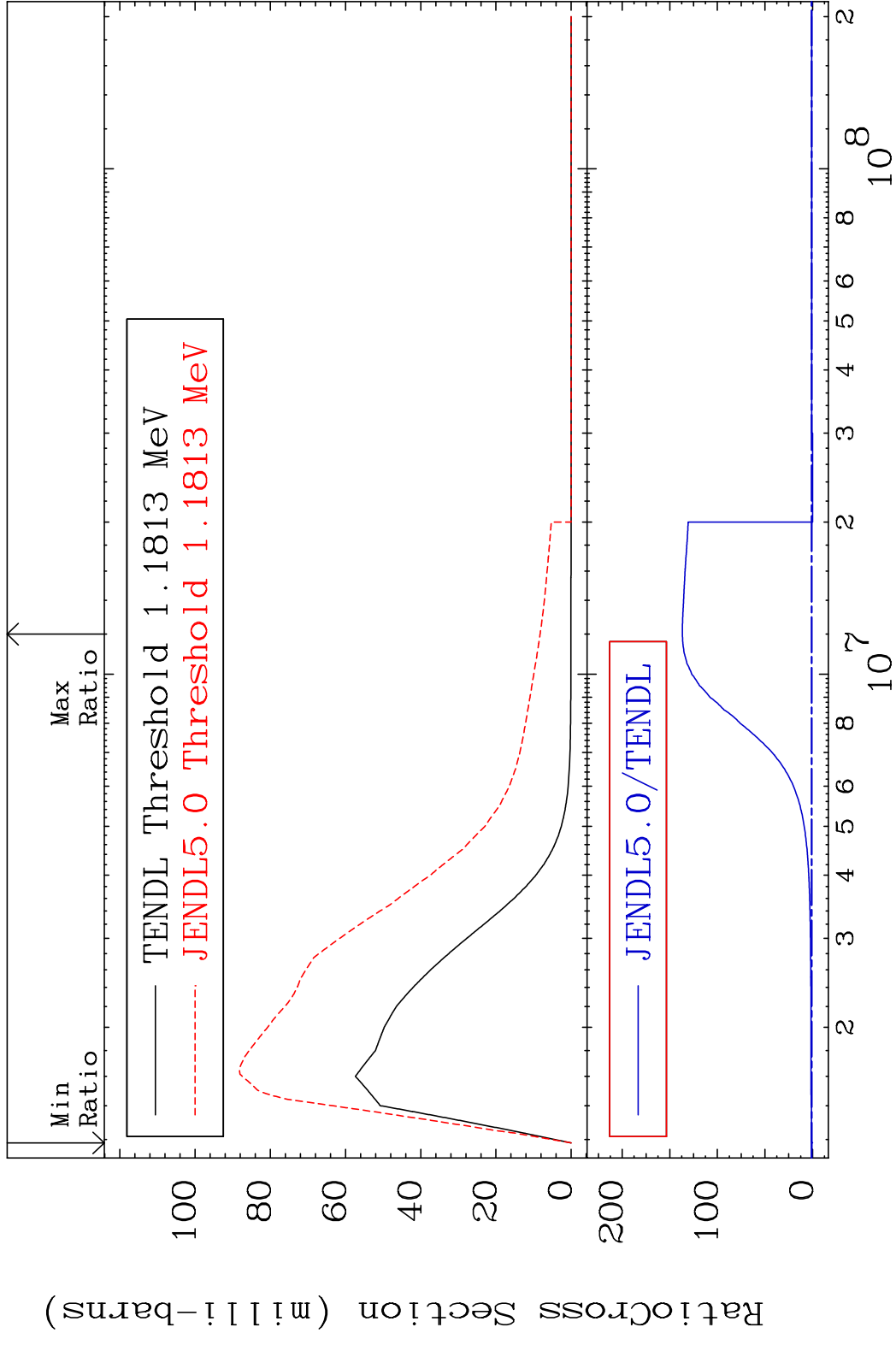
15 40-Zr-93

MAT 4034 MT= 54 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 467.1 %

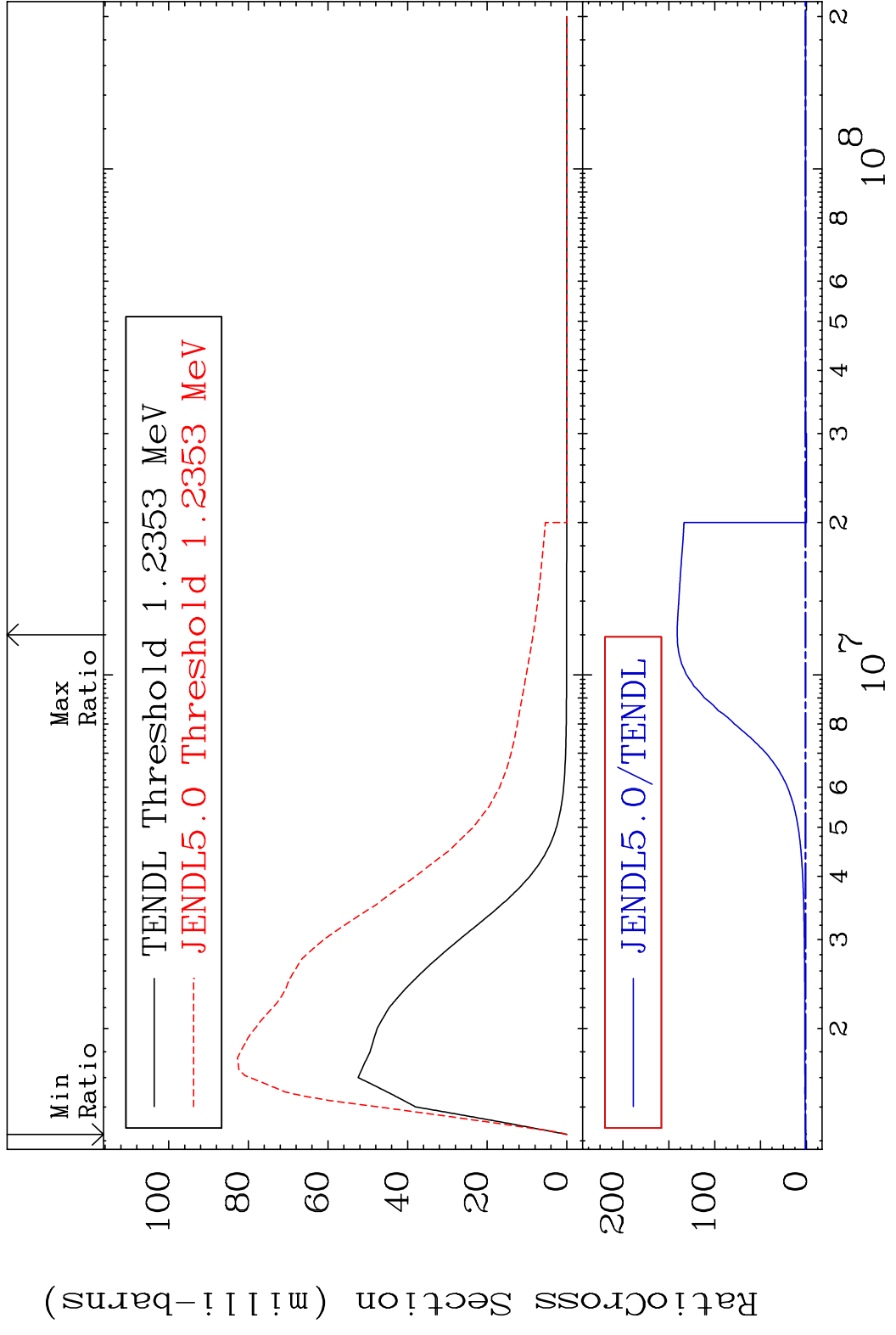


16 Incident Energy (eV) 40-Zr-93

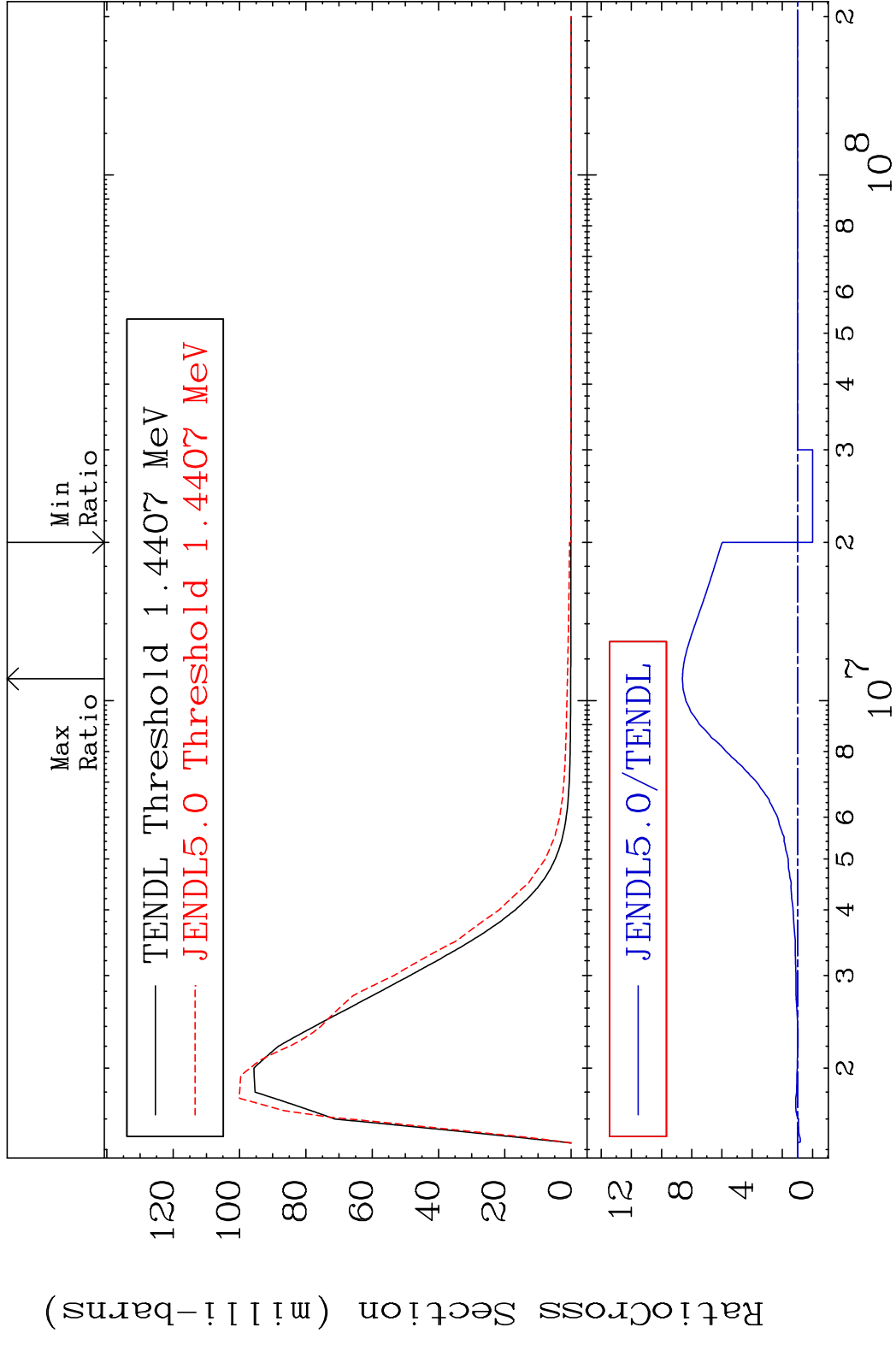
MAT 4034 MT= 55 (n,n') Level 40-Zr-93
 Cross Section -100.0 To 9999. %



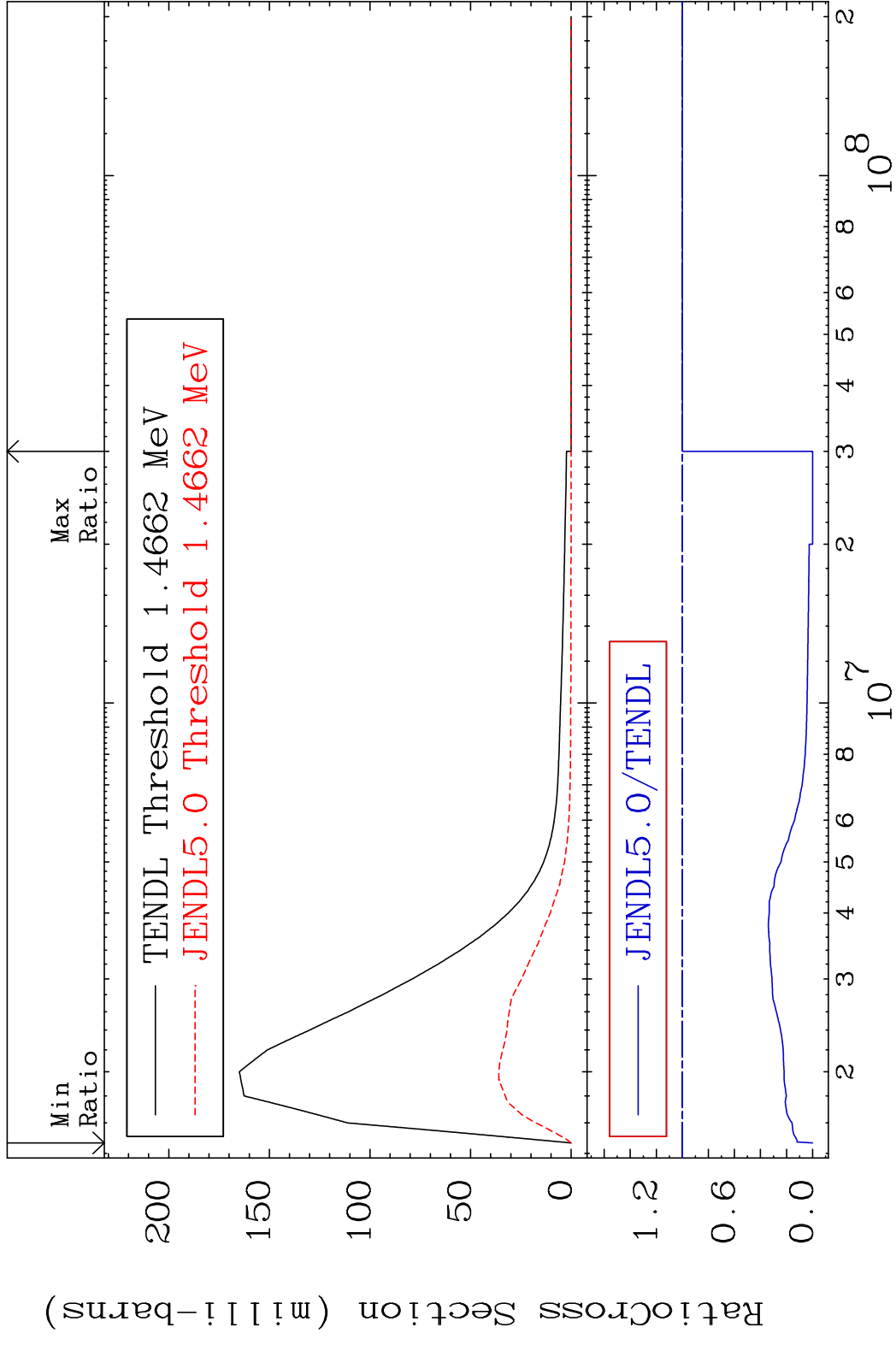
MAT 4034 MT= 56 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 9999. %



