

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

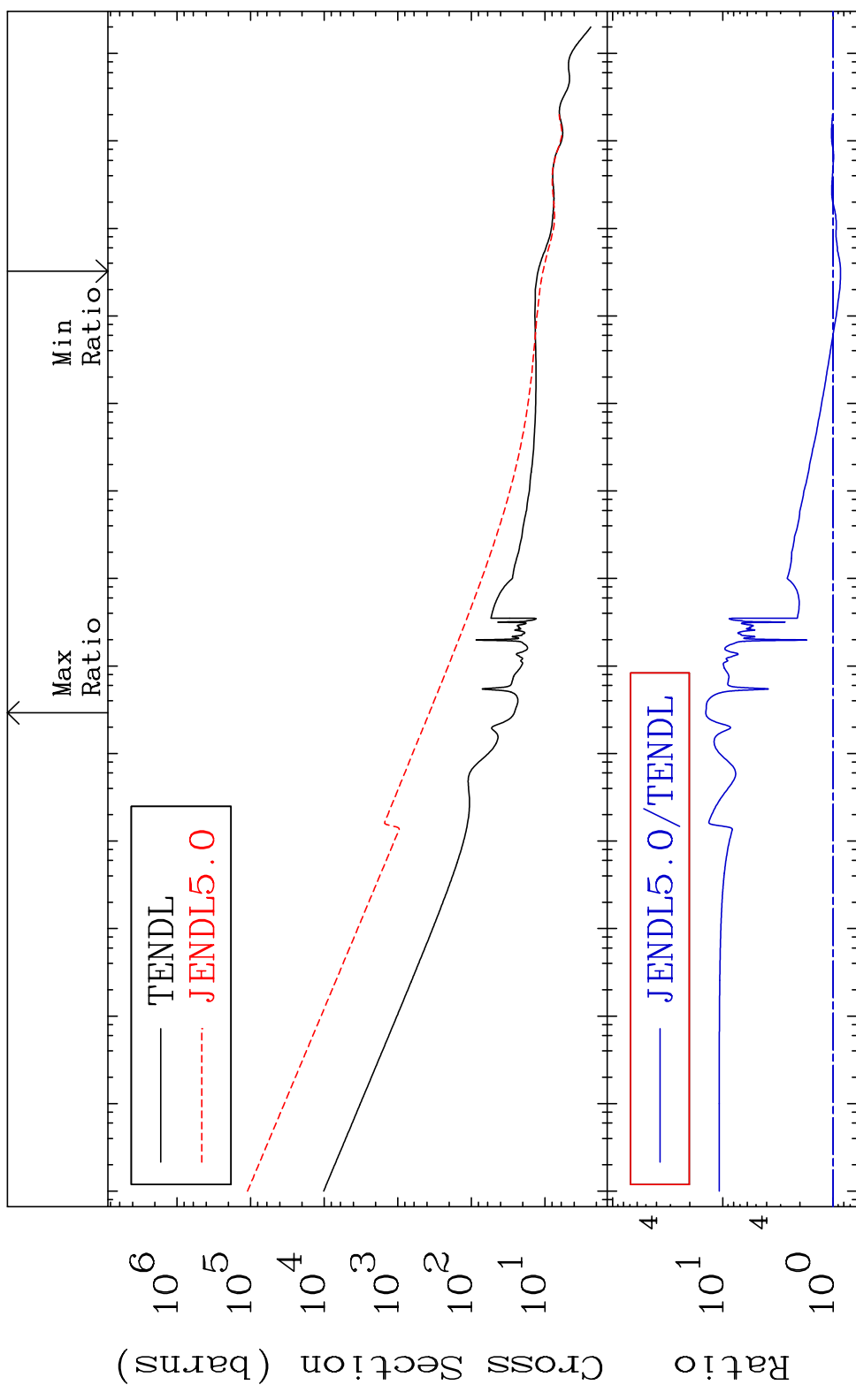
Press Mouse Button to Start

MAT 9912

Total

99-Es-252

Cross Section -14.20 To 1331. %



1

Incident Energy (eV)