MAT 4034 MT= 57 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 762.1 %

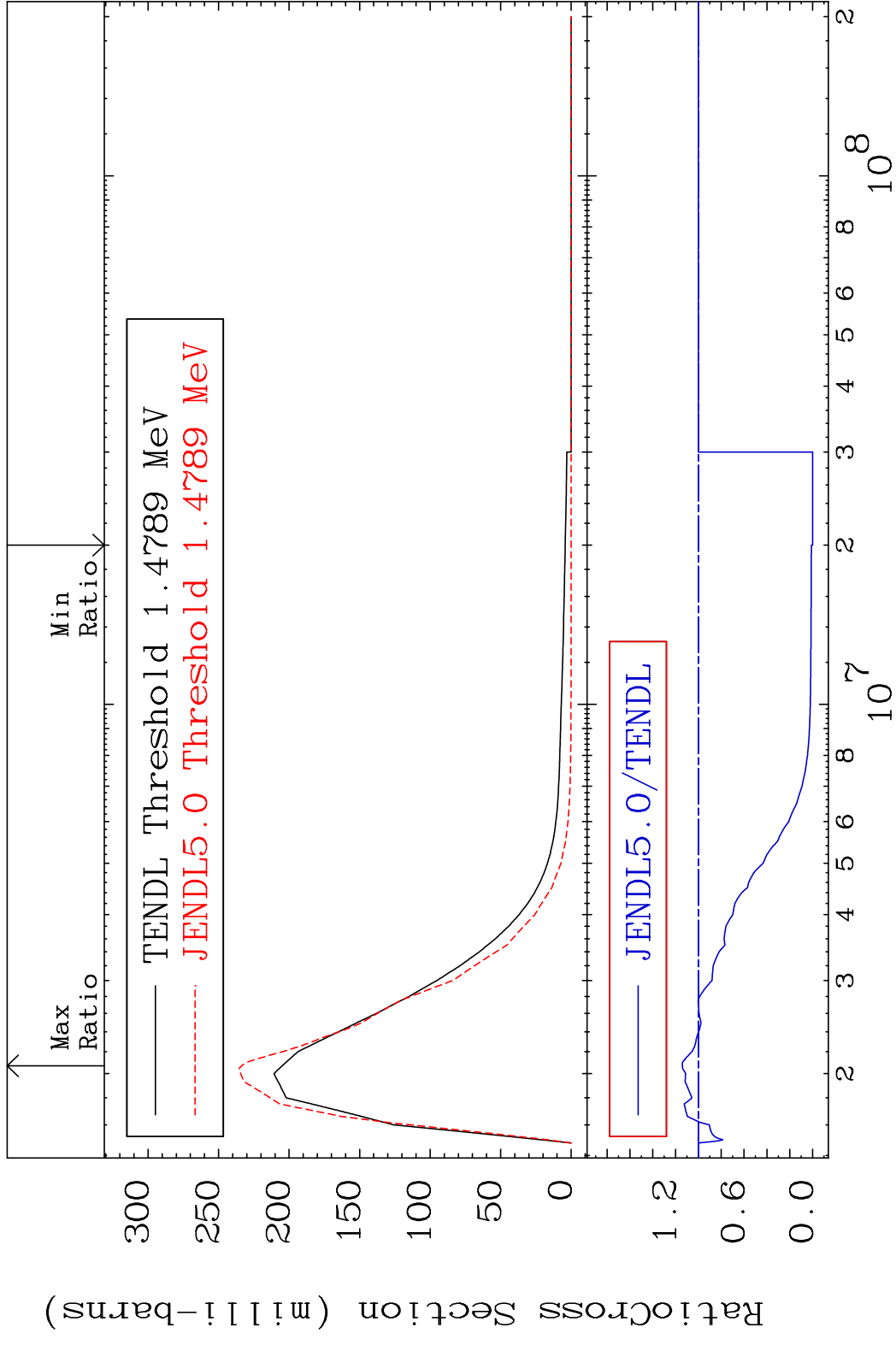


MAT 4034 MT= 58 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 0.000 %

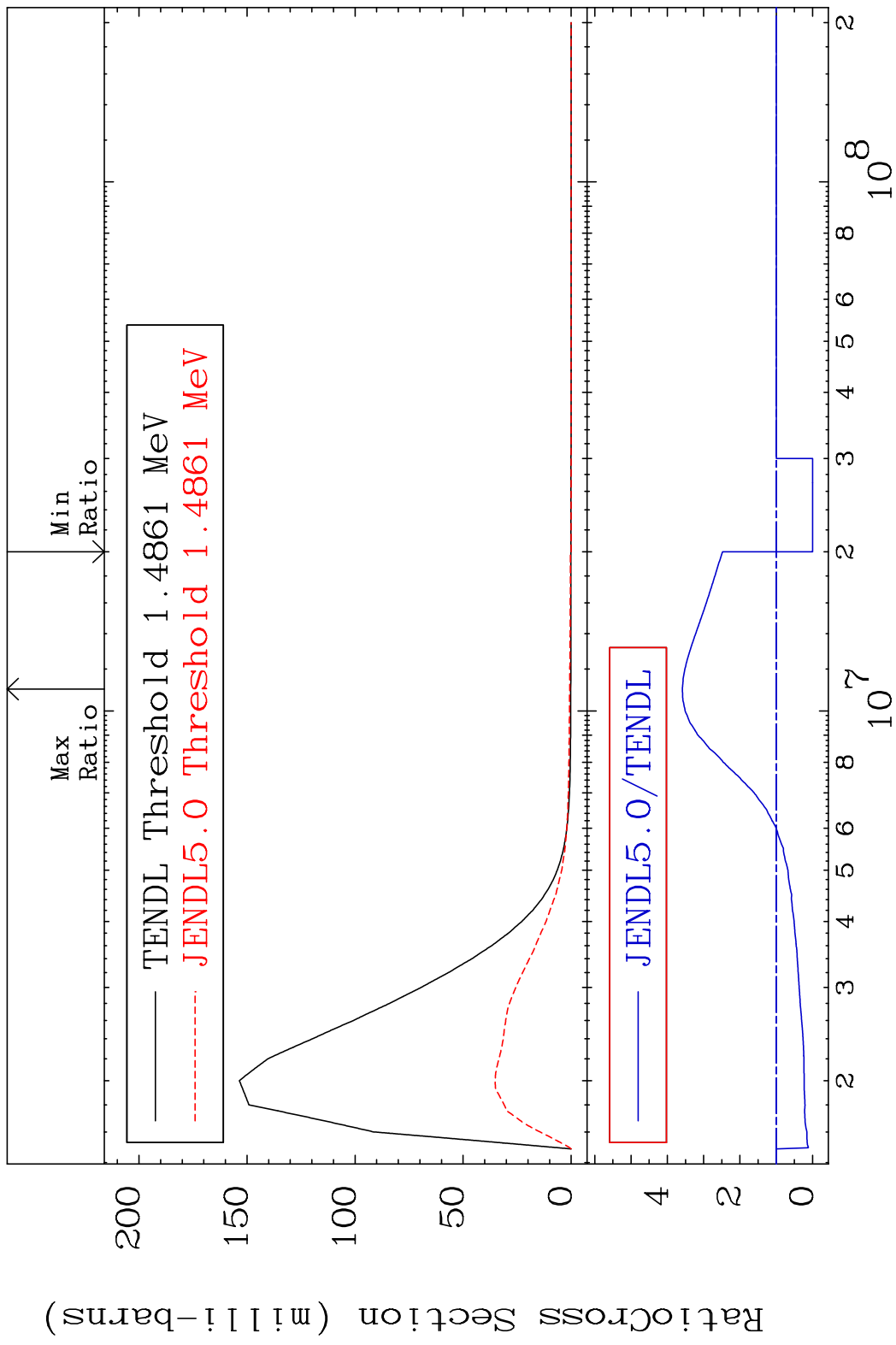


20 Incident Energy (eV) 40-Zr-93

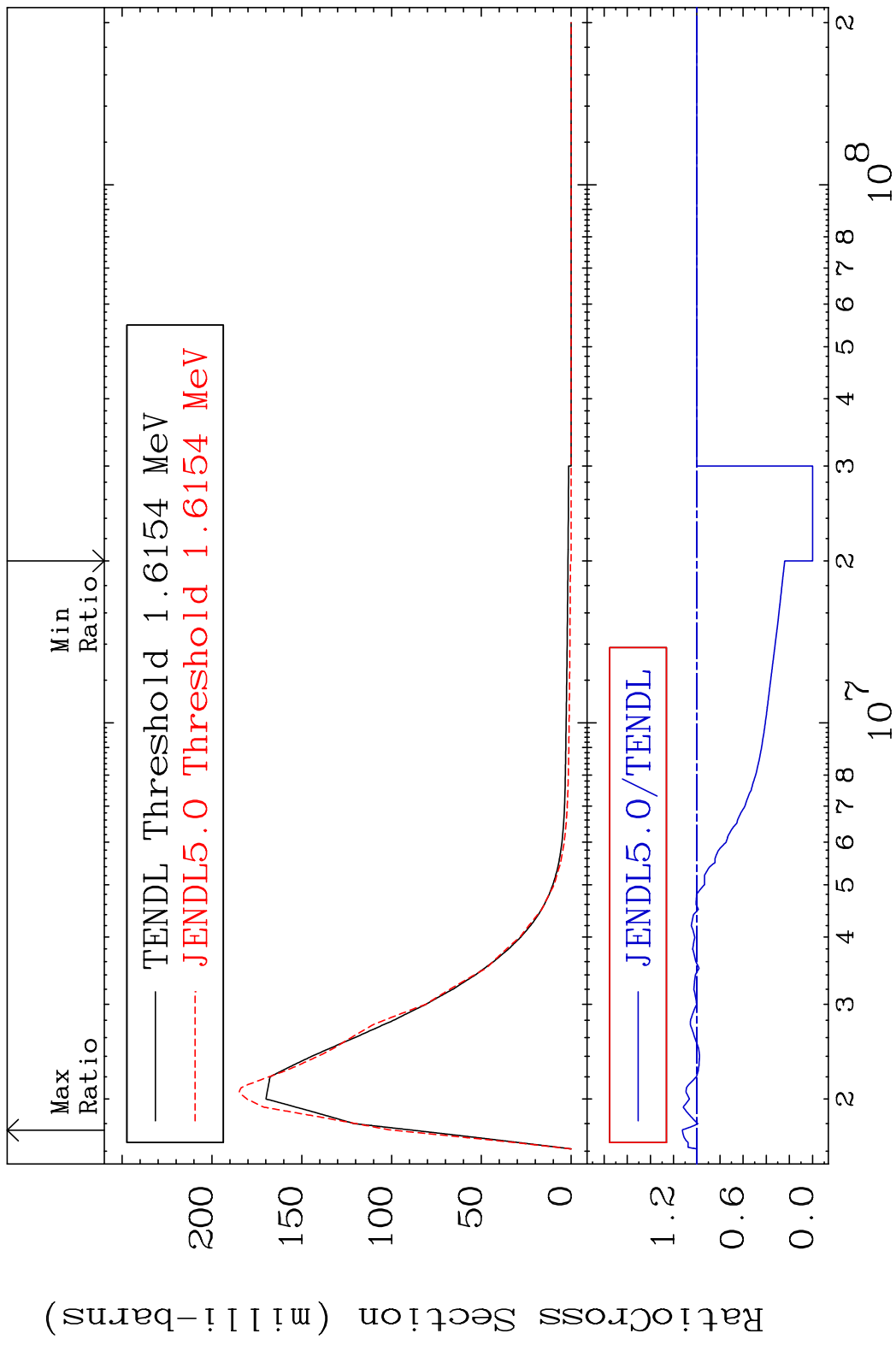
MAT 4034 MT= 59 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 14.05 %



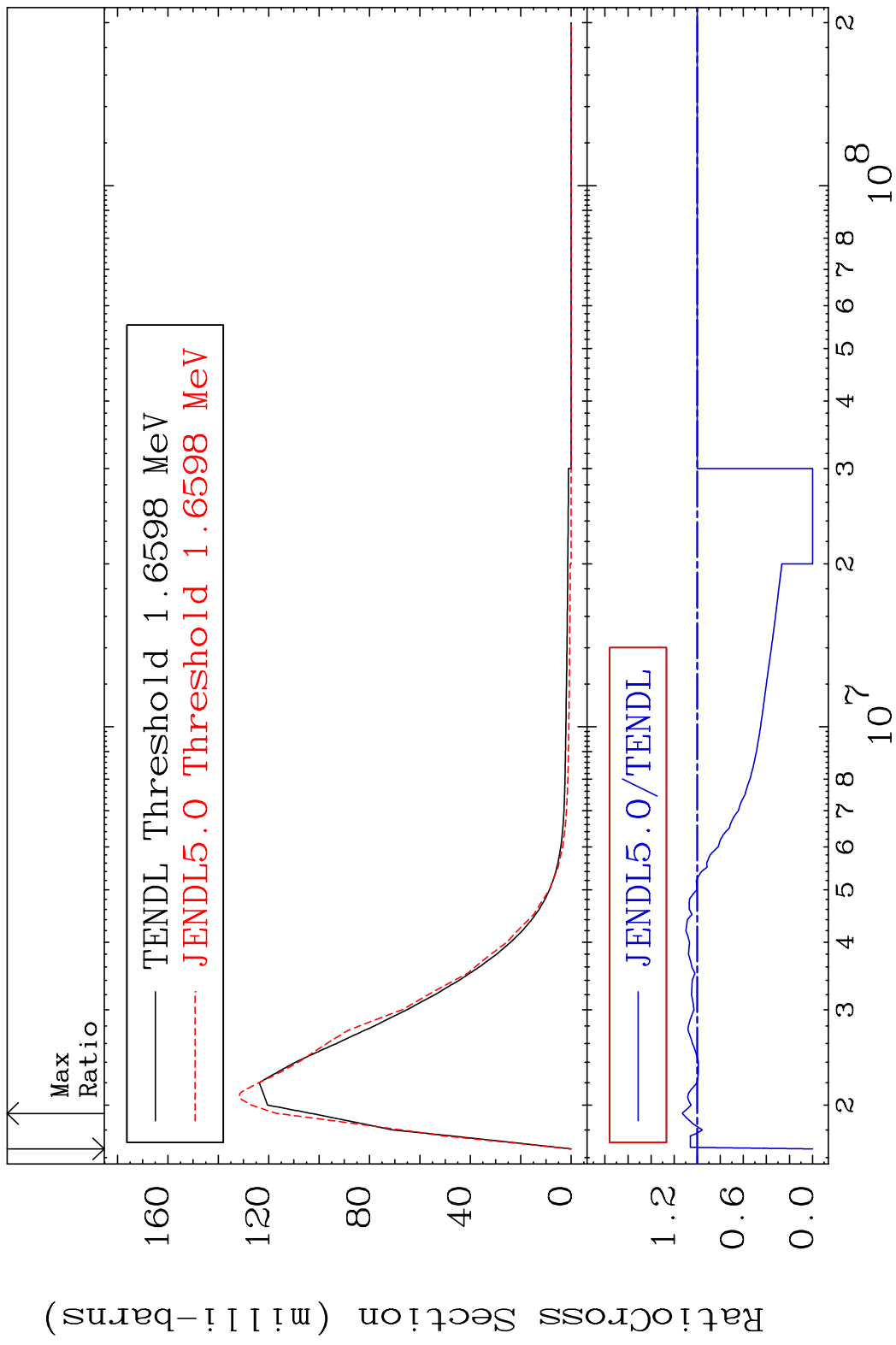
MAT 4034 MT= 60 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 258.6 %



MAT 4034 MT= 61 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 12.43 %

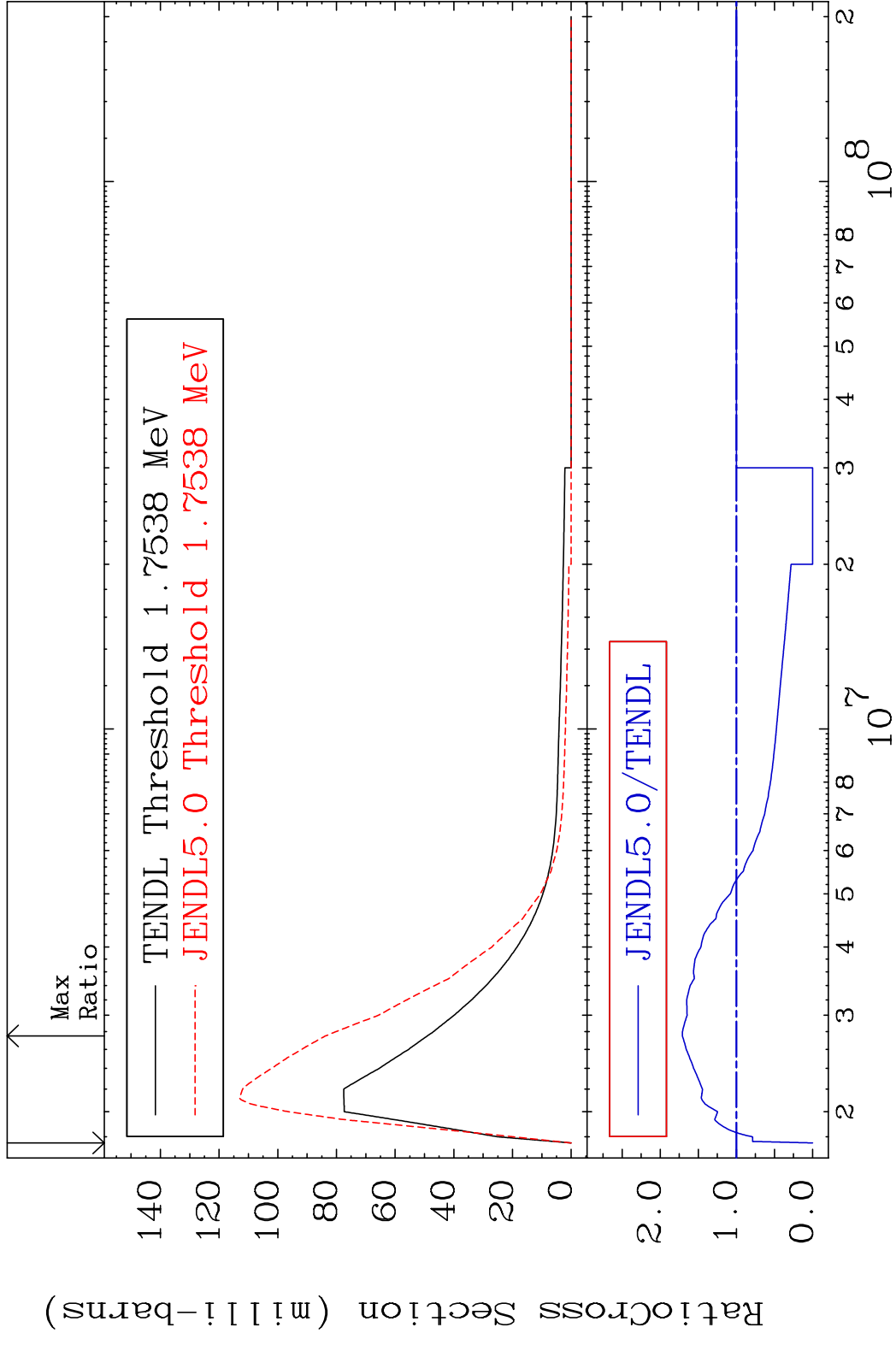


MAT 4034 MT= 62 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 12.90 %

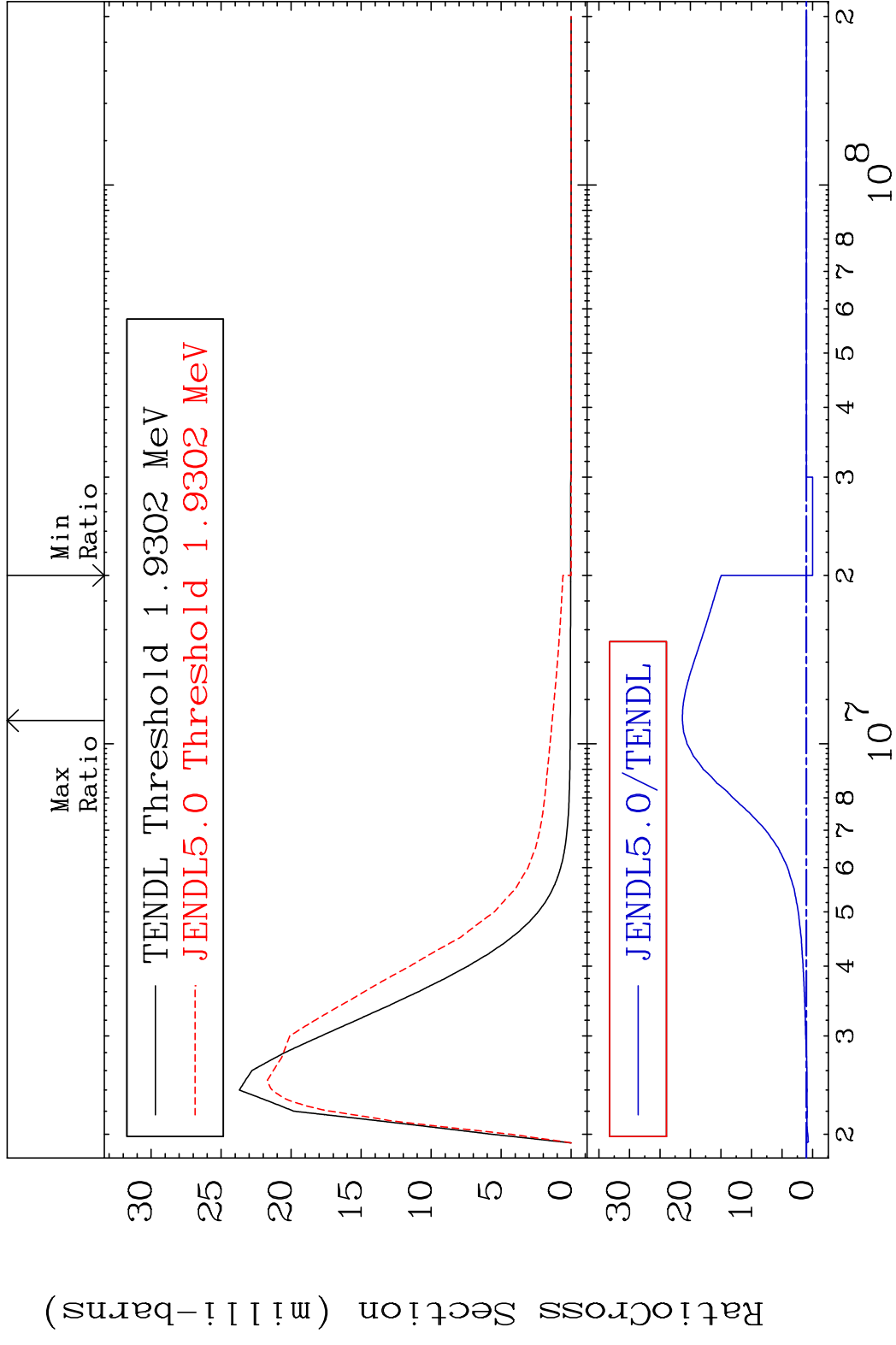


24 Incident Energy (eV) 40-Zr-93

MAT 4034 MT= 63 (n,n') Level 40-Zr-93
 Cross Section -100.0 To 70.88 %

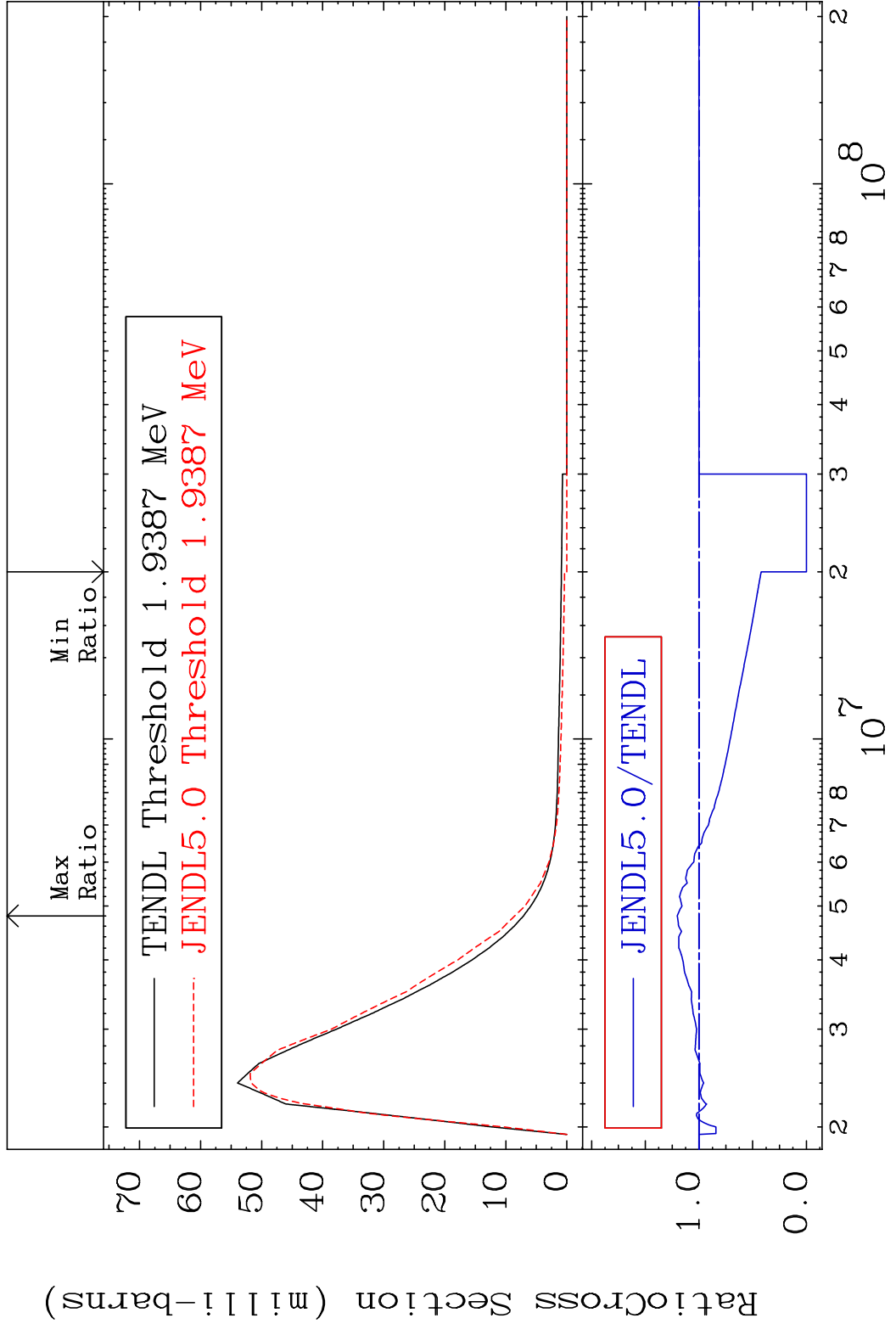


MAT 4034 MT= 64 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 2033. %

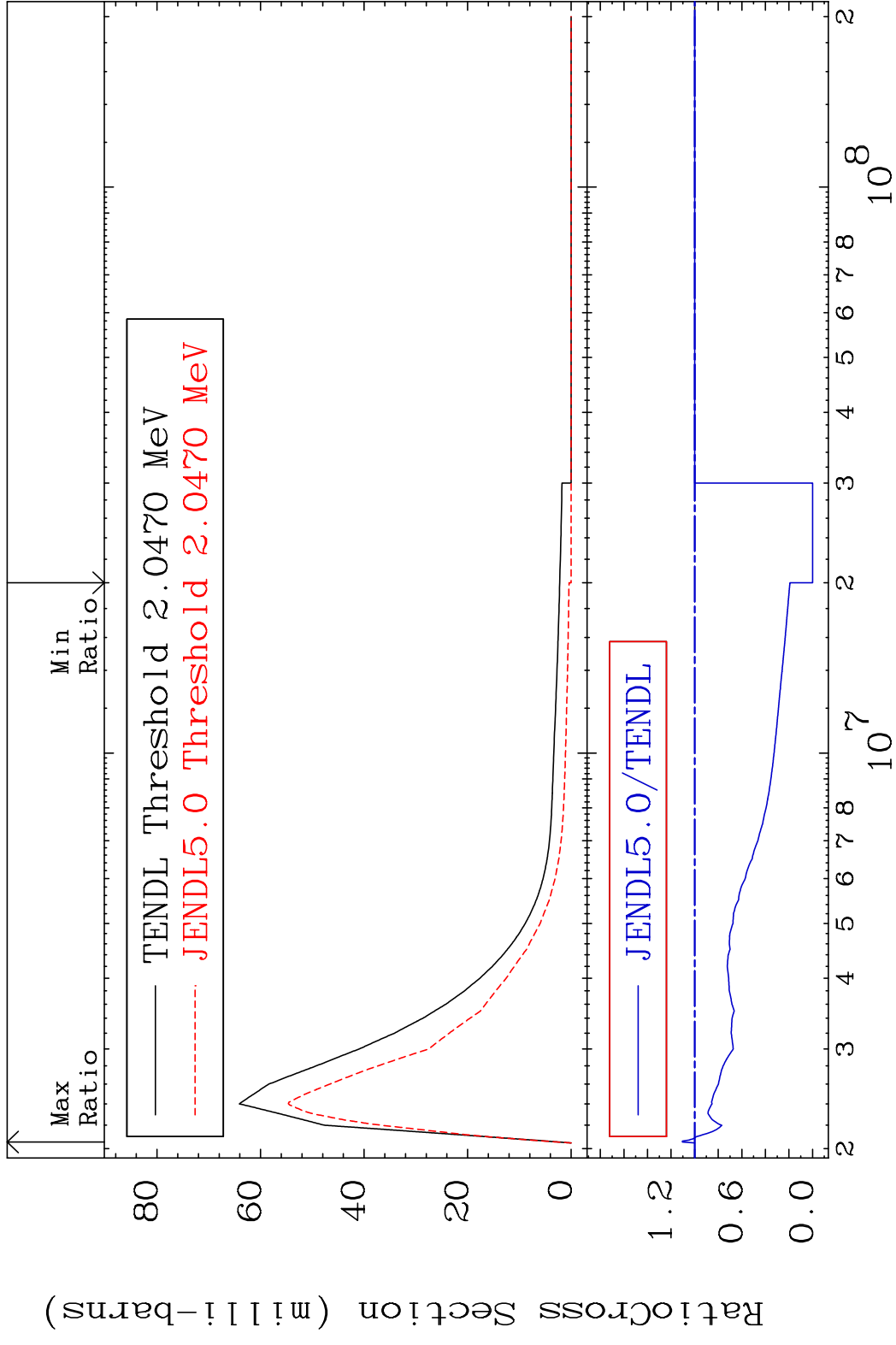


26 Incident Energy (eV) 40-Zr-93

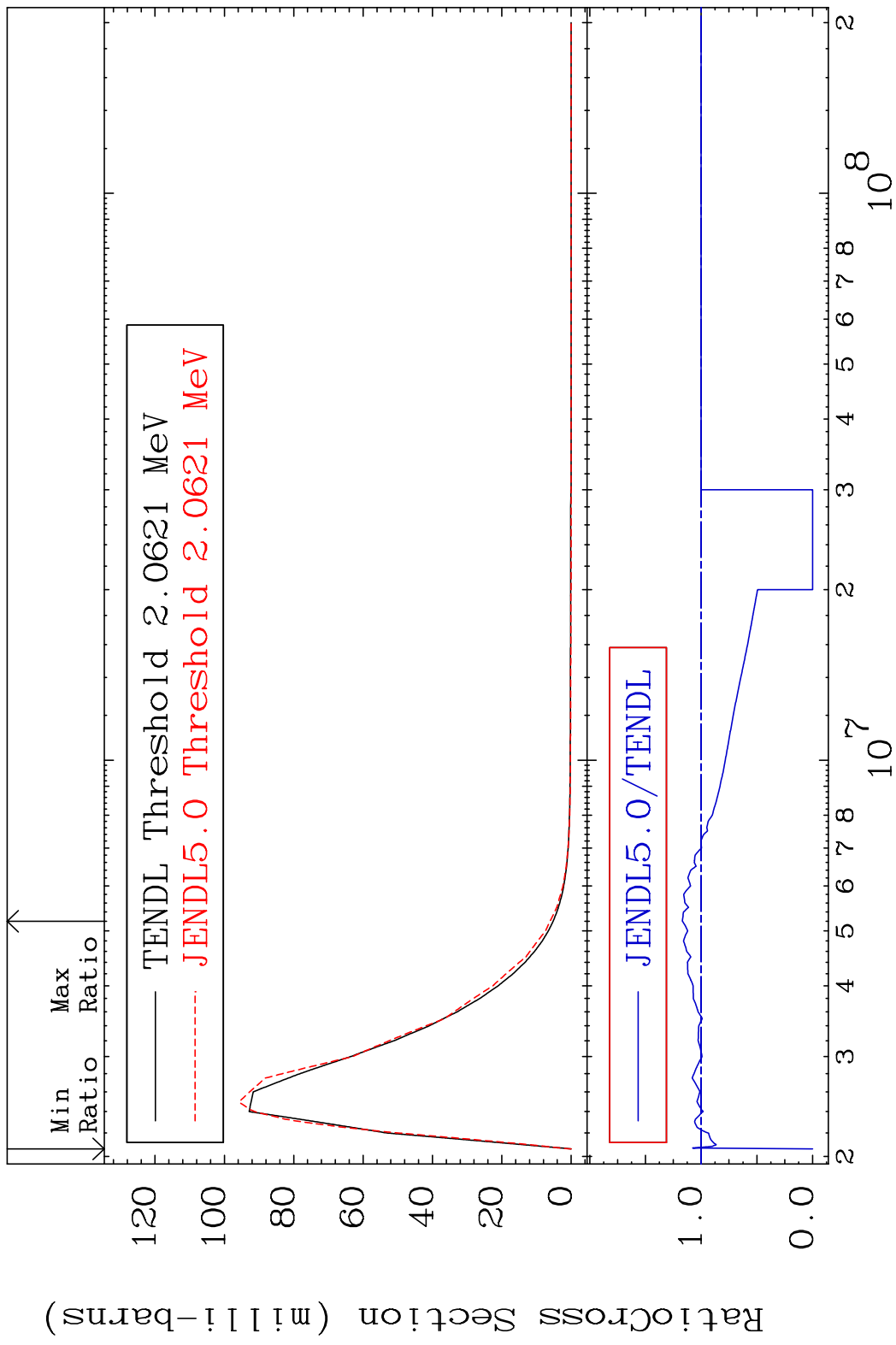
MAT 4034 MT= 65 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 20.30 %



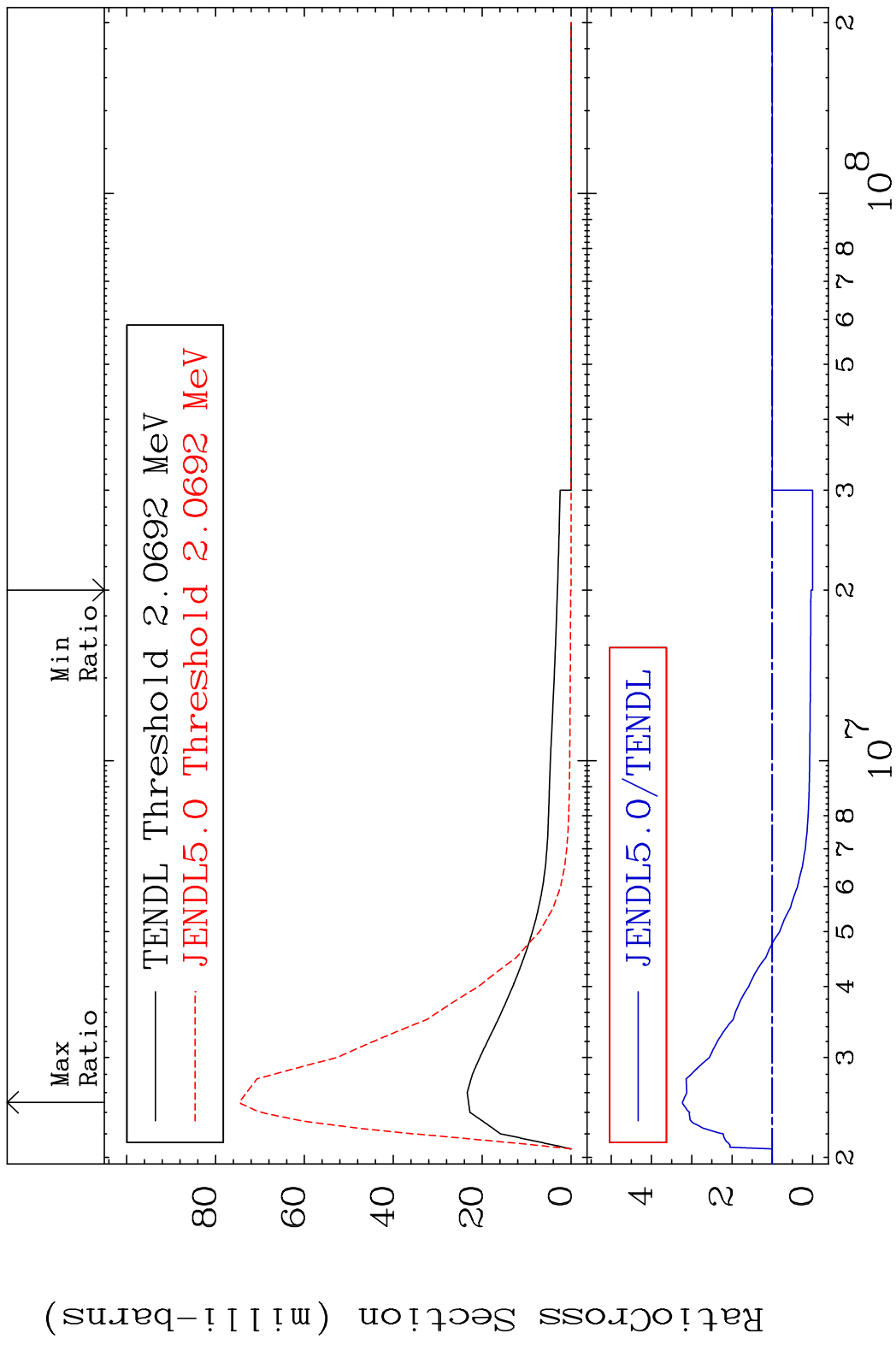
MAT 4034 MT= 66 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 10.43 %



MAT 4034 MT= 67 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 16.90 %

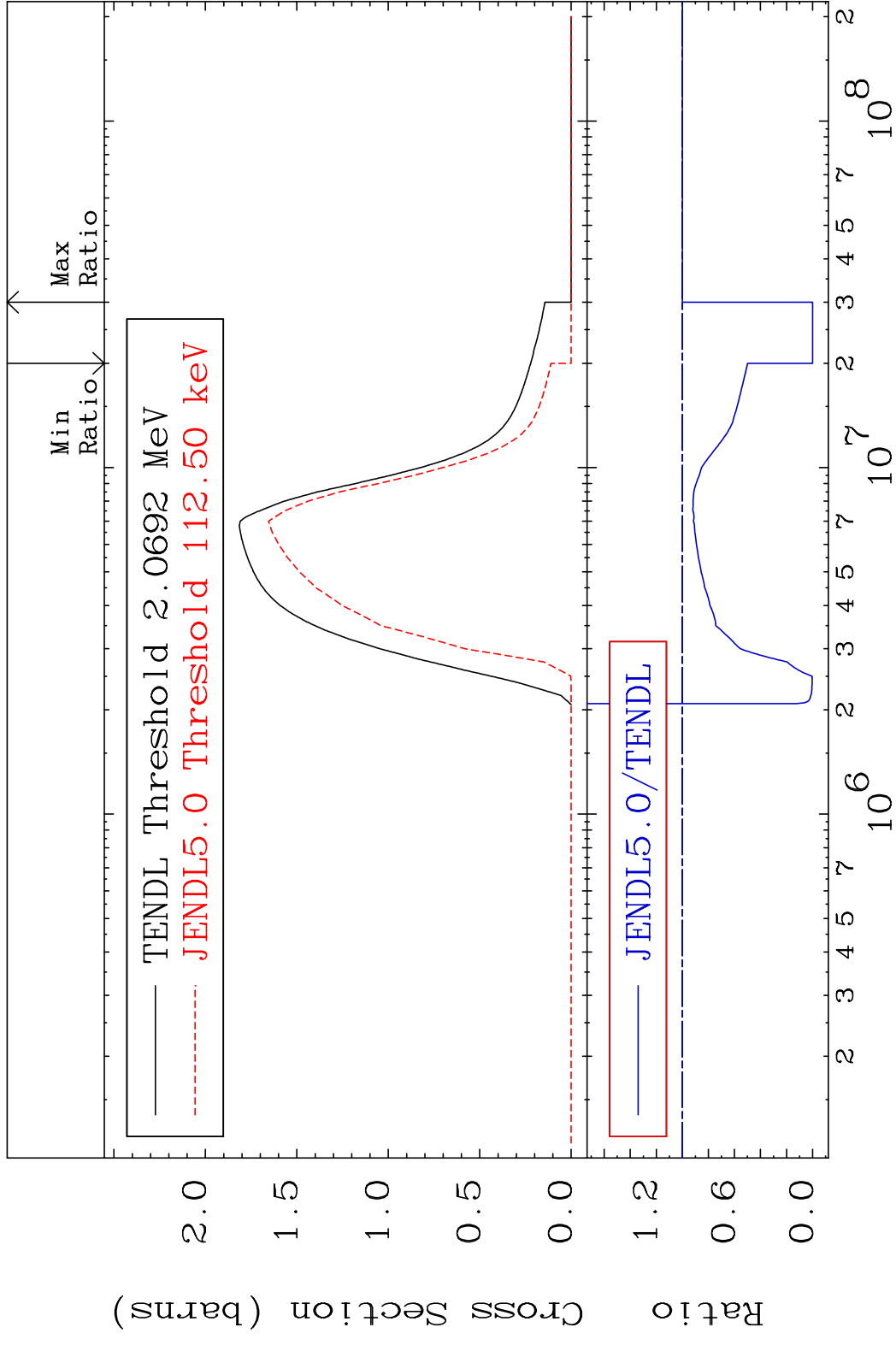


MAT 4034 MT= 68 (n, n') Level 40-Zr-93
 Cross Section -100.0 To 223.3 %



30 Incident Energy (eV) 40-Zr-93

MAT 4034 (n, n') Continuum 40-Zr-93
 Cross Section -100.0 To 0.000 %

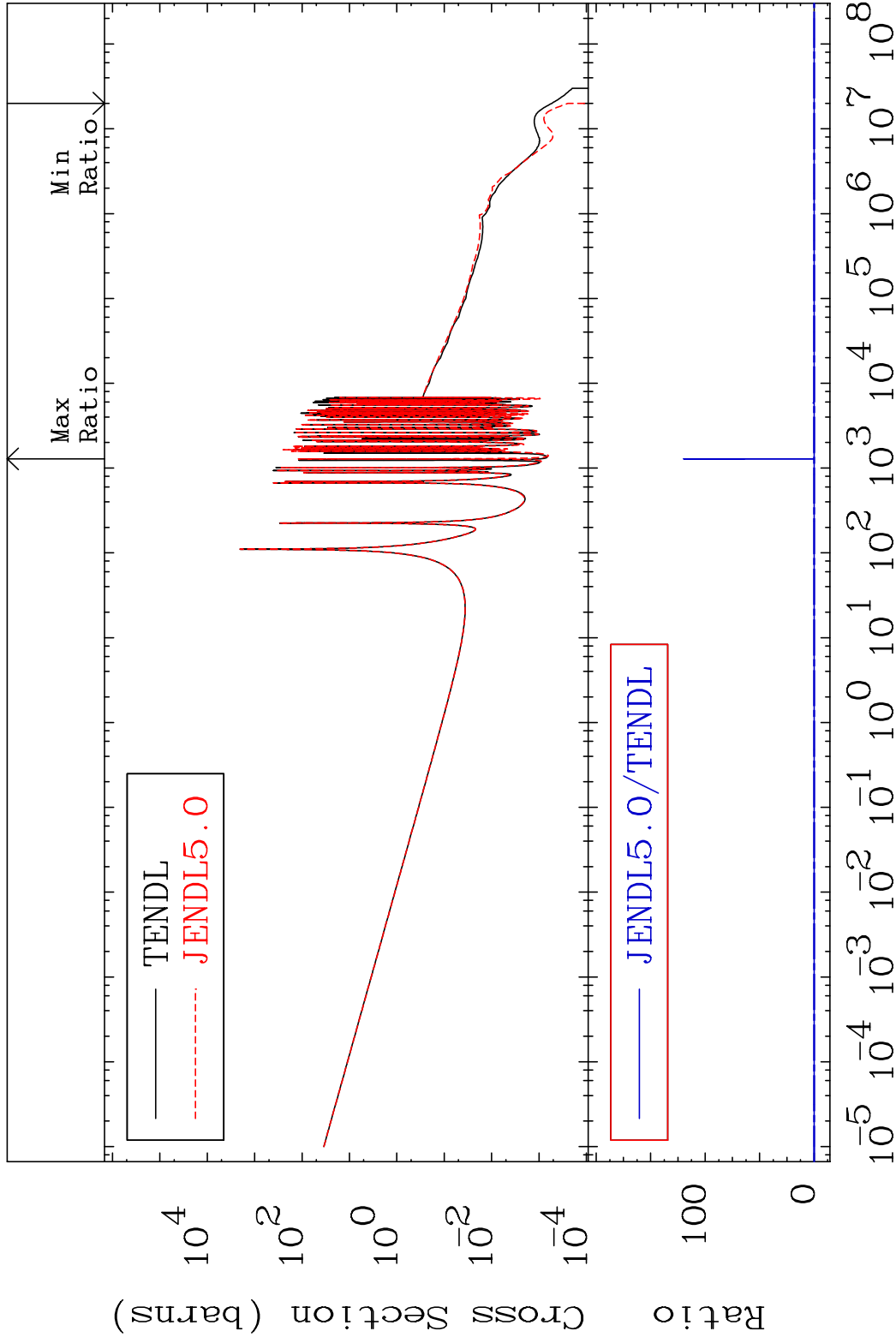


MAT 4034

(n, γ)

40-Zr-93

Cross Section -100.0 To 9999. %



32

Incident Energy (eV)

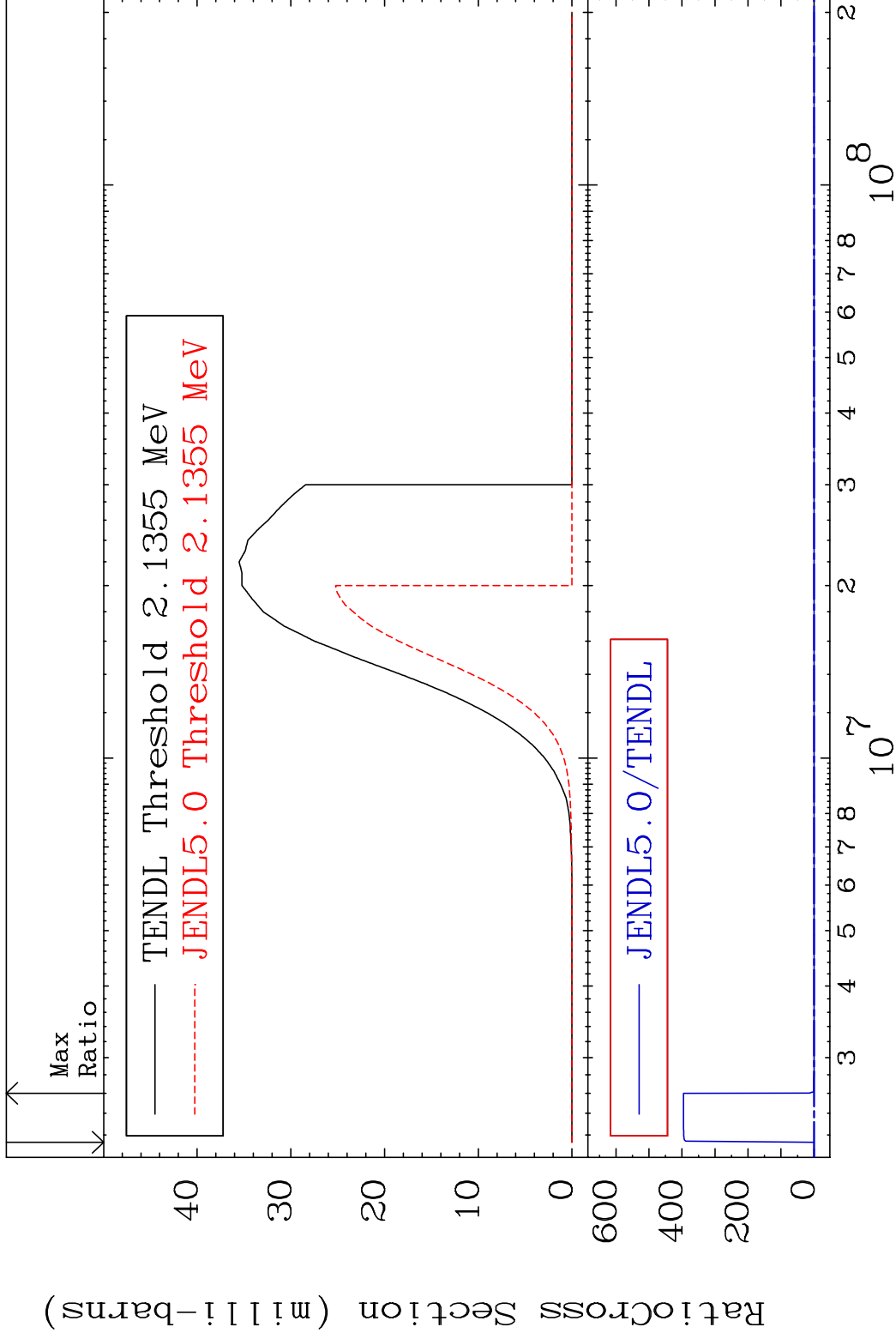
40-Zr-93

MAT 4034

(n,p)