99-Es-252

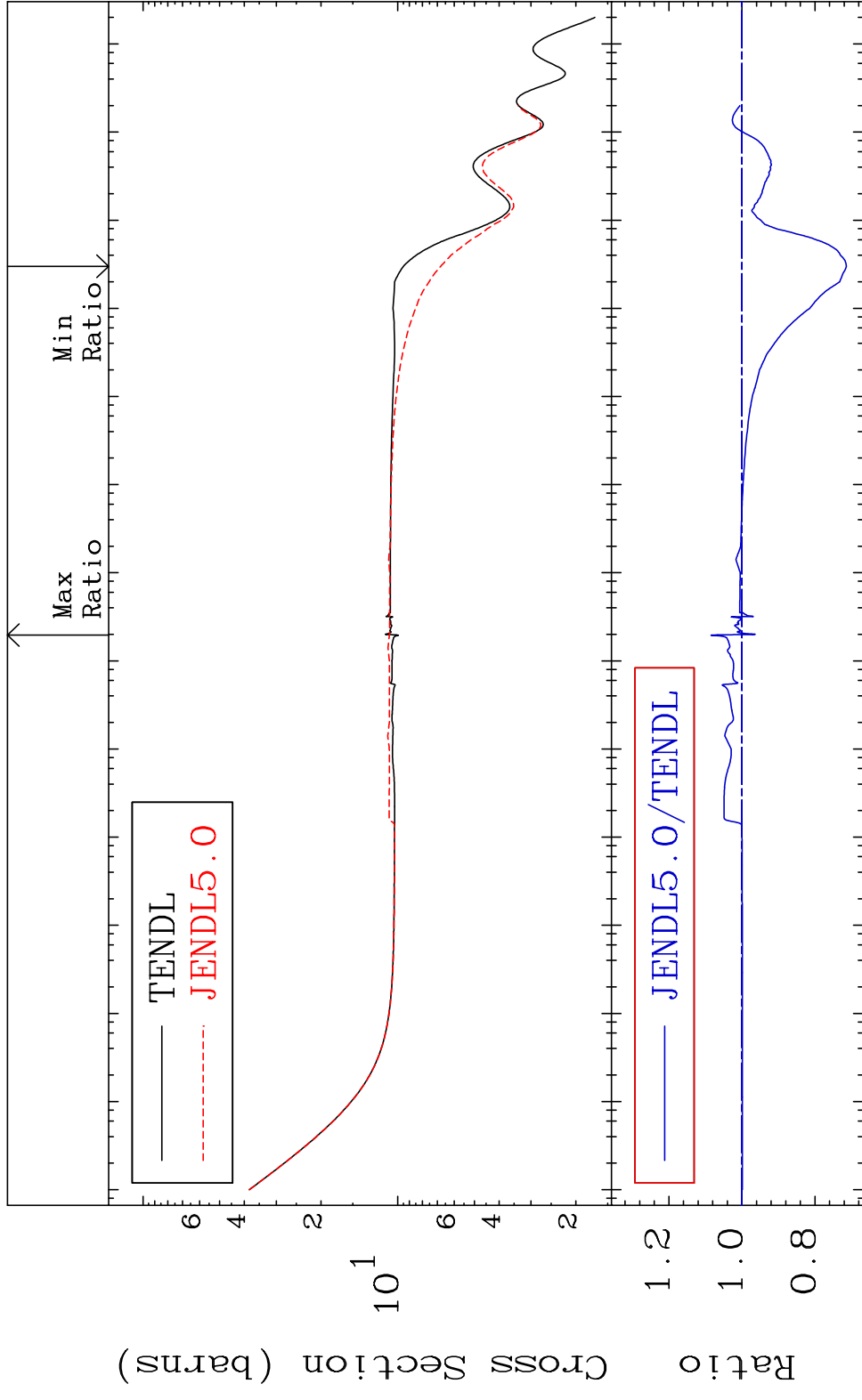
MAT 9912

Elastic

99-Es-252

Cross Section

-28.59 To 8.552 %



2

Incident Energy (eV)

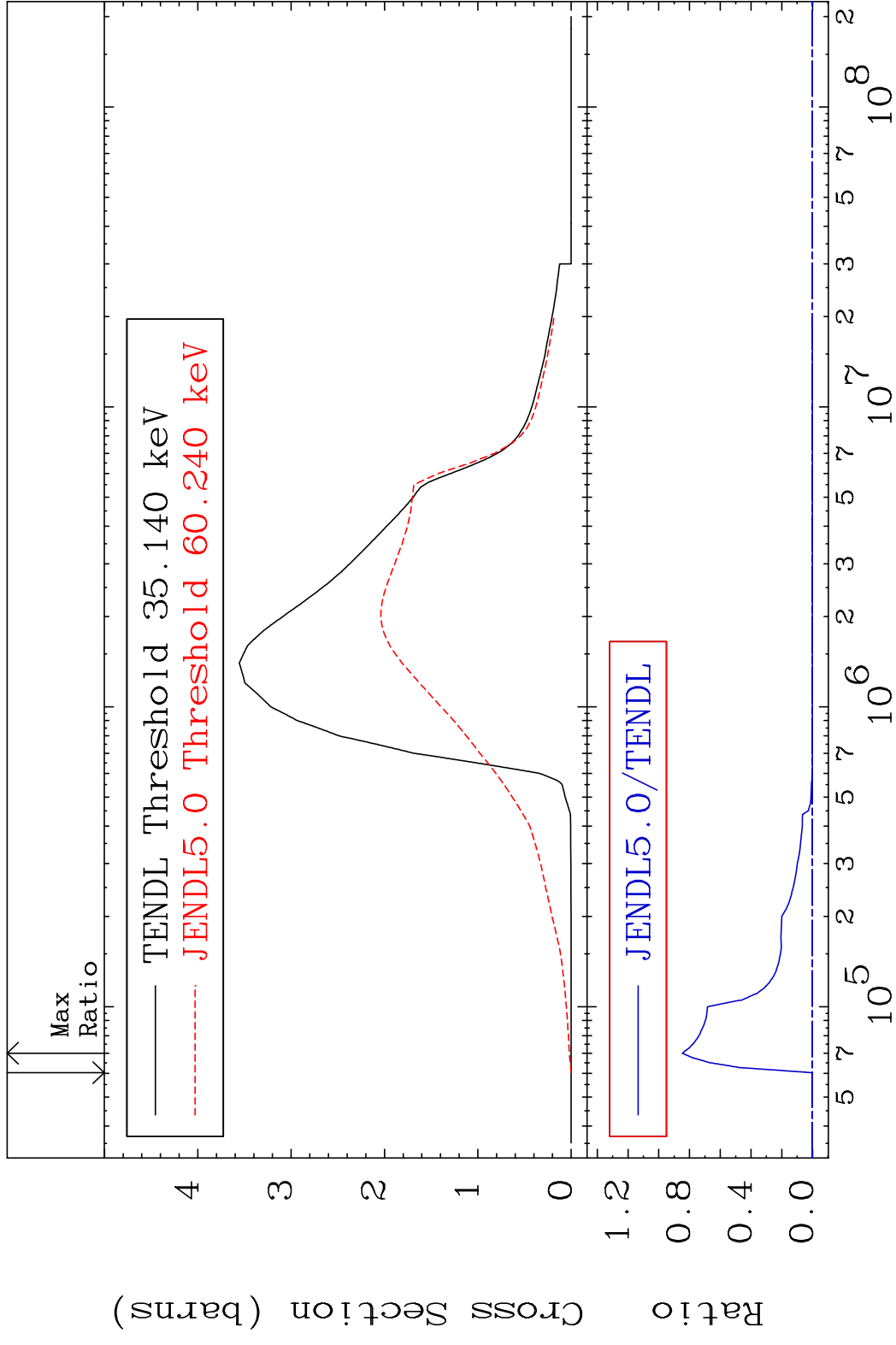
99-Es-252

MAT 9912

Inelastic

99-Es-252

Cross Section -100.0 To 9999. %

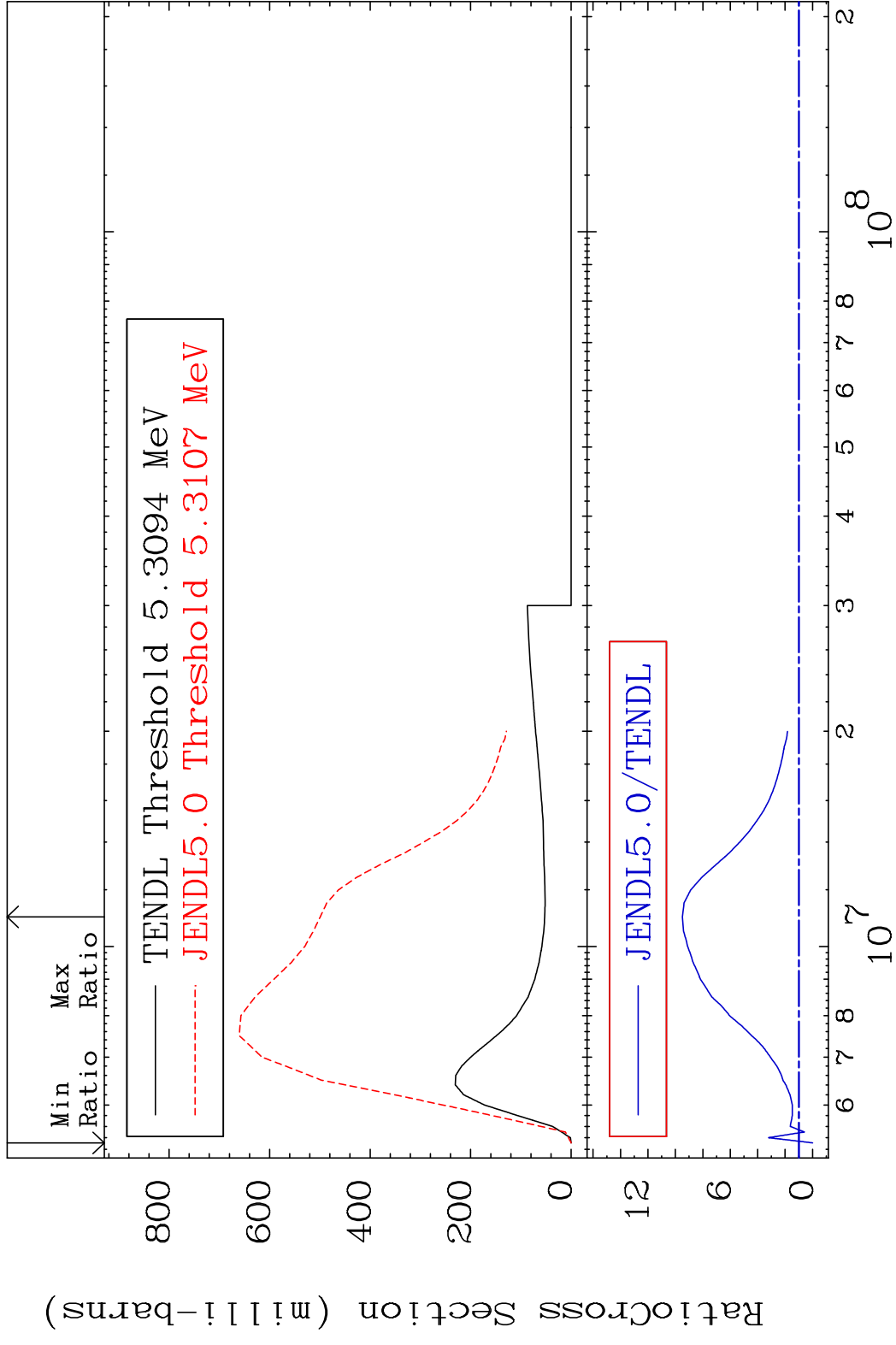


MAT 9912

(n,2n)

99-Es-252

Cross Section -100.0 To 849.2 %



4

Incident Energy (eV)