40-Zr-93

Cross Section -100.0 To 9999. %

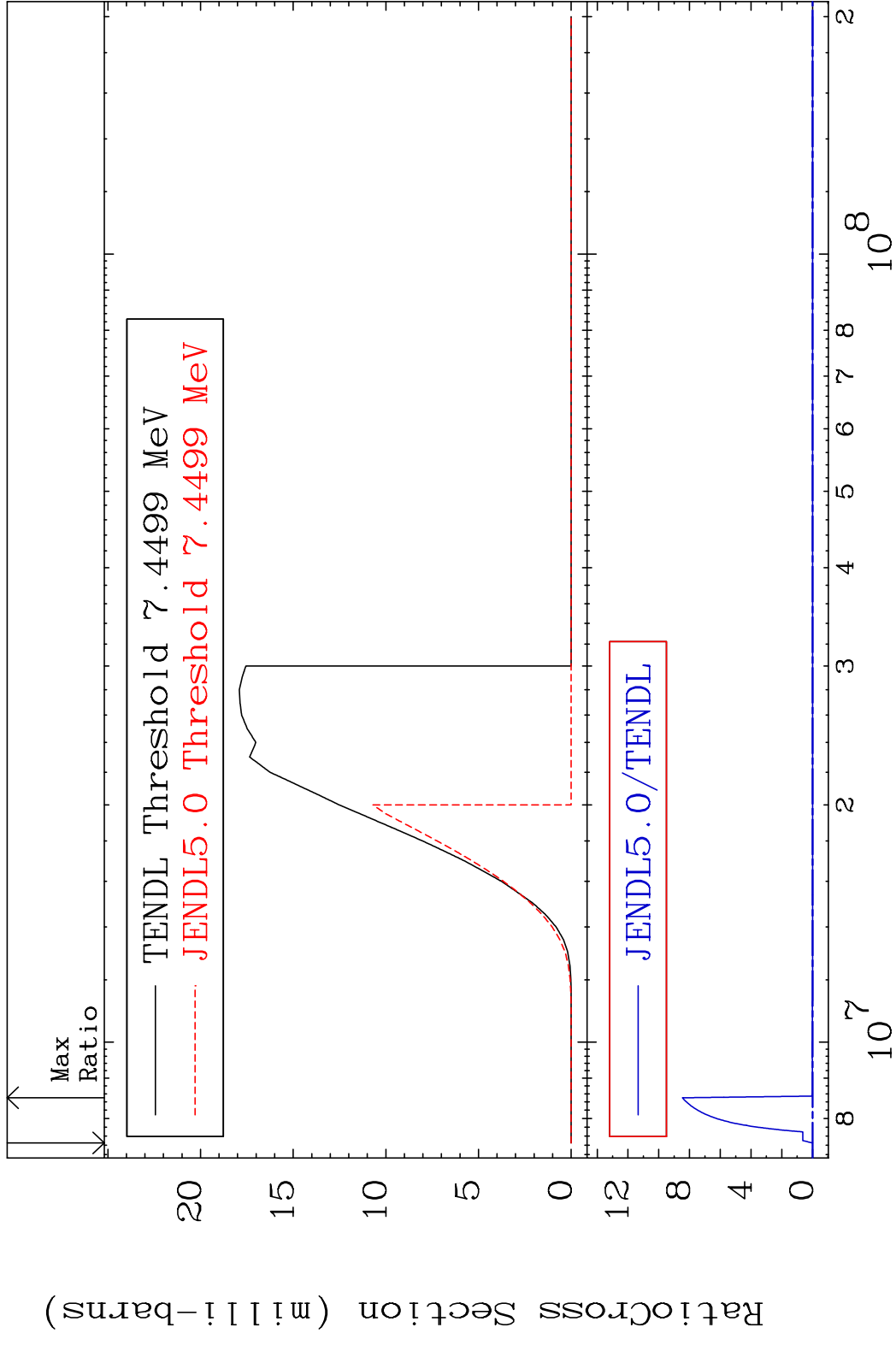


33

Incident Energy (eV)

40-Zr-93

MAT 4034 (n,d) 40-Zr-93
 Cross Section -100.0 To 9999. %



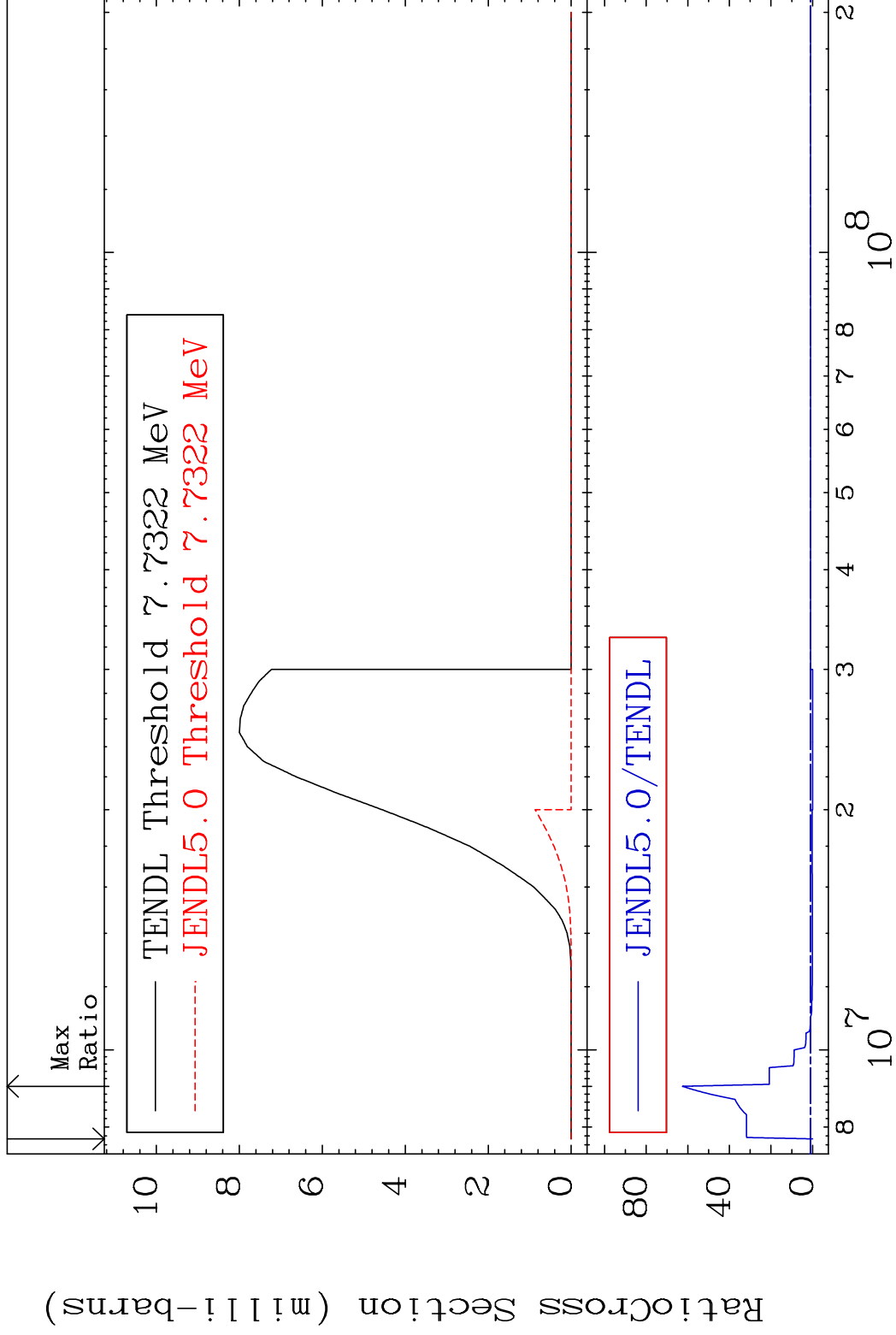
34 40-Zr-93

MAT 4034

(n, t)

40-Zr-93

Cross Section -100.0 To 6162. %



35

Incident Energy (eV)

40-Zr-93

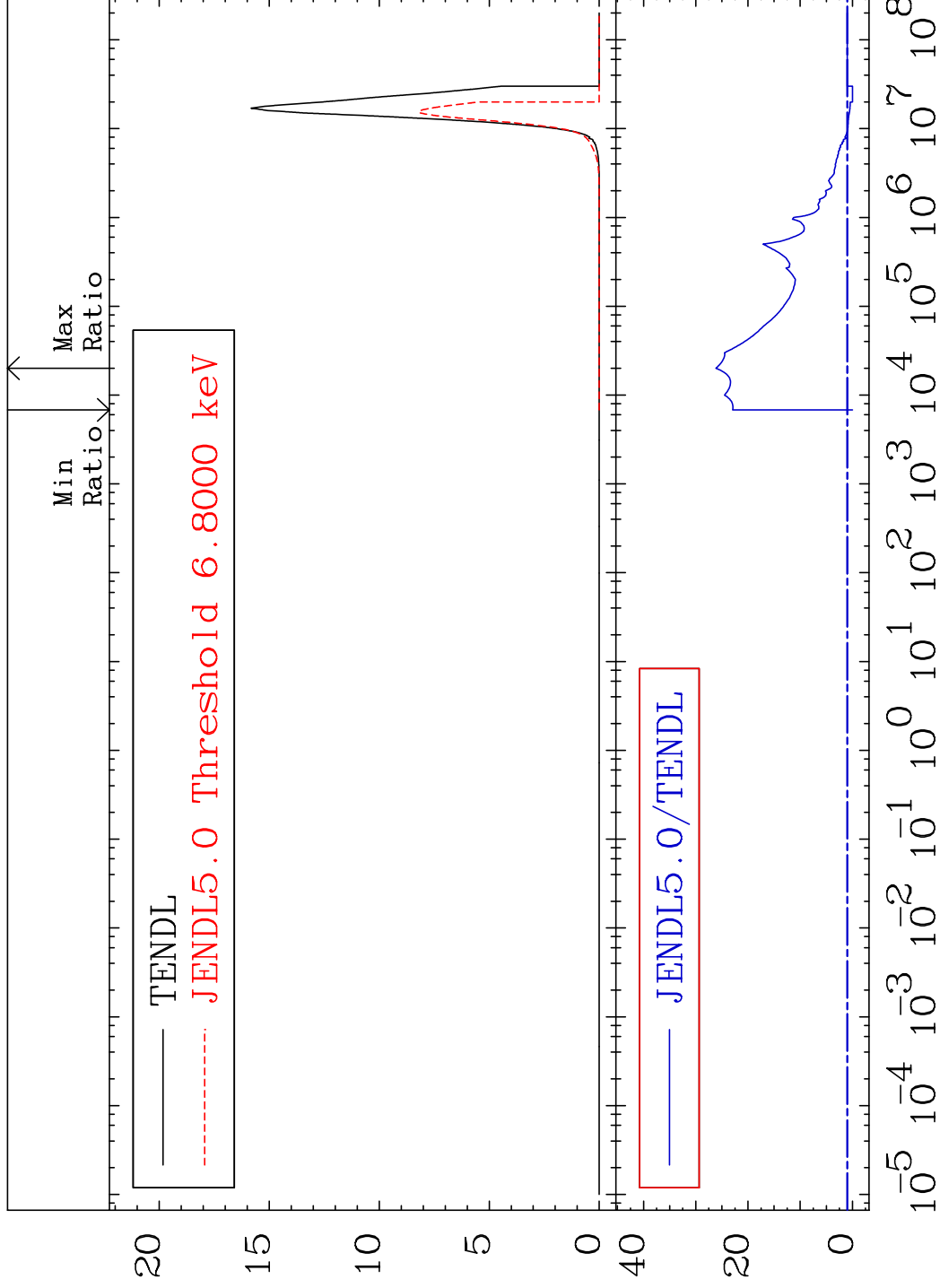
MAT 4034

(n, α)

40-Zr-93

Cross Section -100.0 To 2515. %

RatioCross Section (milli-barns)

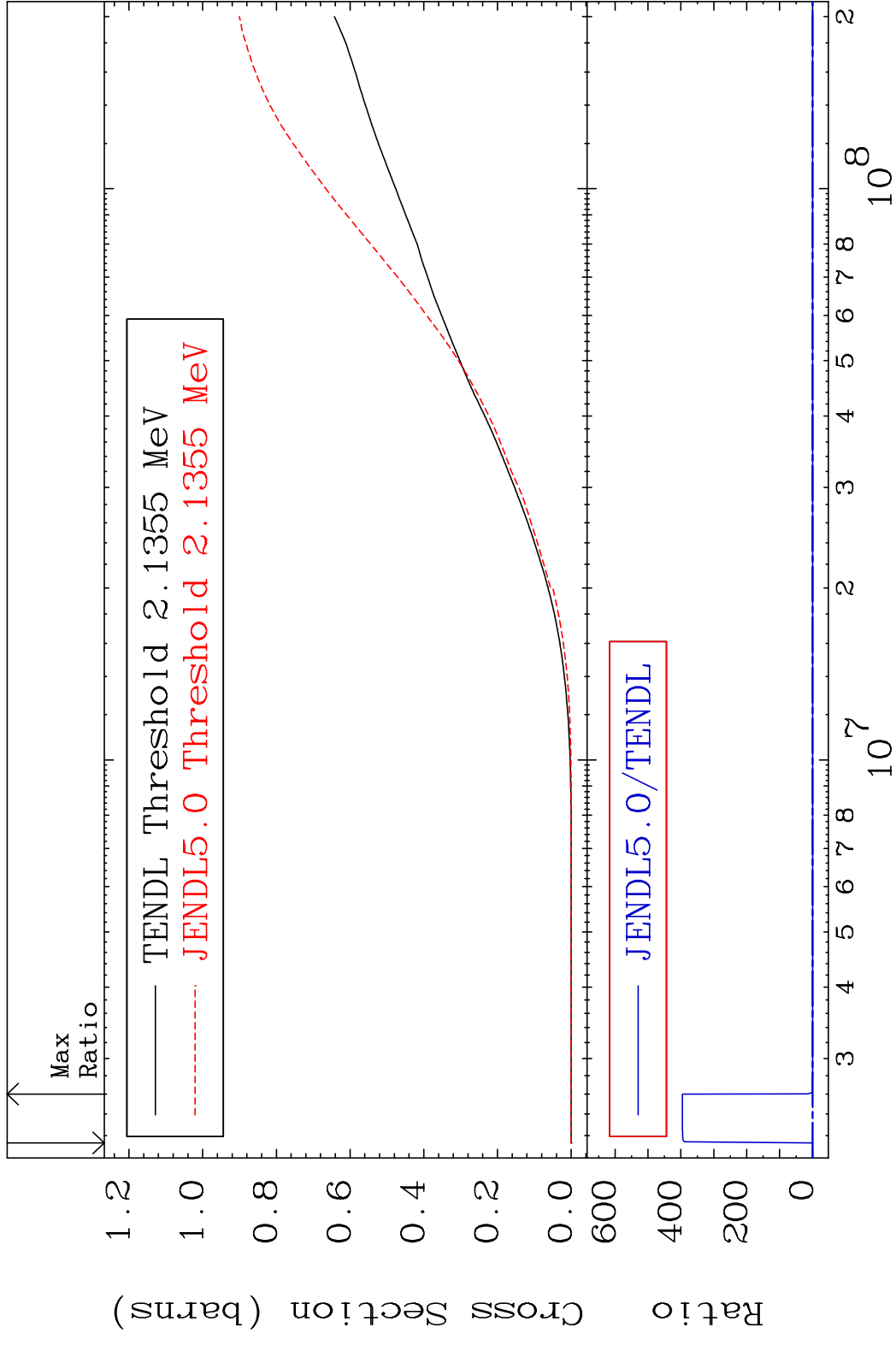


36

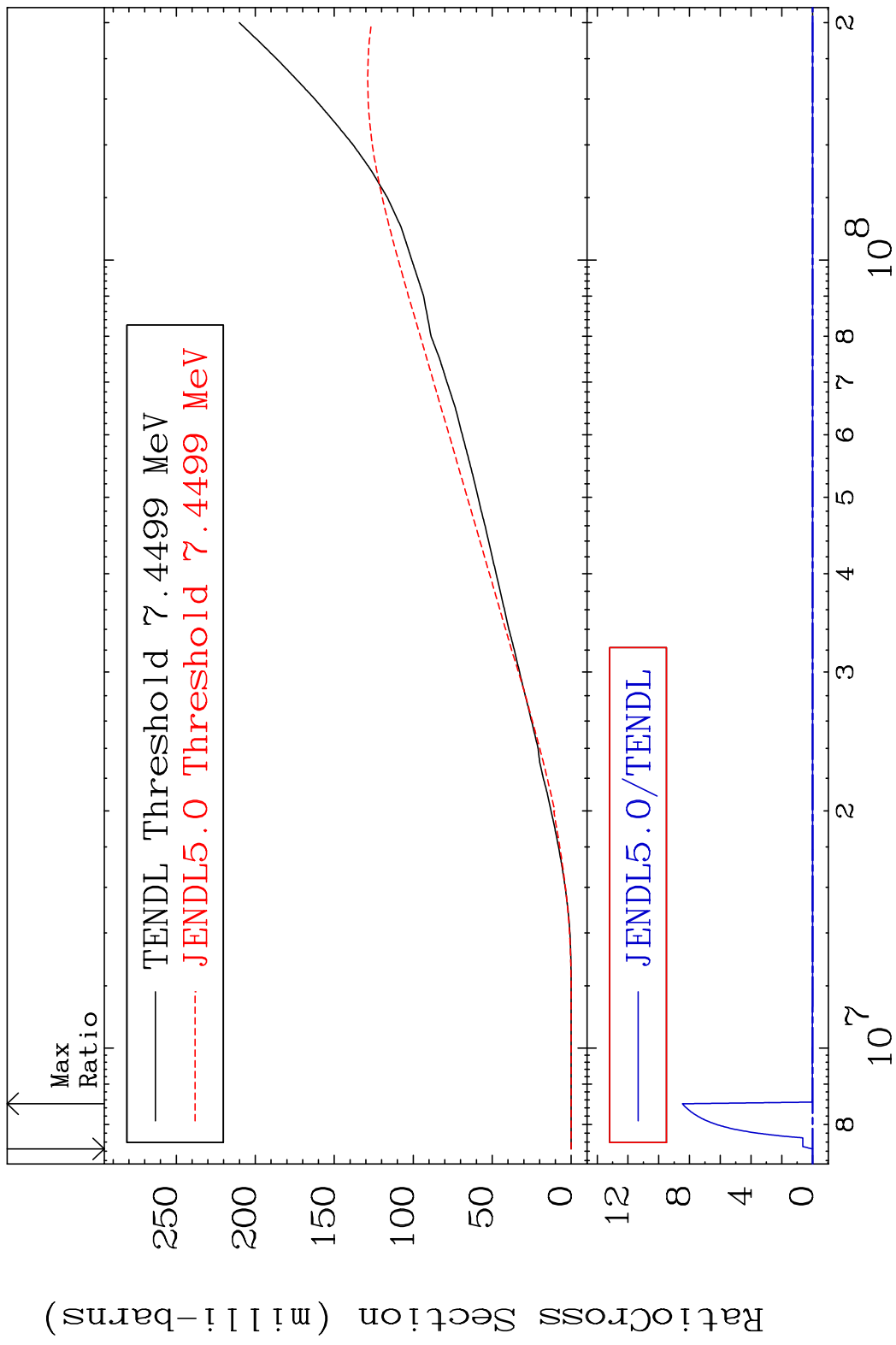
Incident Energy (eV)