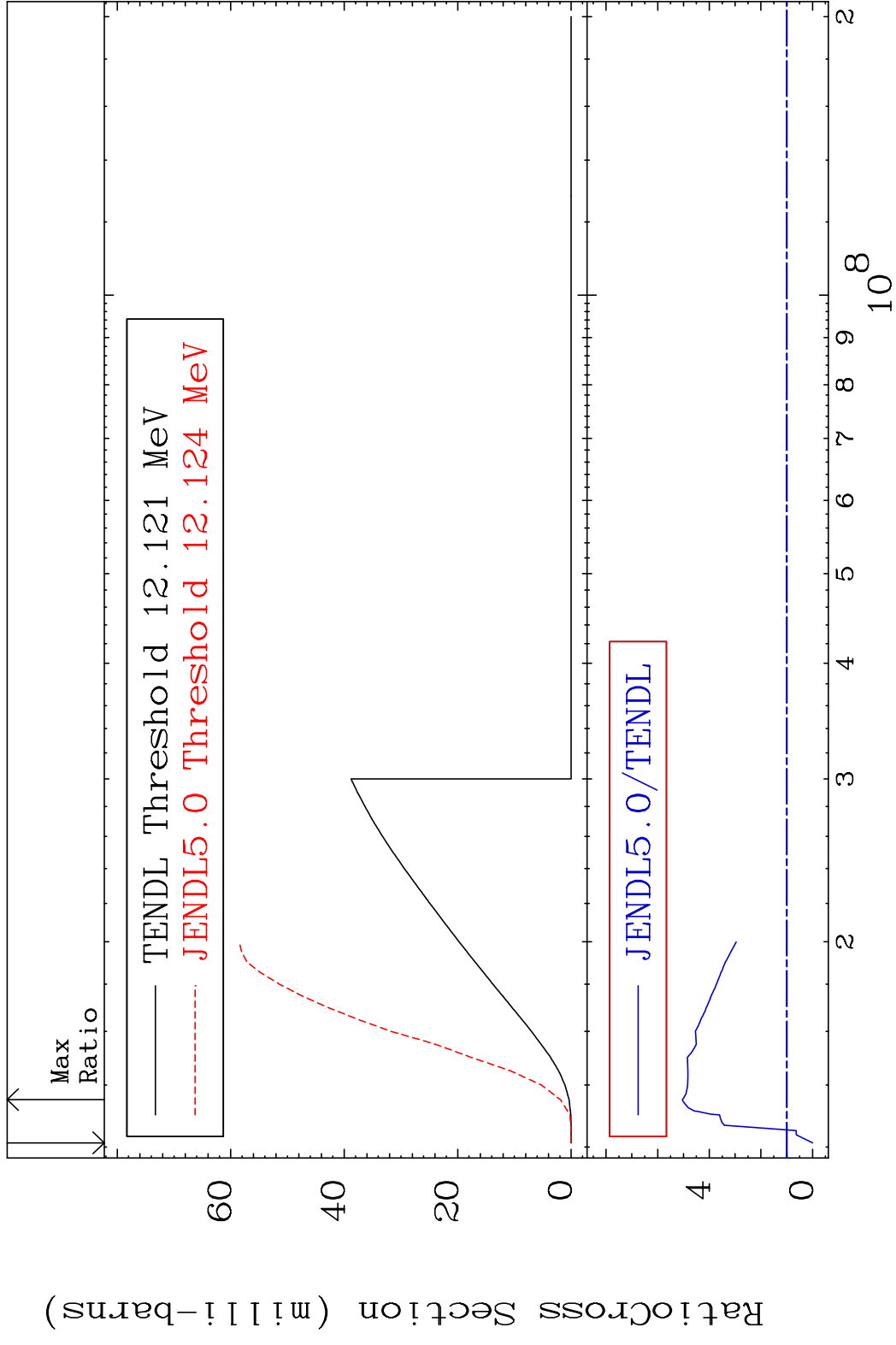
99-Es-252

MAT 9912

(n,3n)

99-Es-252

Cross Section -100.0 To 404.4 %



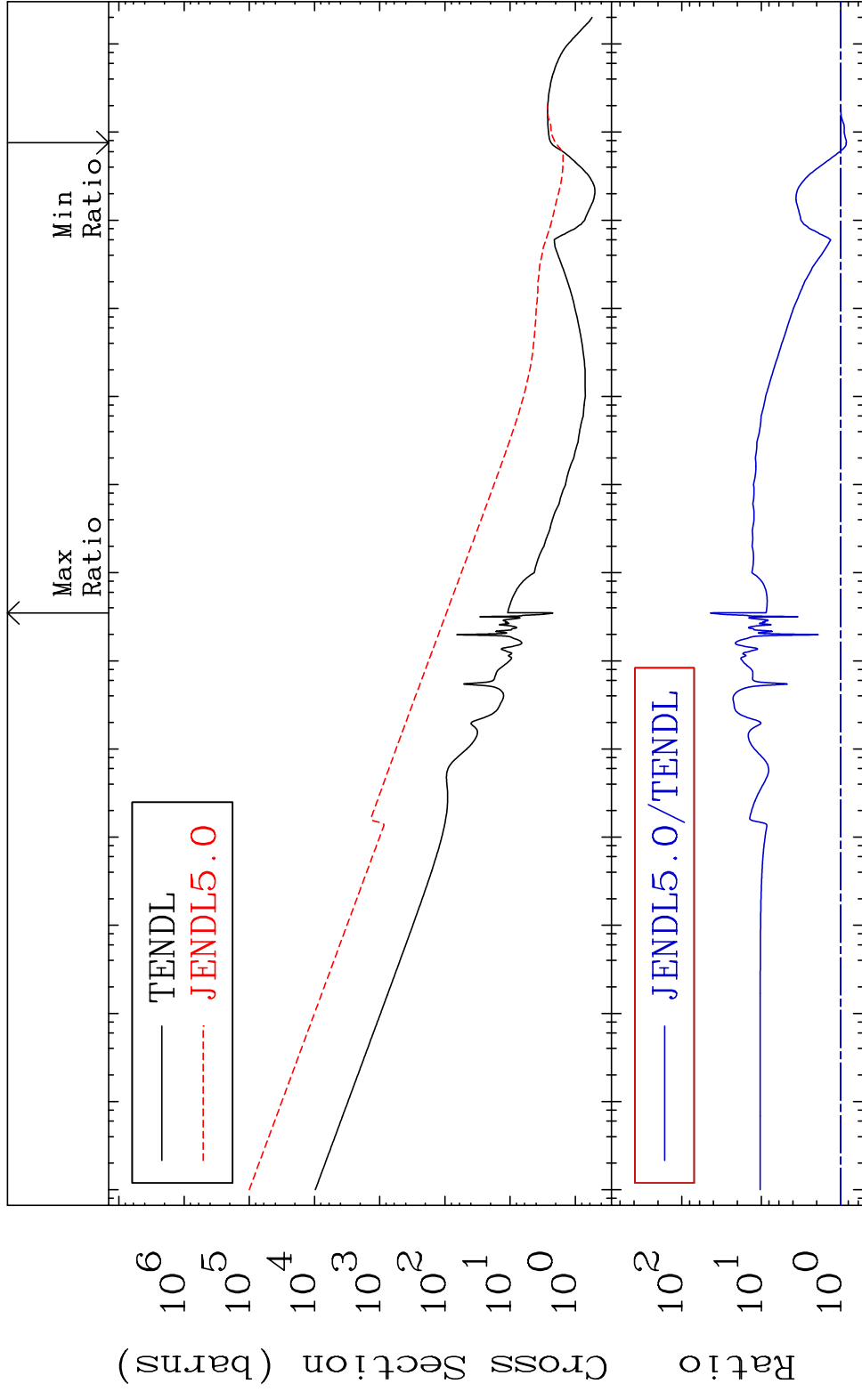
5

Incident Energy (eV)

99-Es-252

MAT 9912

Fission
Cross Section -15.05 To 4234. %
99-Es-252

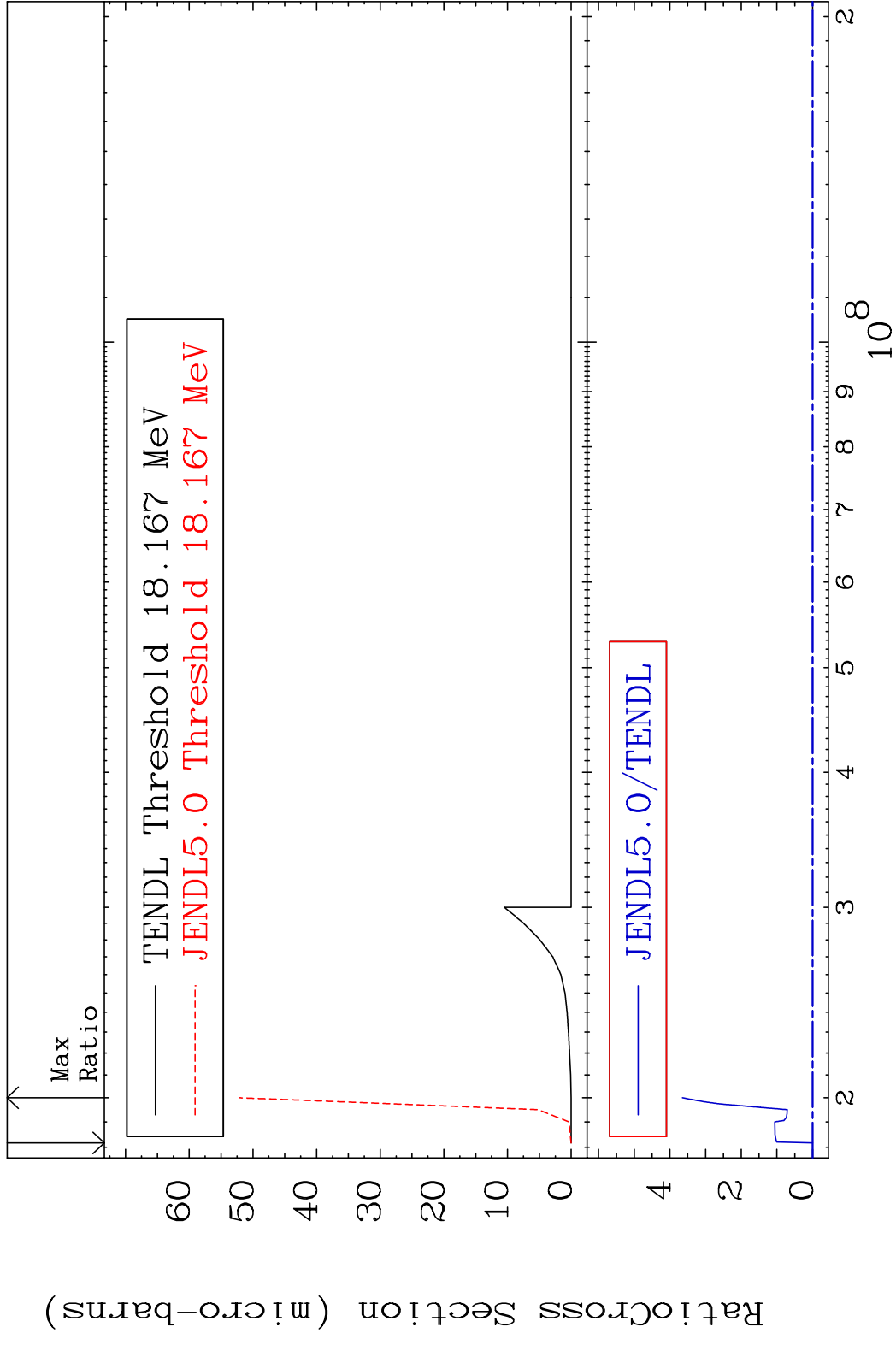


MAT 9912

(n,4n)