40-Zr-93

MAT 4034 Hydrogen Production 40-Zr-93
 Cross Section -100.0 To 9999. %

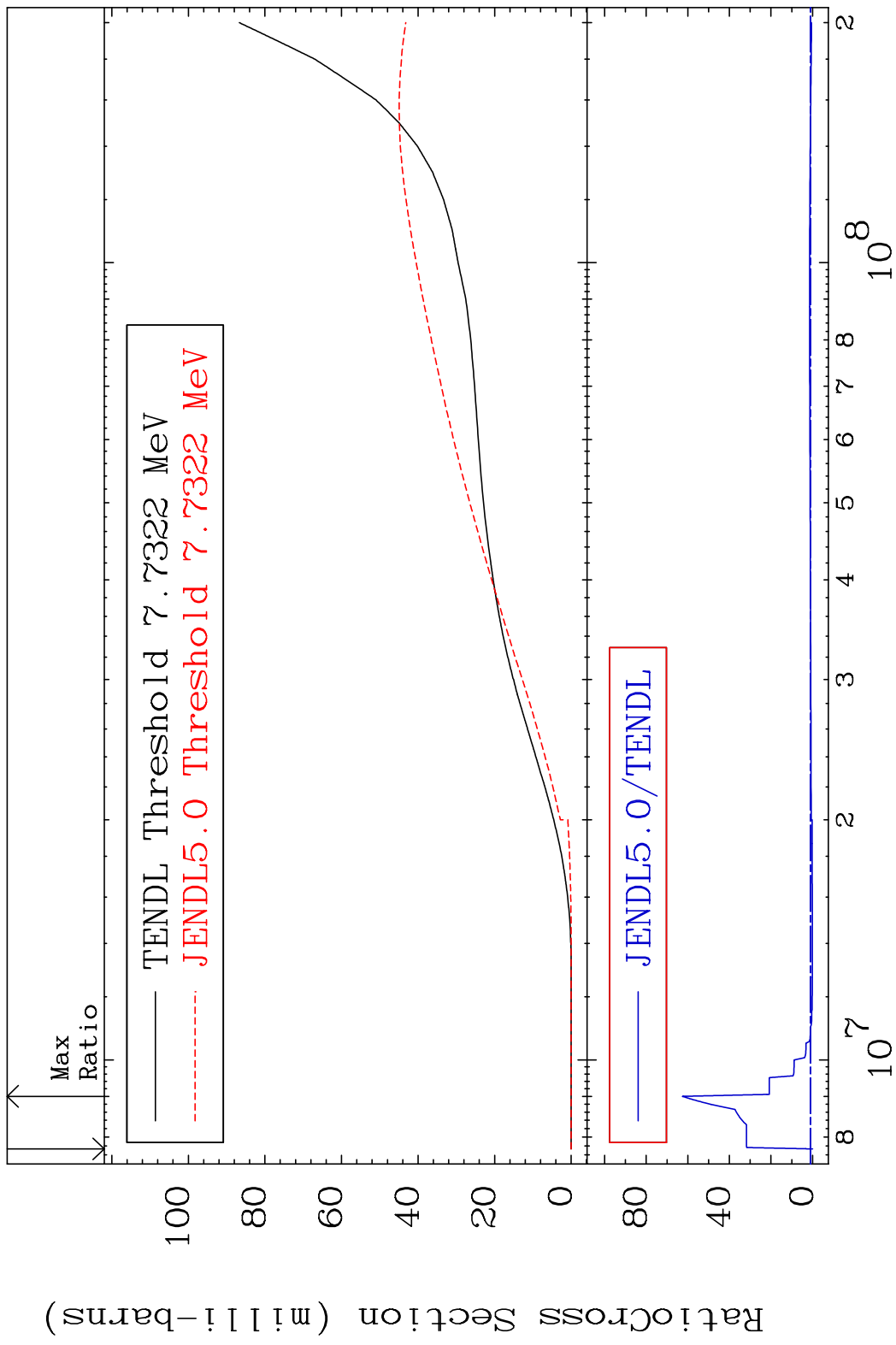


MAT 4034 Deuterium Production 40-Zr-93
 Cross Section -100.0 To 9999. %



38 40-Zr-93

MAT 4034 Tritium Production 40-Zr-93
 Cross Section -100.0 To 6162. %

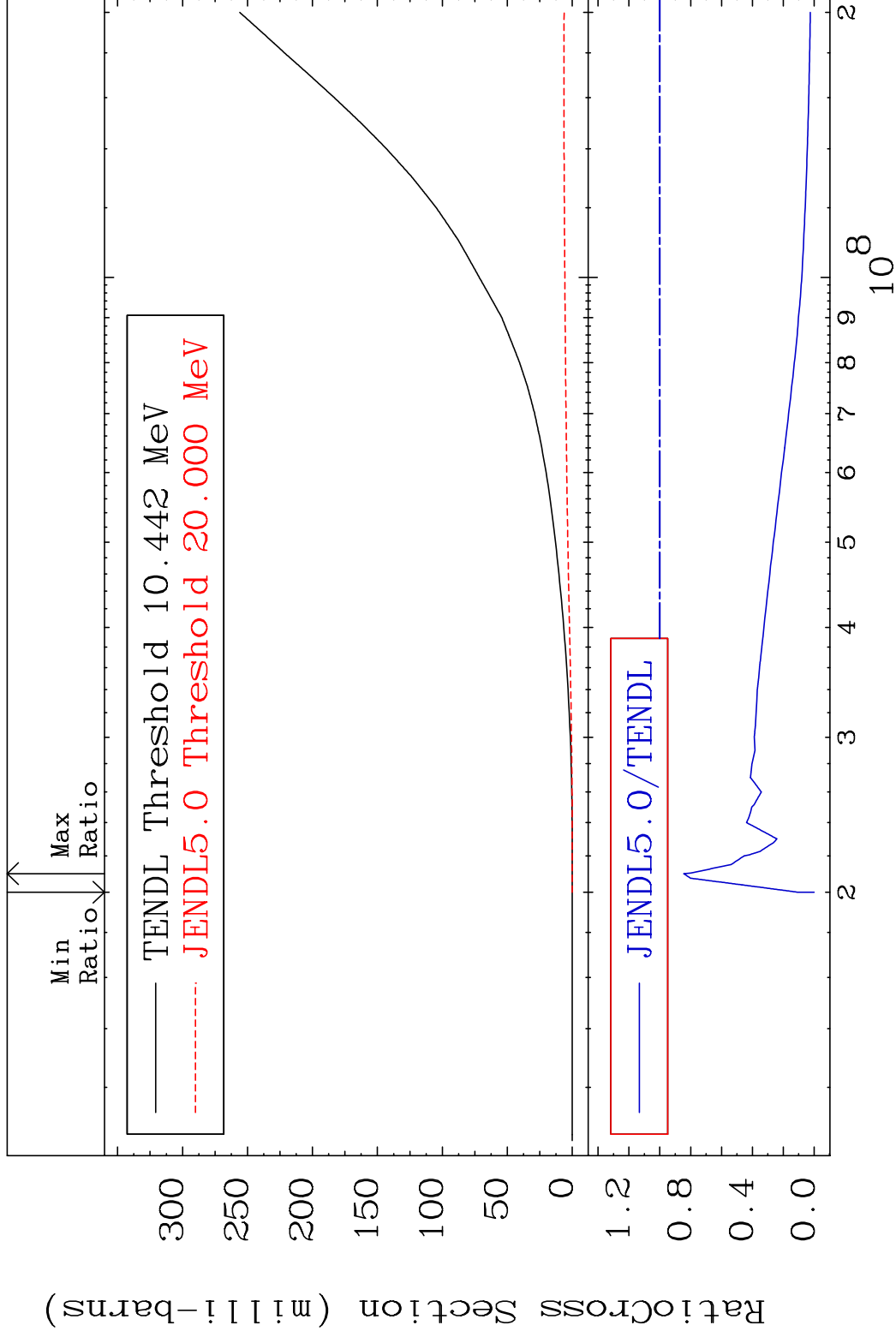


MAT 4034

He-3 Production

40-Zr-93

Cross Section -100.0 To -15.45%

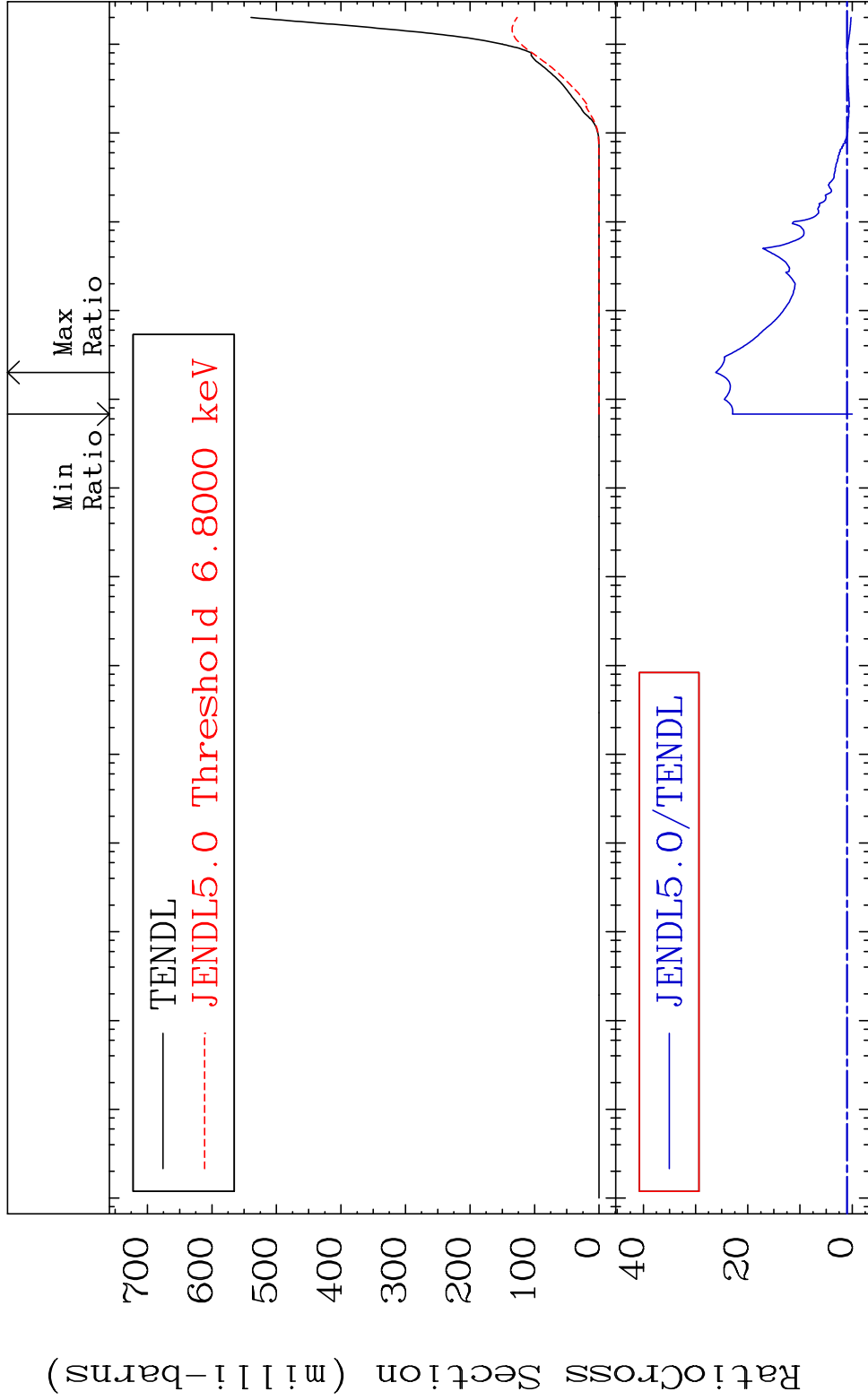


MAT 4034

He-4 Production

40-Zr-93

Cross Section -100.0 To 2515. %

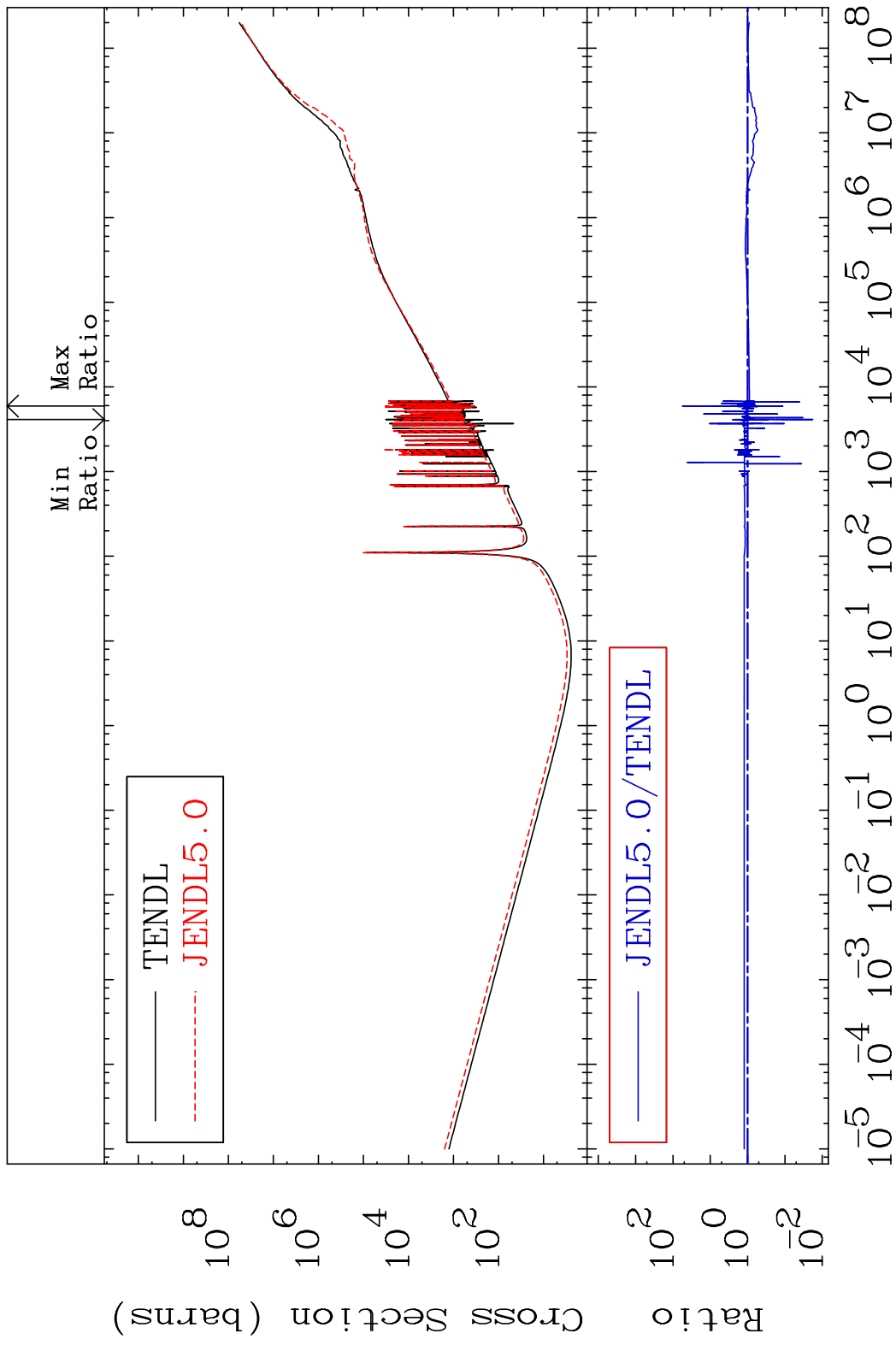


41

Incident Energy (eV)

40-Zr-93

MAT 4034 Kerma total (eV-barns) 40-Zr-93
Cross Section -98.18 To 5495. %



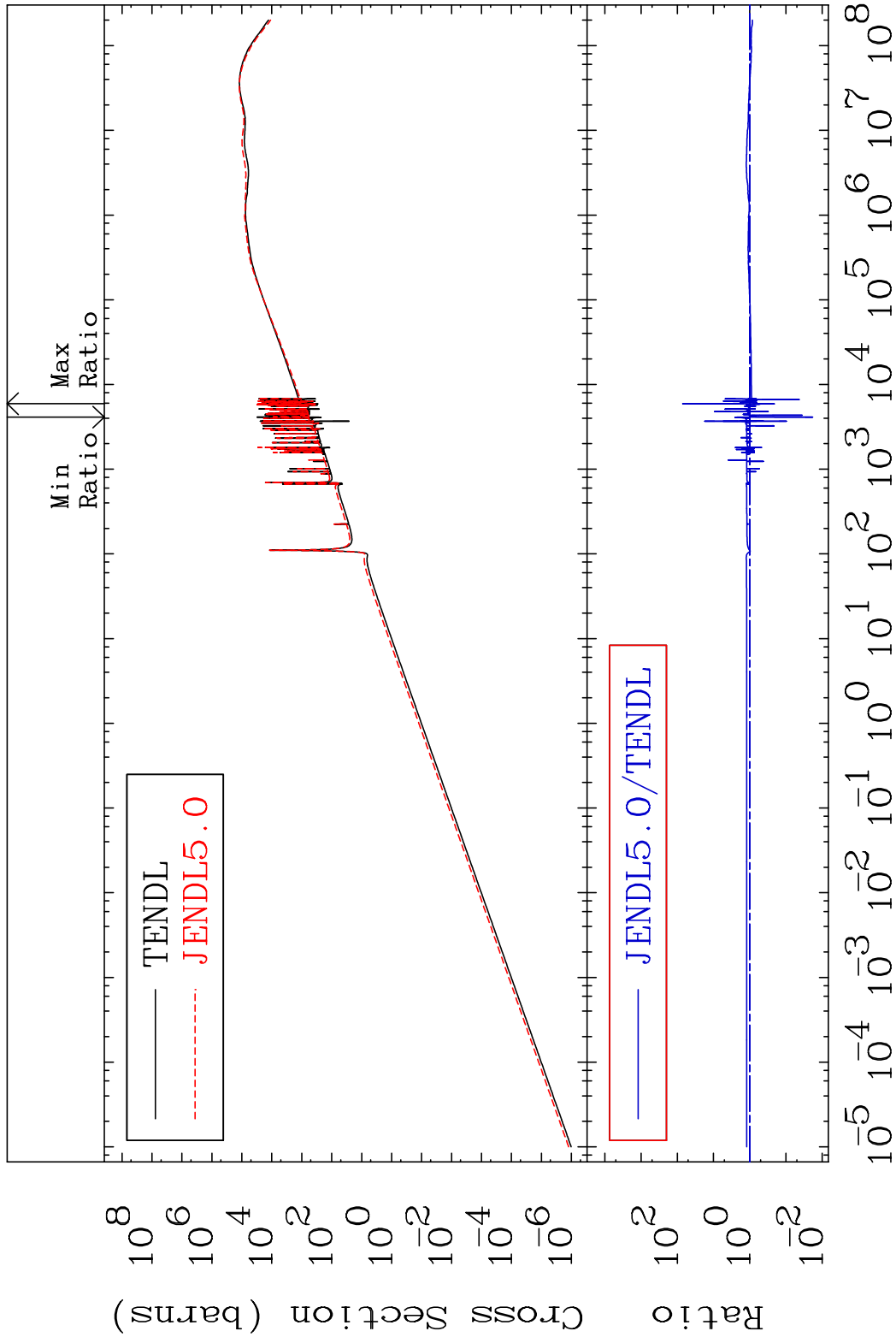
42 Incident Energy (eV) 40-Zr-93

MAT 4034

Kerma elastic

40-Zr-93

Cross Section -98.16 To 7149. %

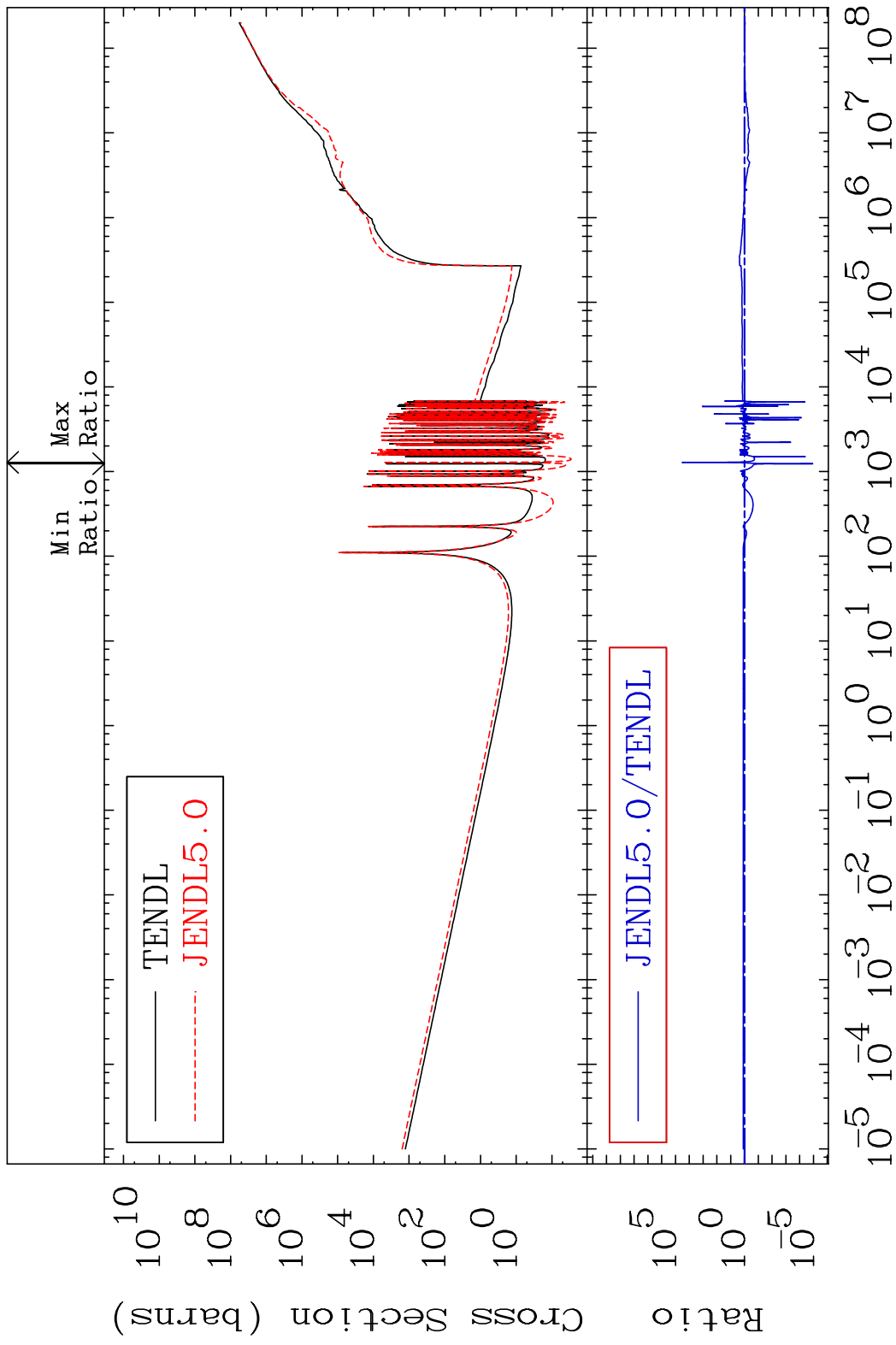


43

Incident Energy (eV)