99-Es-252

Cross Section -100.0 To 9999. %

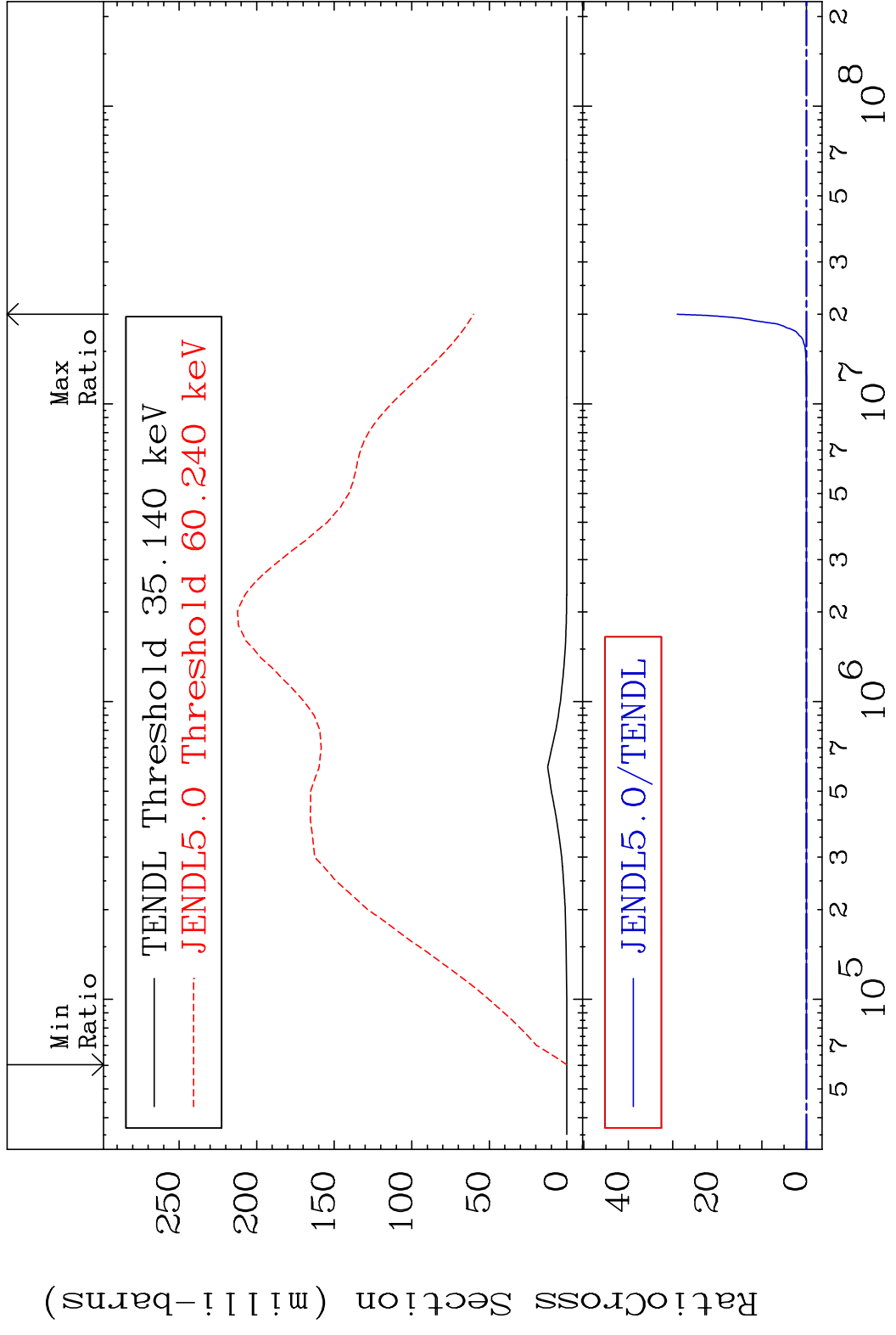


7

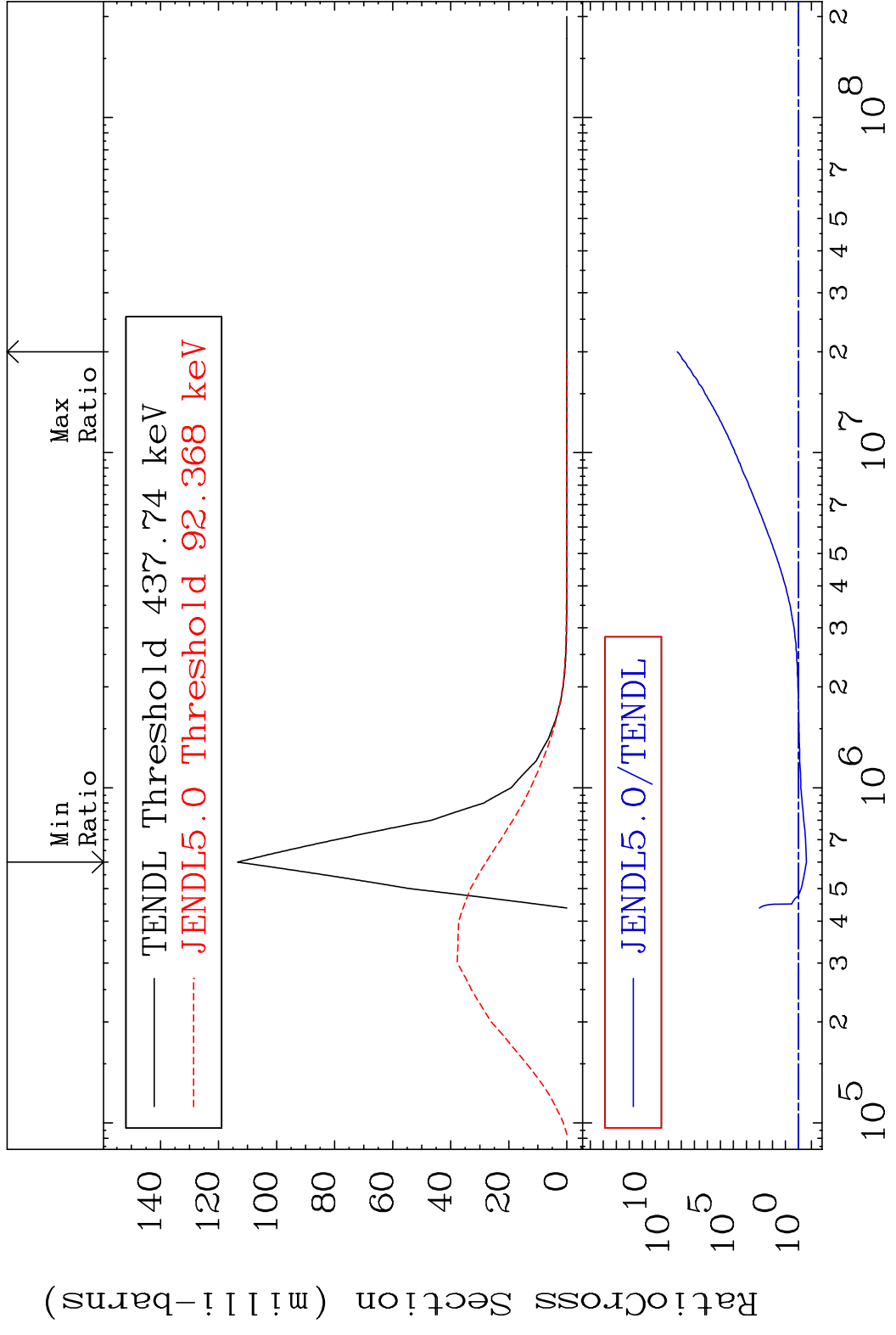
Incident Energy (eV)

99-Es-252

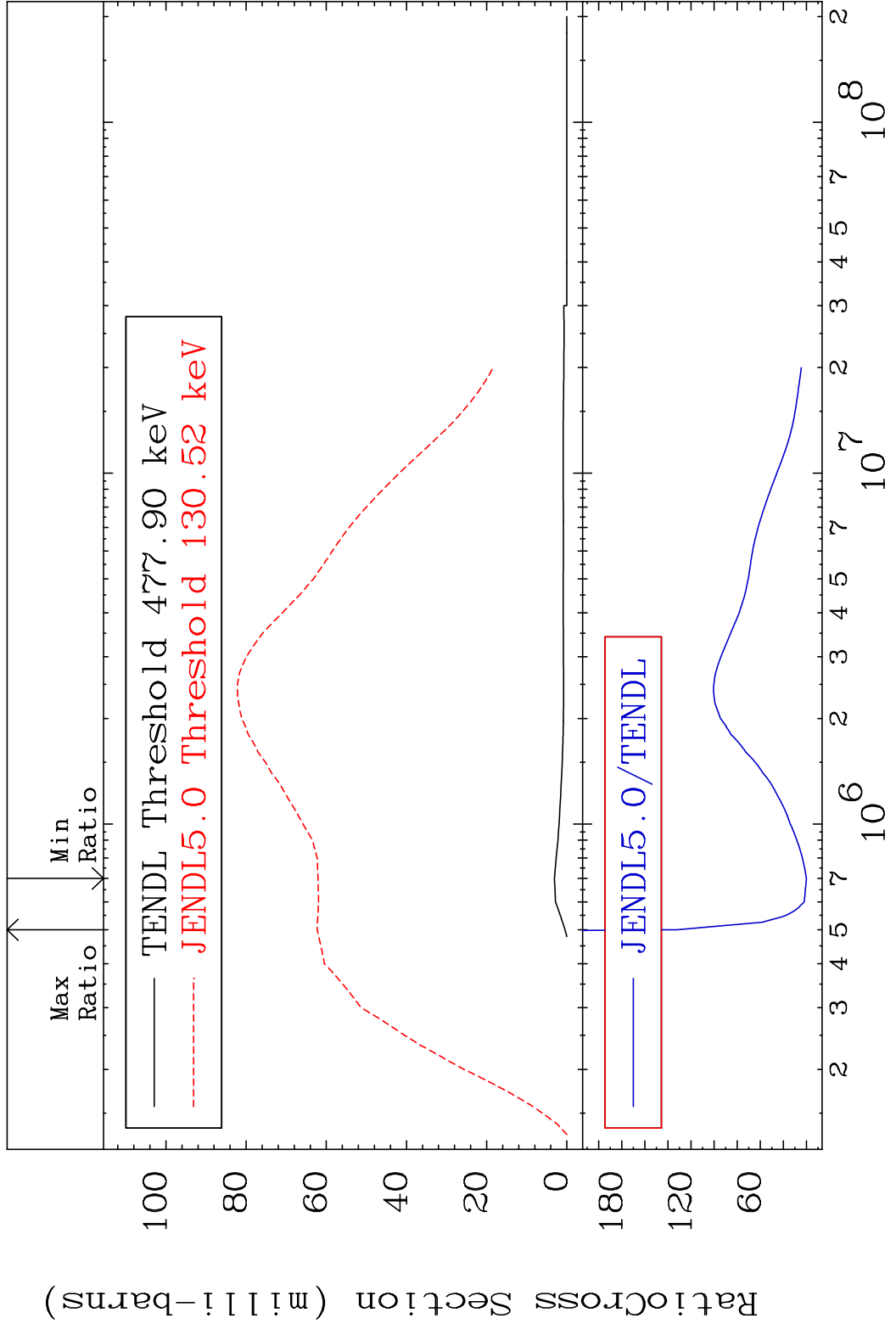
MAT 9912 MT= 51 (n, n') Level 99-Es-252
 Cross Section -100.0 To 9999. %