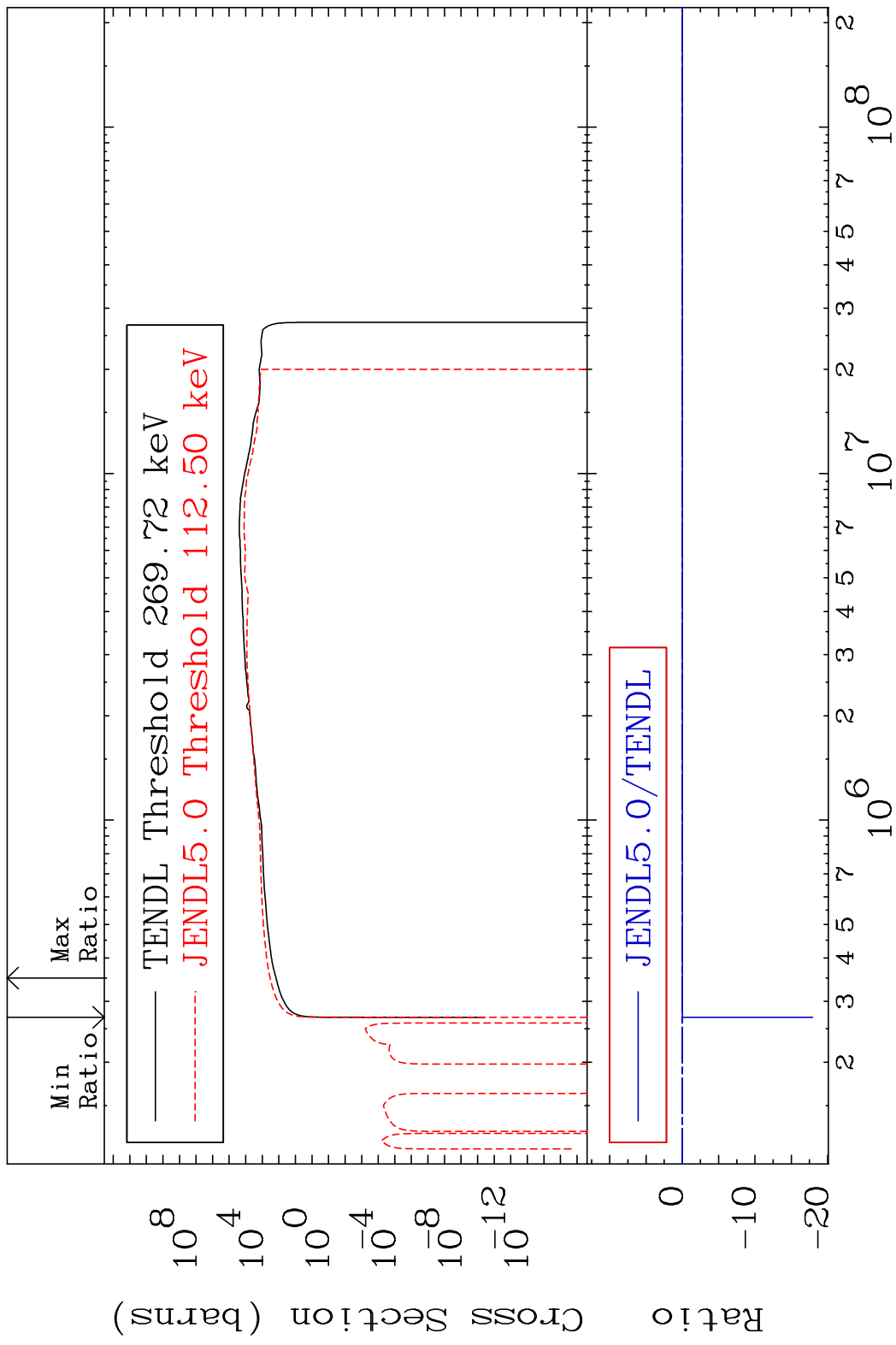
40-Zr-93

MAT 4034 Kerma non-elastic (all but mt2) 40-Zr-93
 Cross Section -100.0 To 9999. %

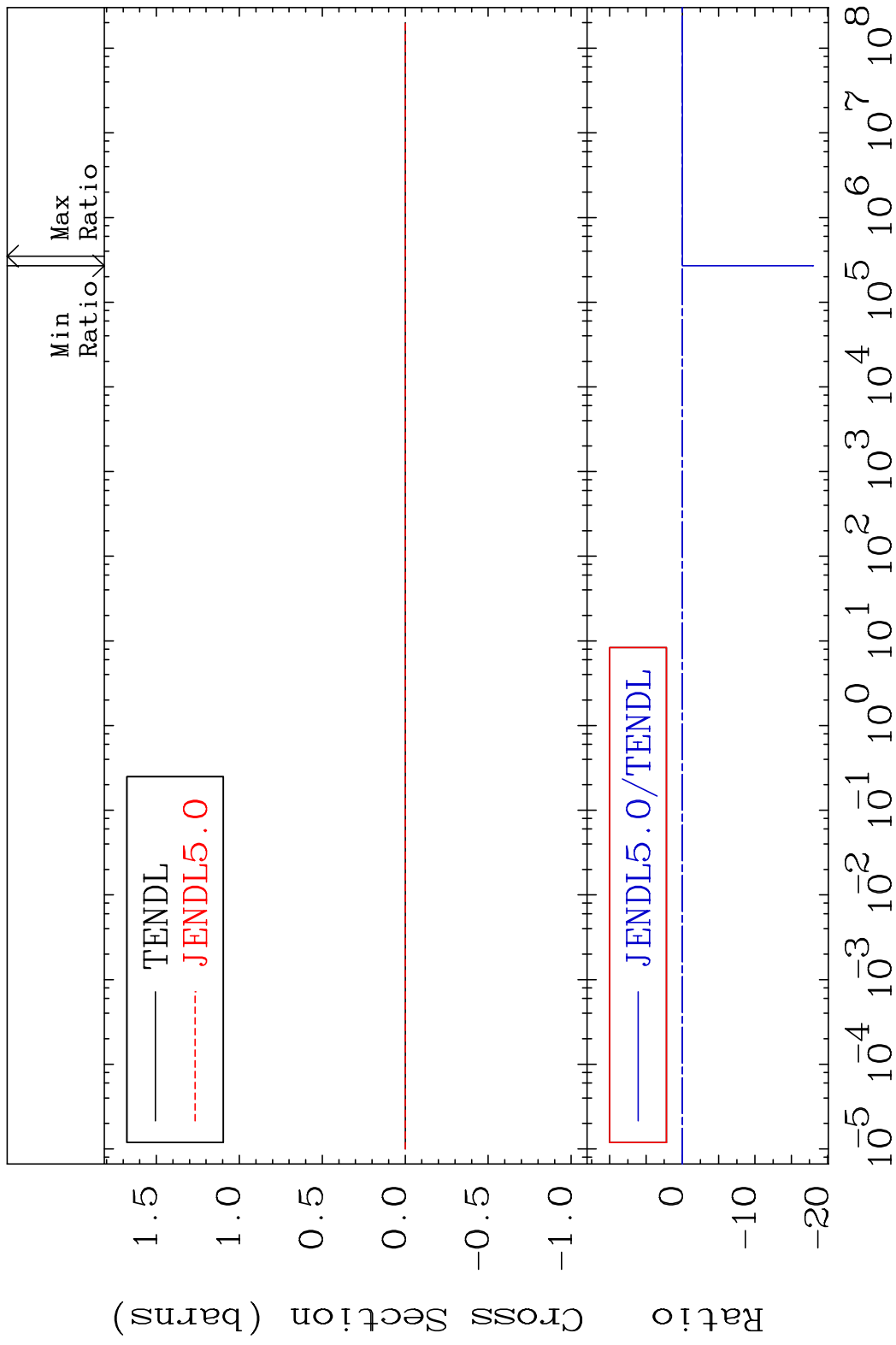


44 Incident Energy (eV) 40-Zr-93

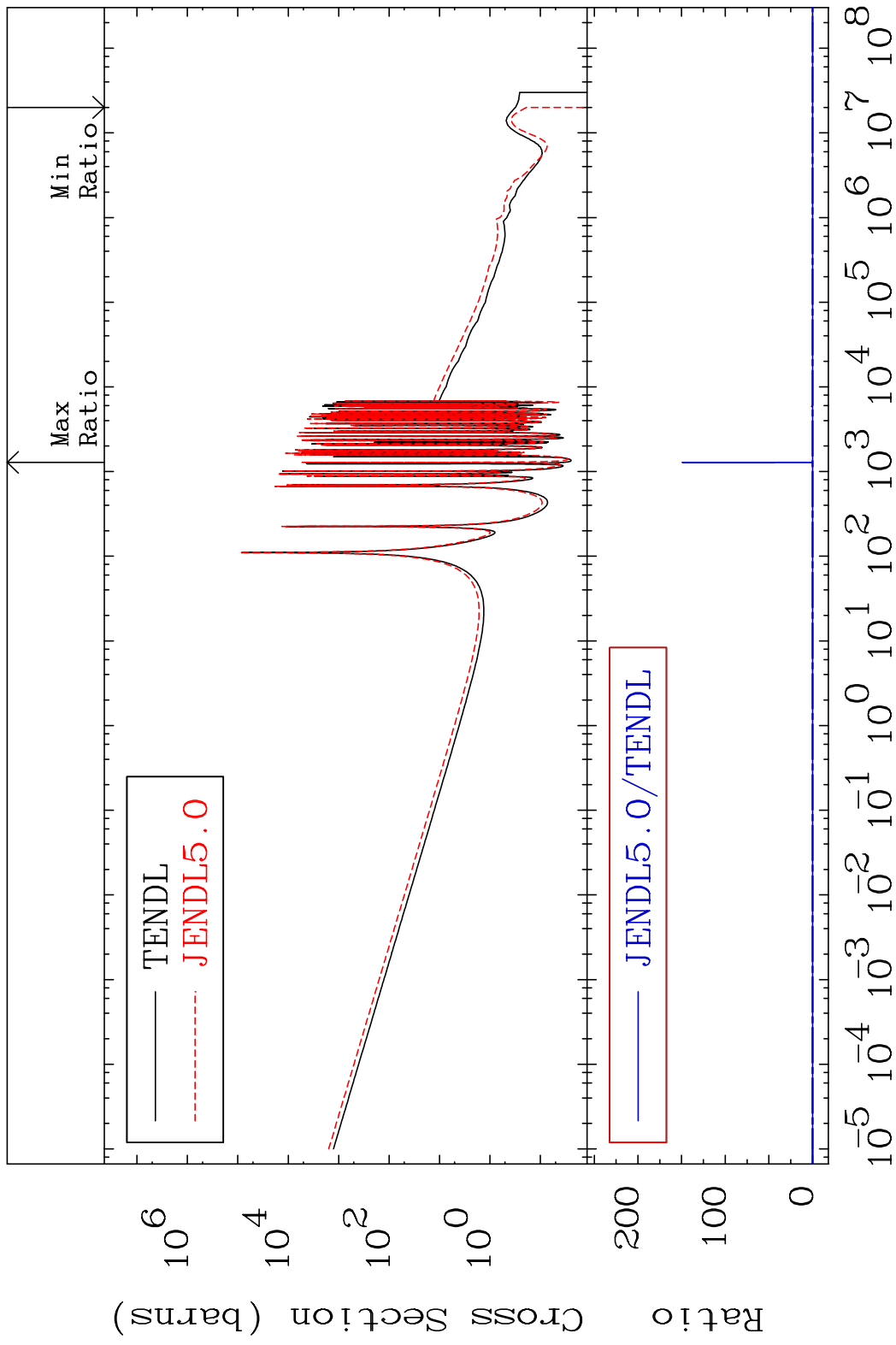
MAT 4034 Kerma inelastic (mt51-91) 40-Zr-93
 Cross Section -9999. To 133.7 %



MAT 4034 Kerma fission (mt18 or mt19-20-21-38) 40-Zr-93
 Cross Section -9999. To 133.7 %

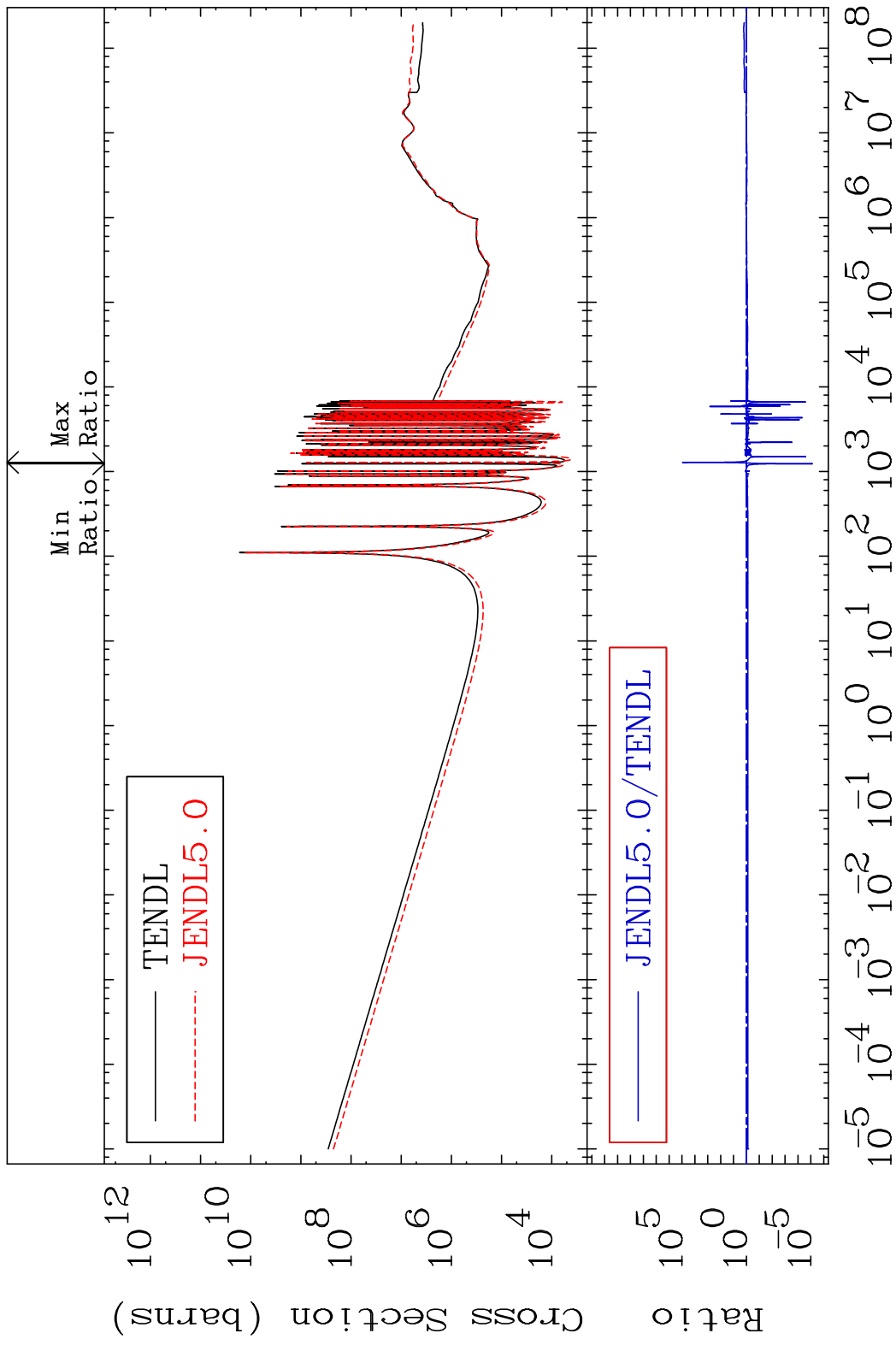


MAT 4034 Kerma capture (mt102) 40-Zr-93
 Cross Section -100.0 To 9999. %

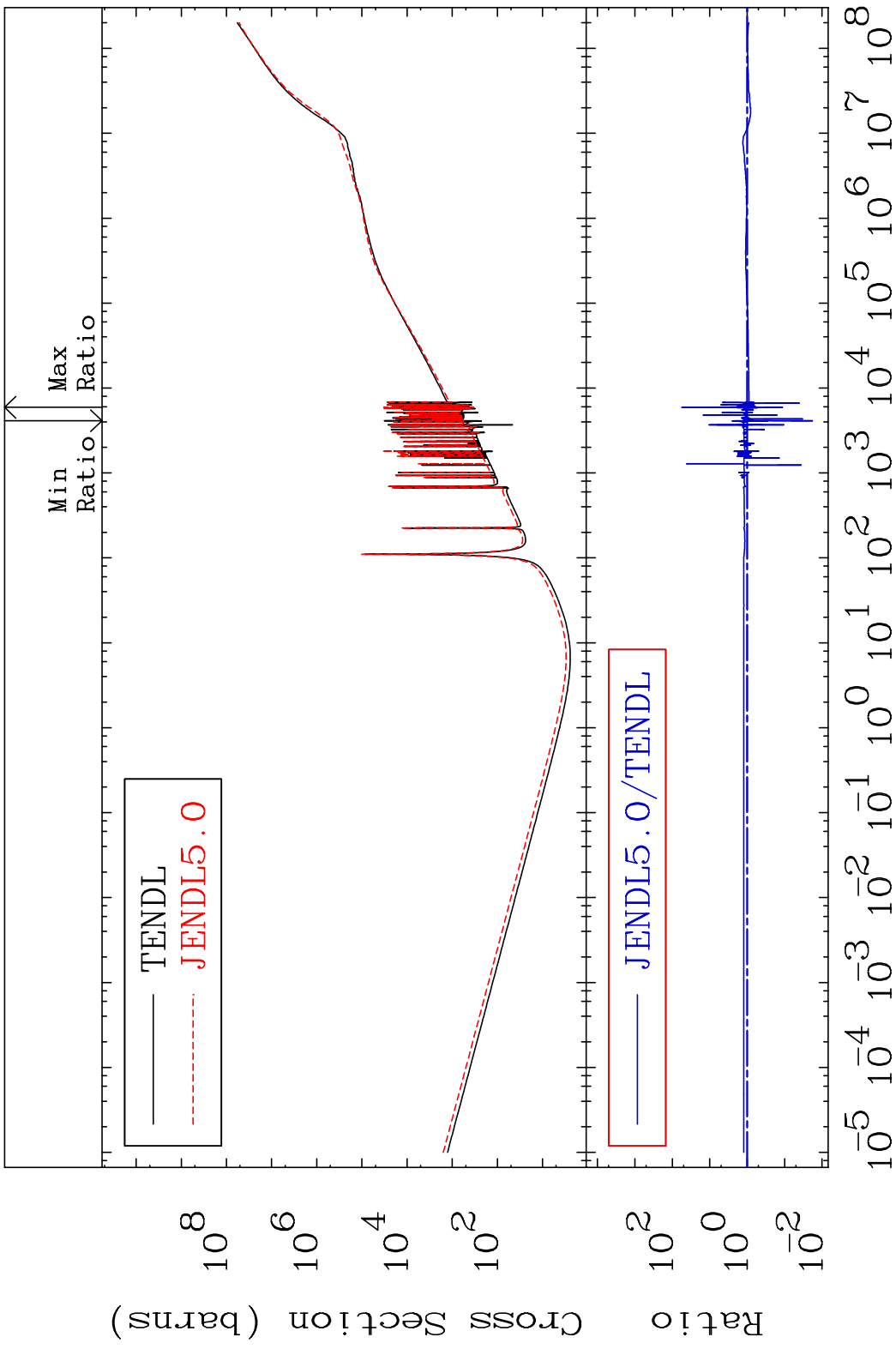


47 Incident Energy (eV) 40-Zr-93

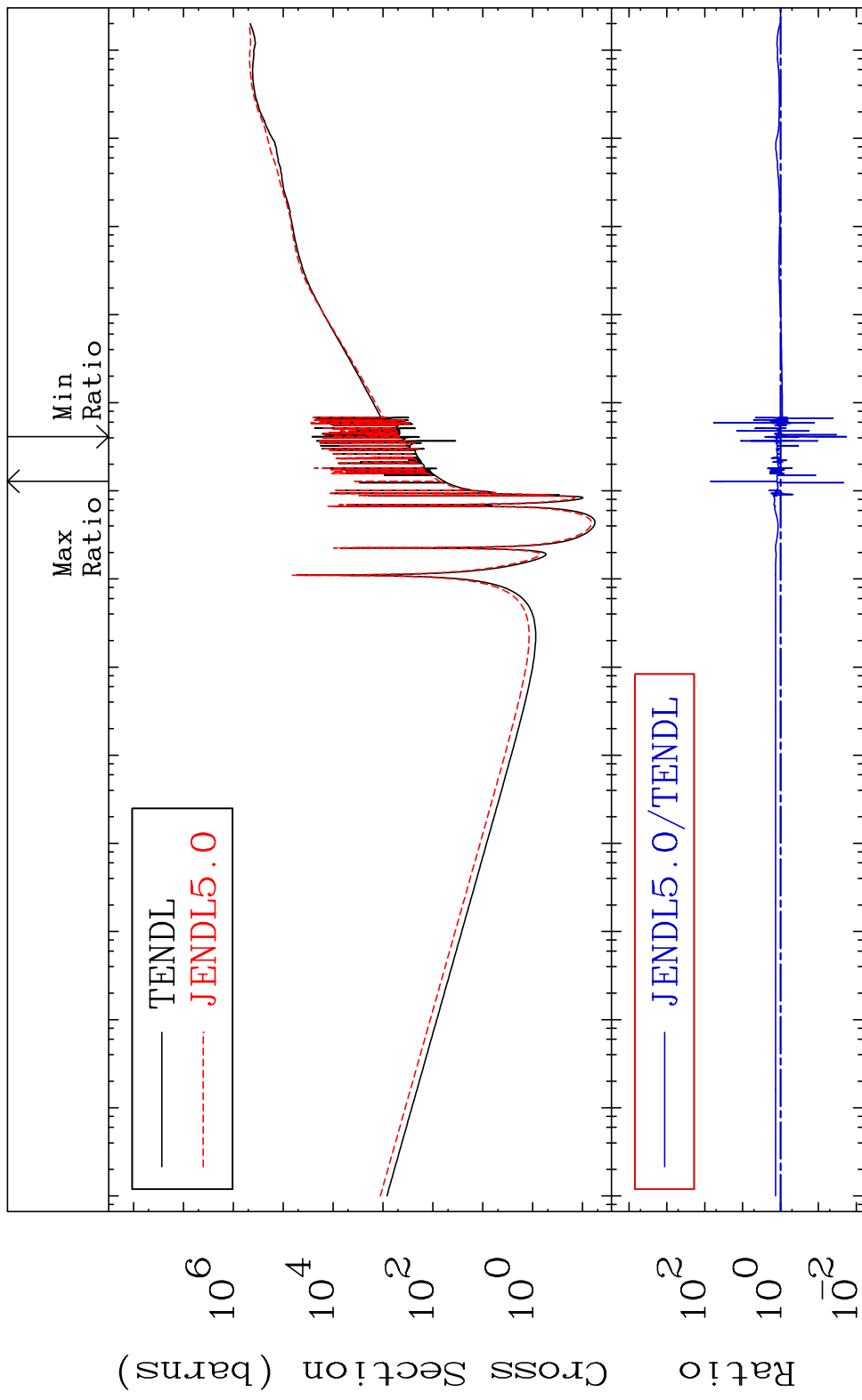
MAT 4034 Total photon (eV-barns) 40-Zr-93
Cross Section -100.0 To 9999. %



MAT 4034 Total kinematic kerma (high limit) 40-Zr-93
Cross Section -98.18 To 5495. %

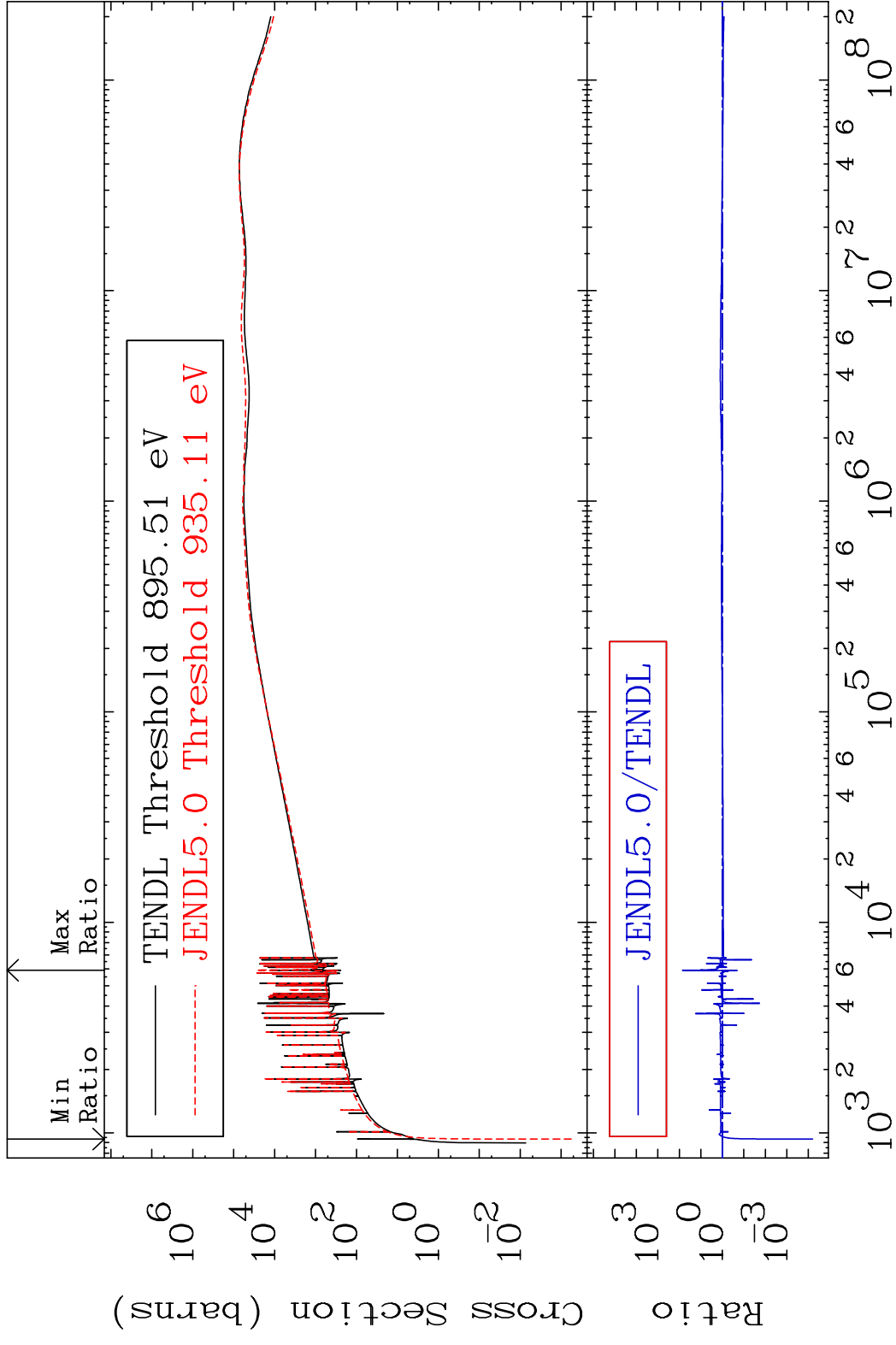


MAT 4034 Dpa total (eV-barns) 40-Zr-93
 Cross Section -98.17 To 6854. %

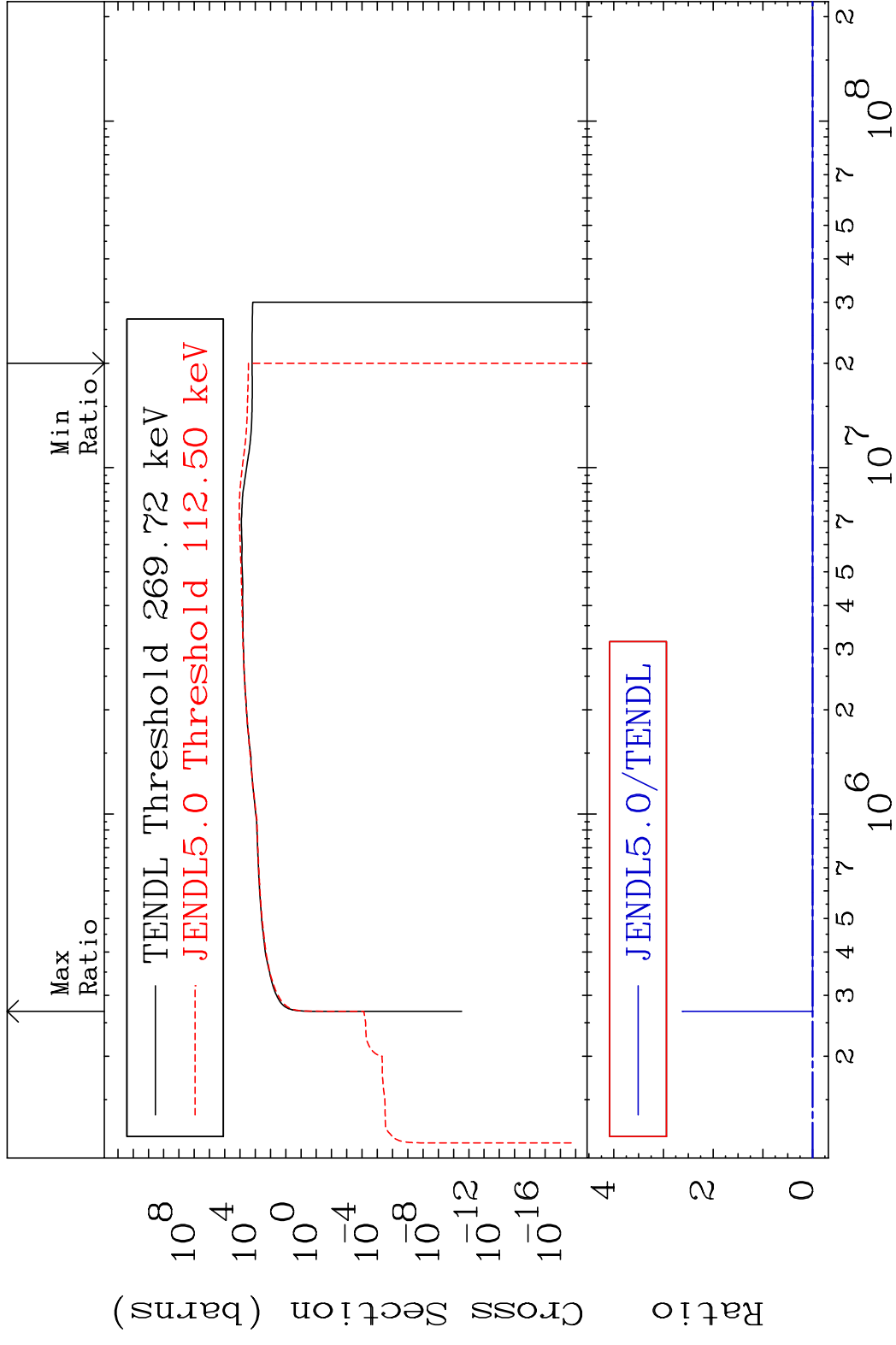


50 Incident Energy (eV) 40-Zr-93

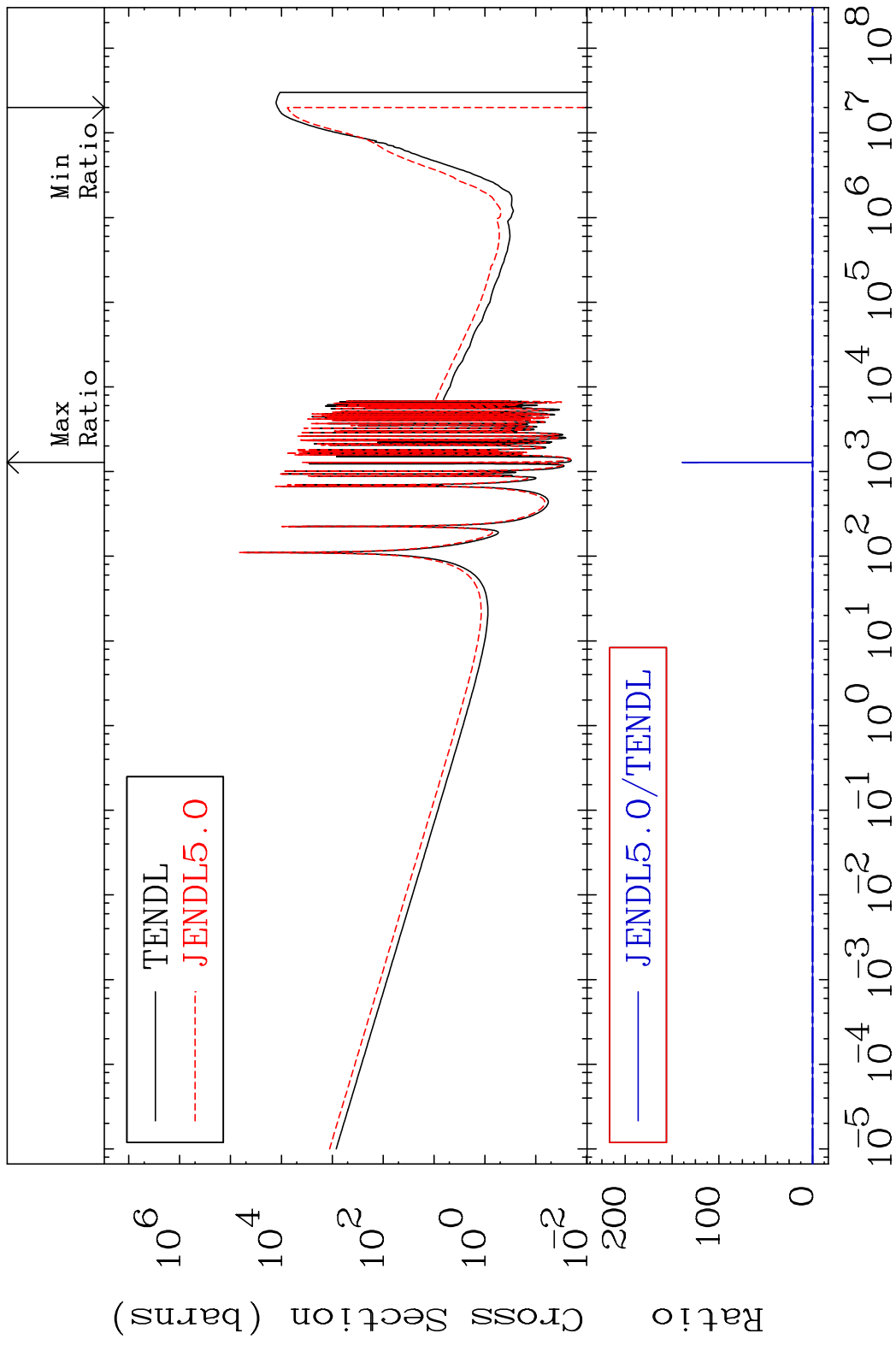
MAT 4034 Dpa elastic (mt2) 40-Zr-93
 Cross Section -99.99 To 7136. %



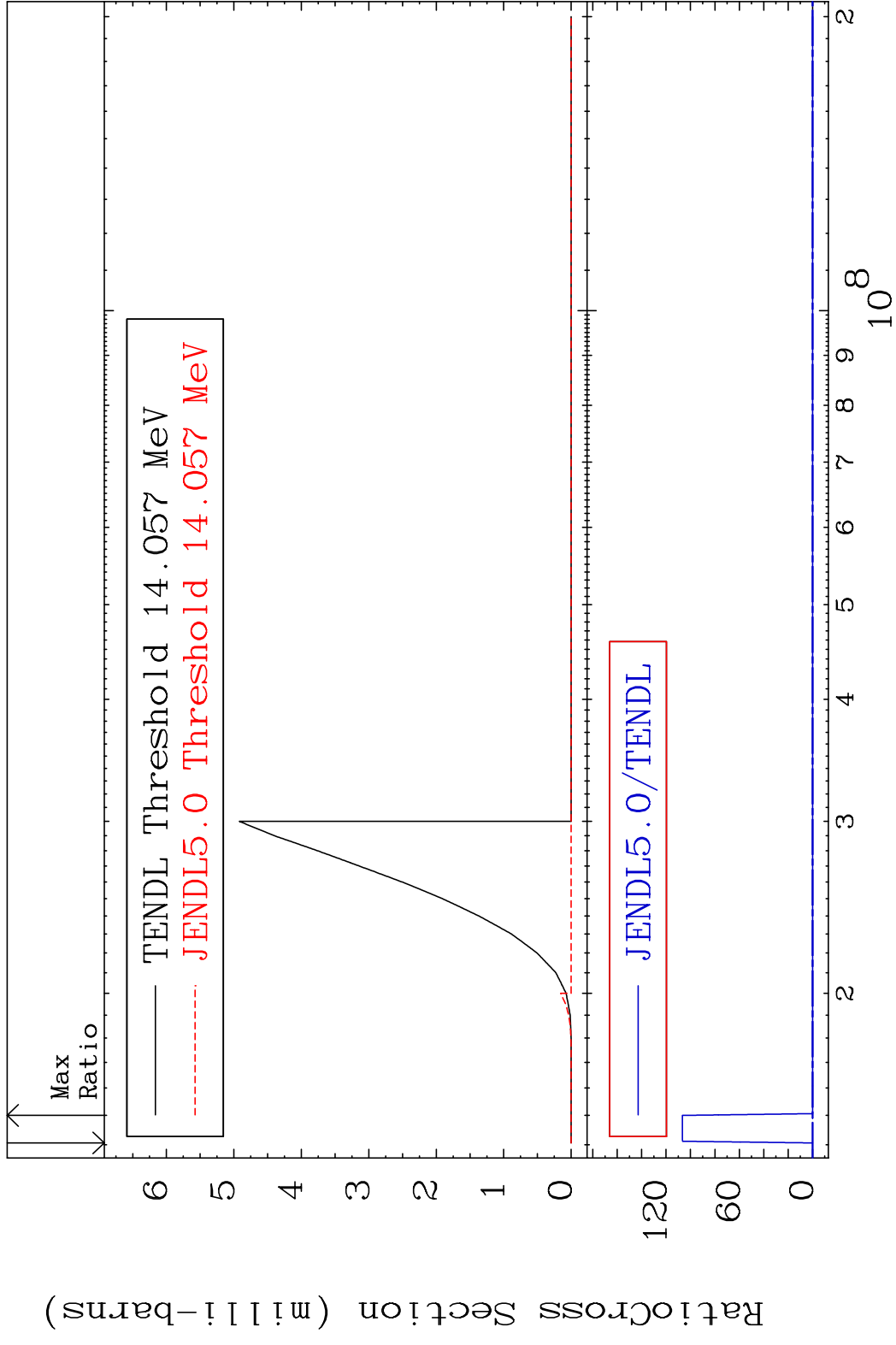
MAT 4034 Dpa inelastic (mt51-91) 40-Zr-93
 Cross Section -100.0 To 9999. %



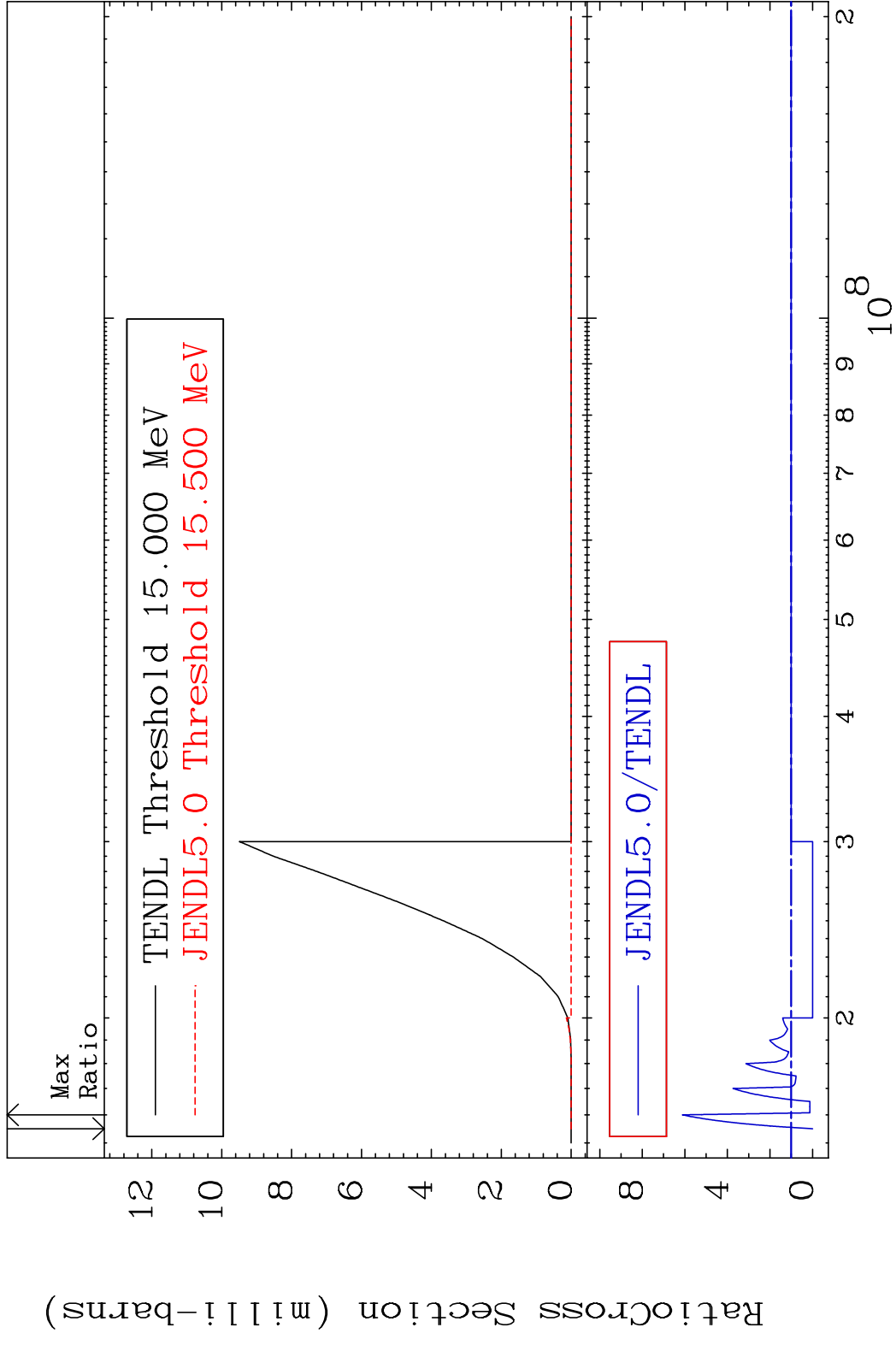
MAT 4034 Dpa disappearance (mt102 -120) 40-Zr-93
 Cross Section -100.0 To 9999. %



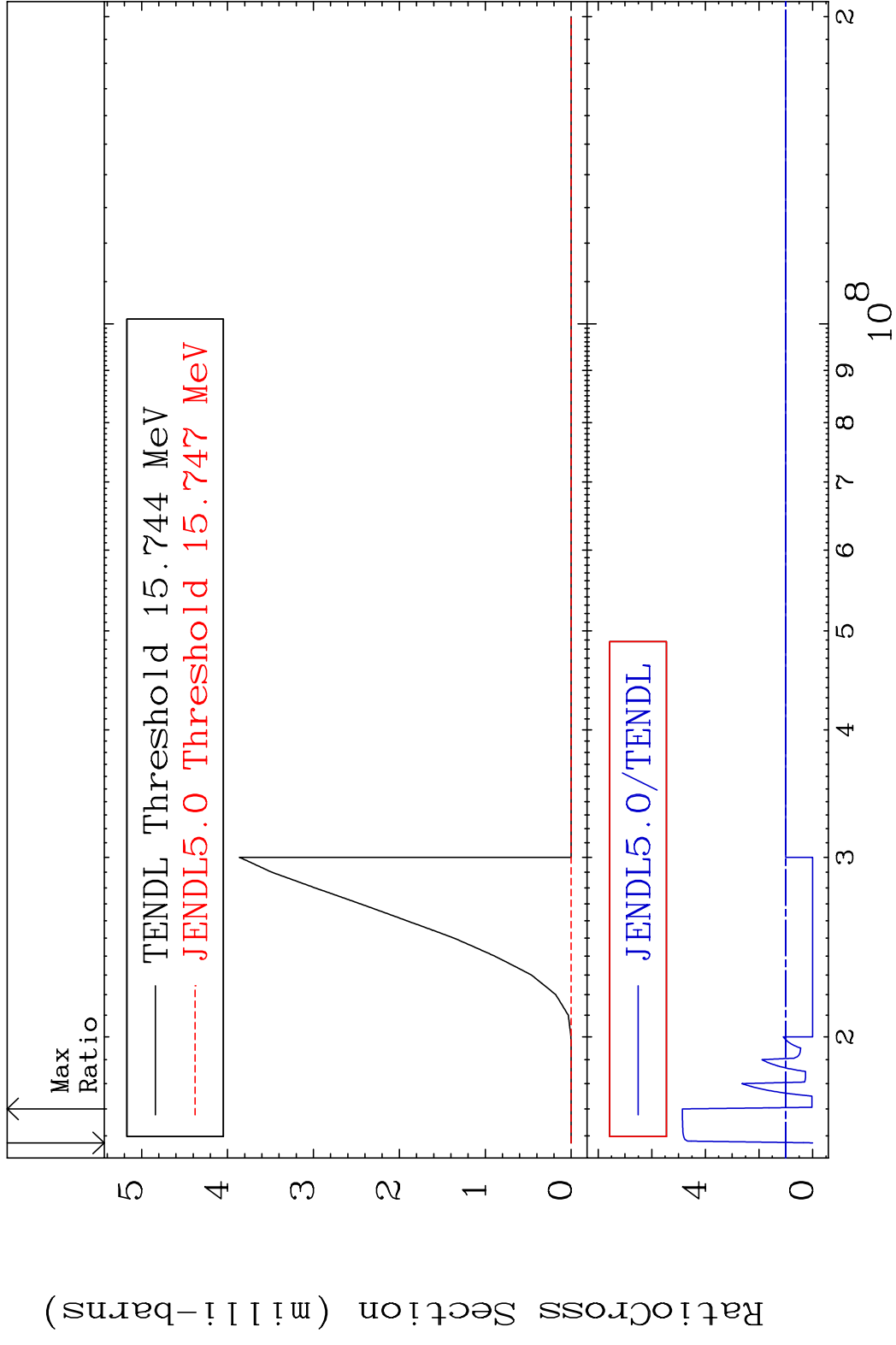
53 Incident Energy (eV) 40-Zr-93



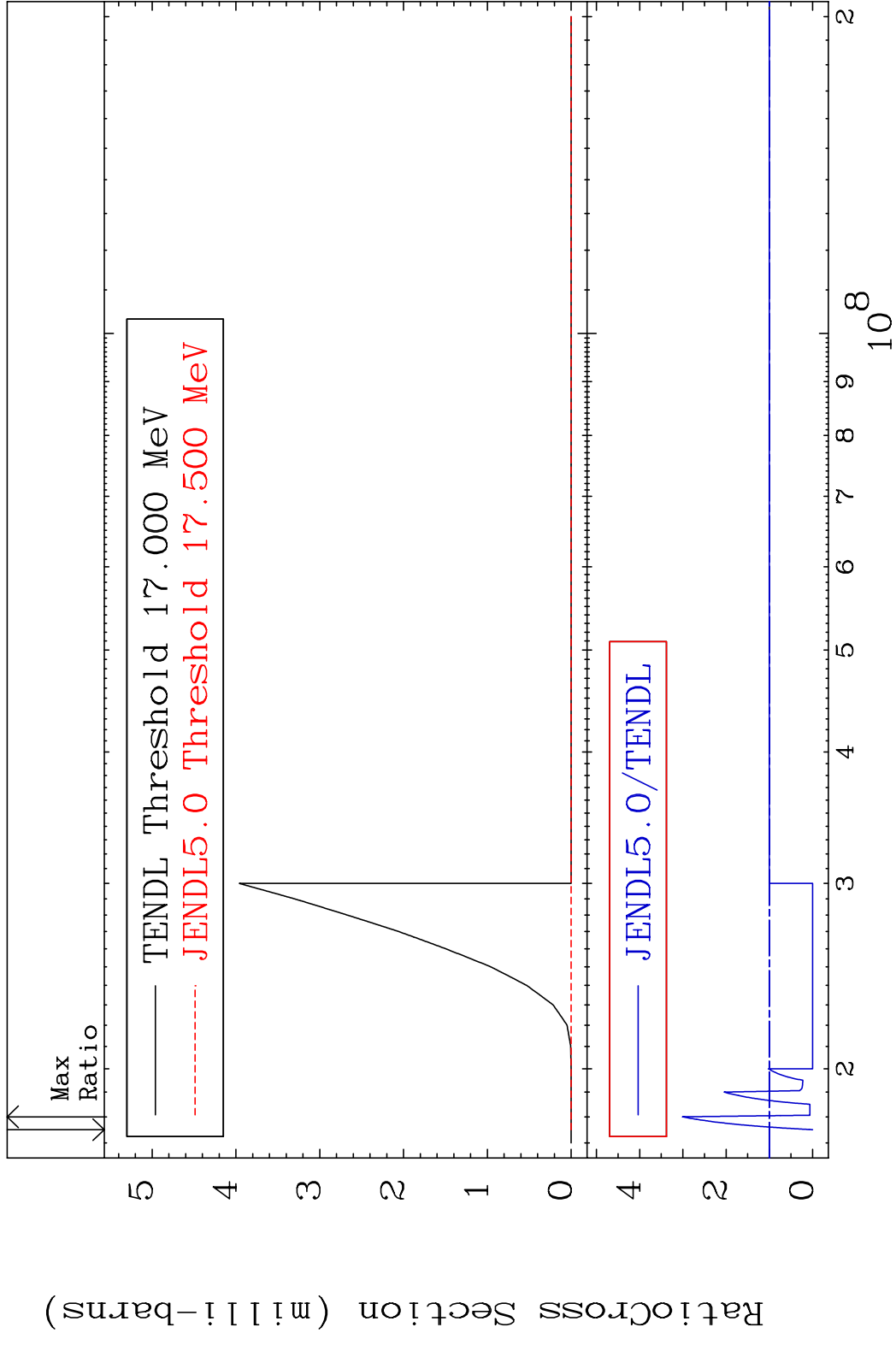
MAT 4034 (n, n') d:39-Y -91m1 40-Zr-93
 Radionuclide Production Cross Section 180.0 mb 511.8 %



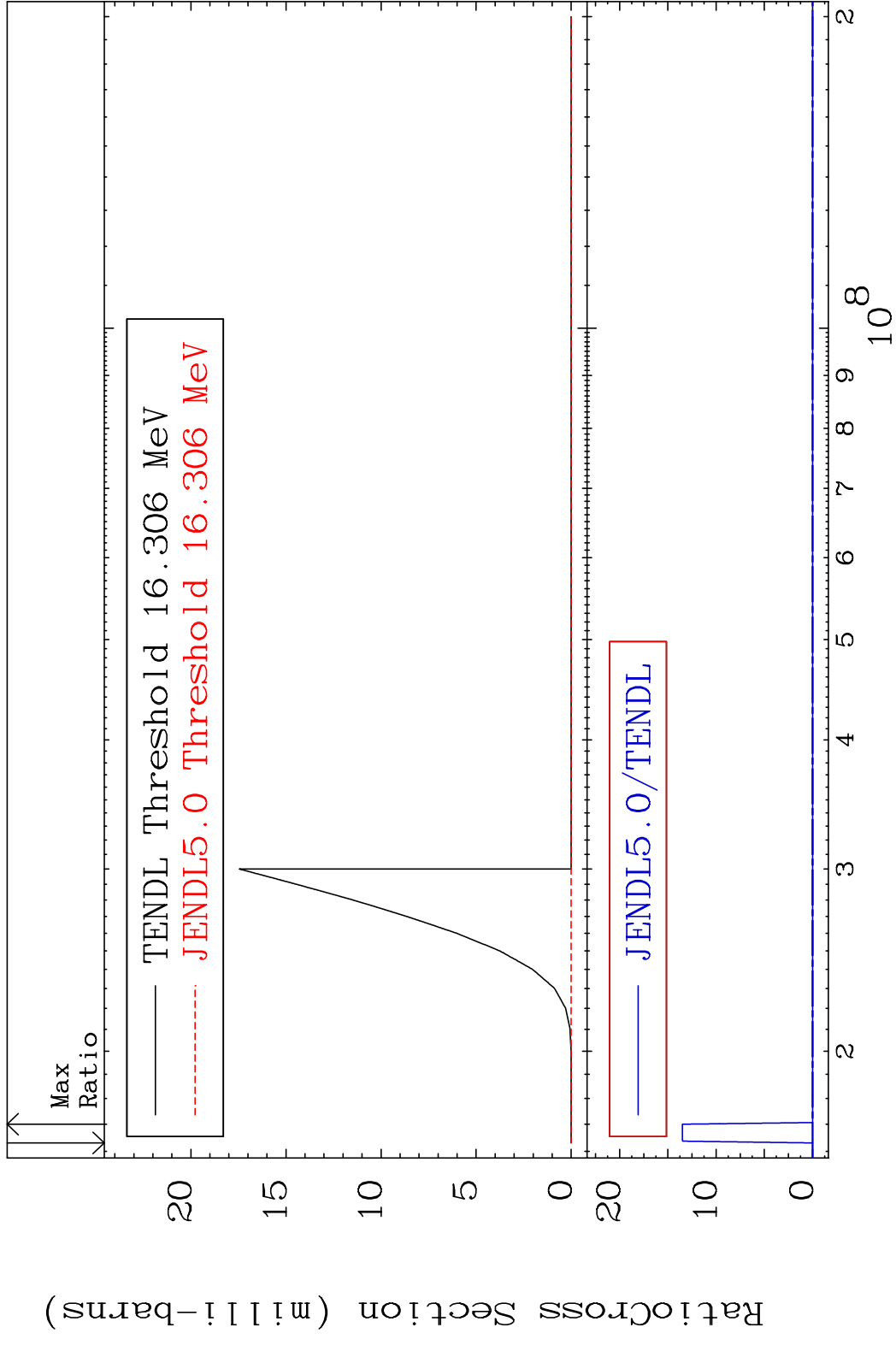
MAT 4034 (n, n') t:39-Y -90g 40-Zr-93
 Radionuclide Production Cross Section 180.0 mb 385.8 %



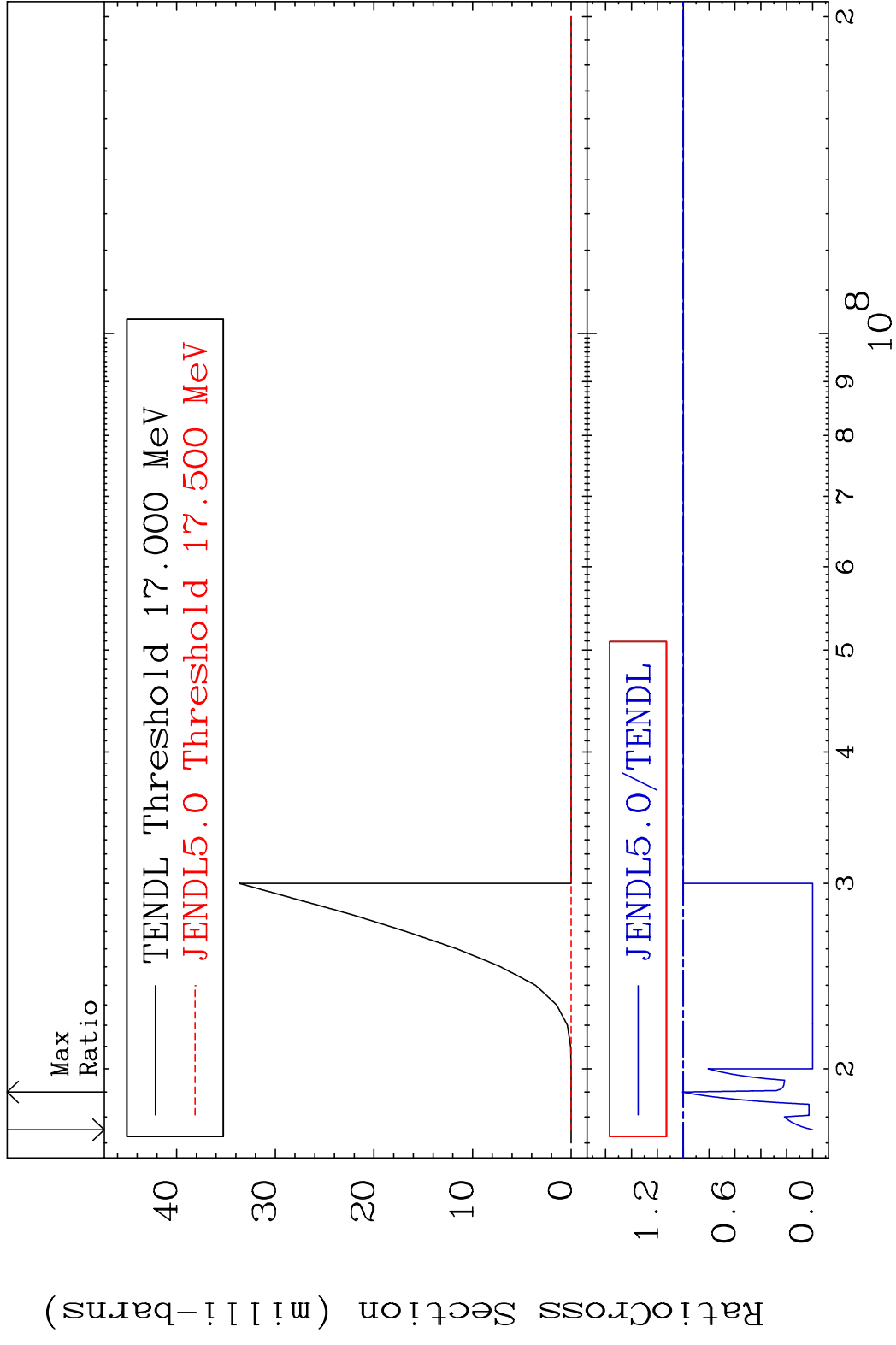
MAT 4034 (n, n') t:39-Y -90m2 40-Zr-93
 Radionuclide Production Cross Section Ratio 201.2 %



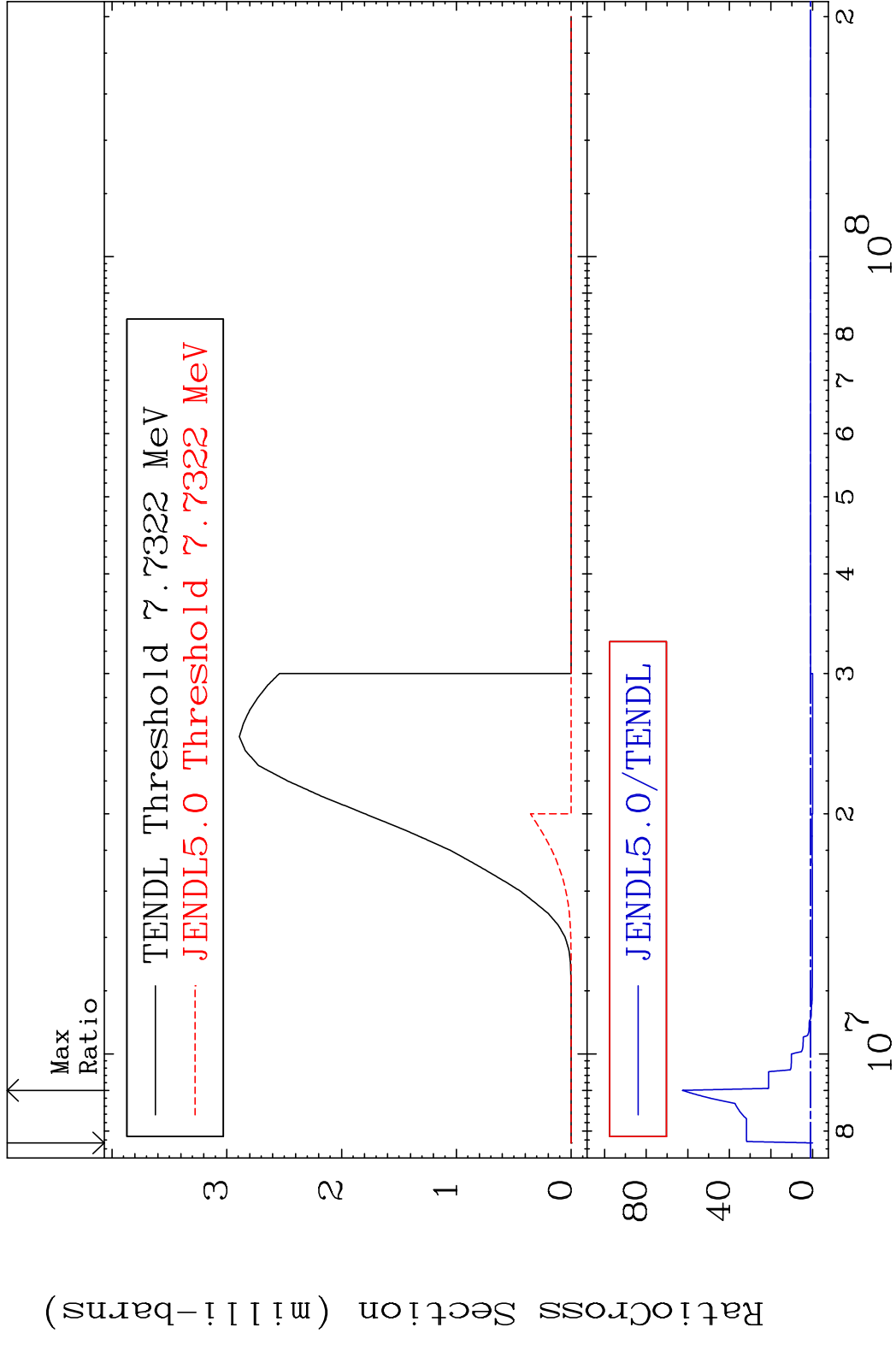
MAT 4034 (n,2n) p:39-Y -91g 40-Zr-93
 Radionuclide Production Cross Section 1800 to 9999. %



MAT 4034 (n,2n) p:39-Y -91m1 40-Zr-93
 Radionuclide Production Cross Section Ratio 0.647 %



MAT 4034 (n, t):39-Y -91g 40-Zr-93
 Radionuclide Production Cross Section 6163. %



60 Incident Energy (eV) 40-Zr-93

MAT 4034 (n,t):39-Y -91m1 40-Zr-93
 Radionuclide Production Cross Section Ratio 0.000 %