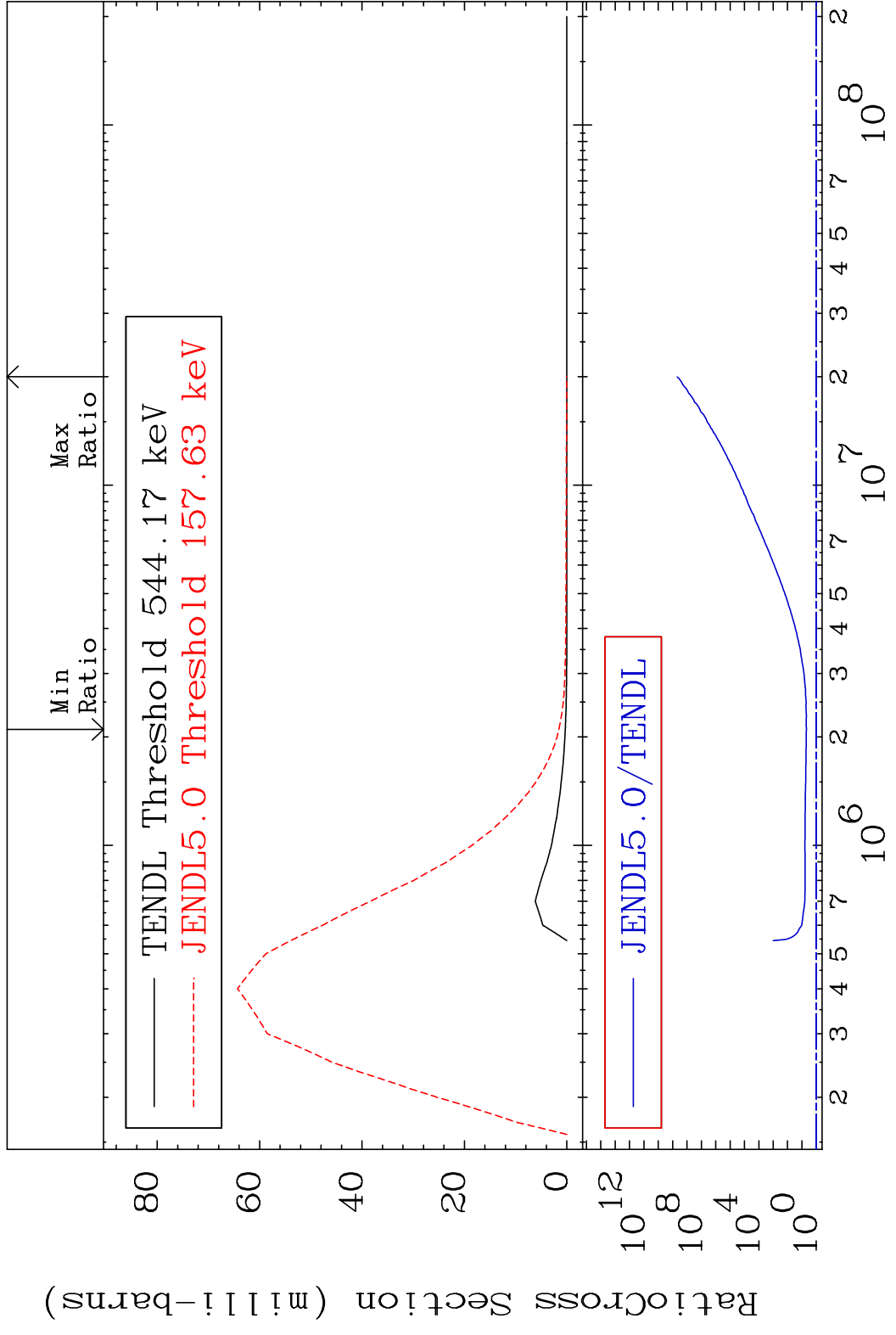
MAT 9912 MT= 52 (n, n') Level 99-Es-252
 Cross Section -75.50 To 9999. %



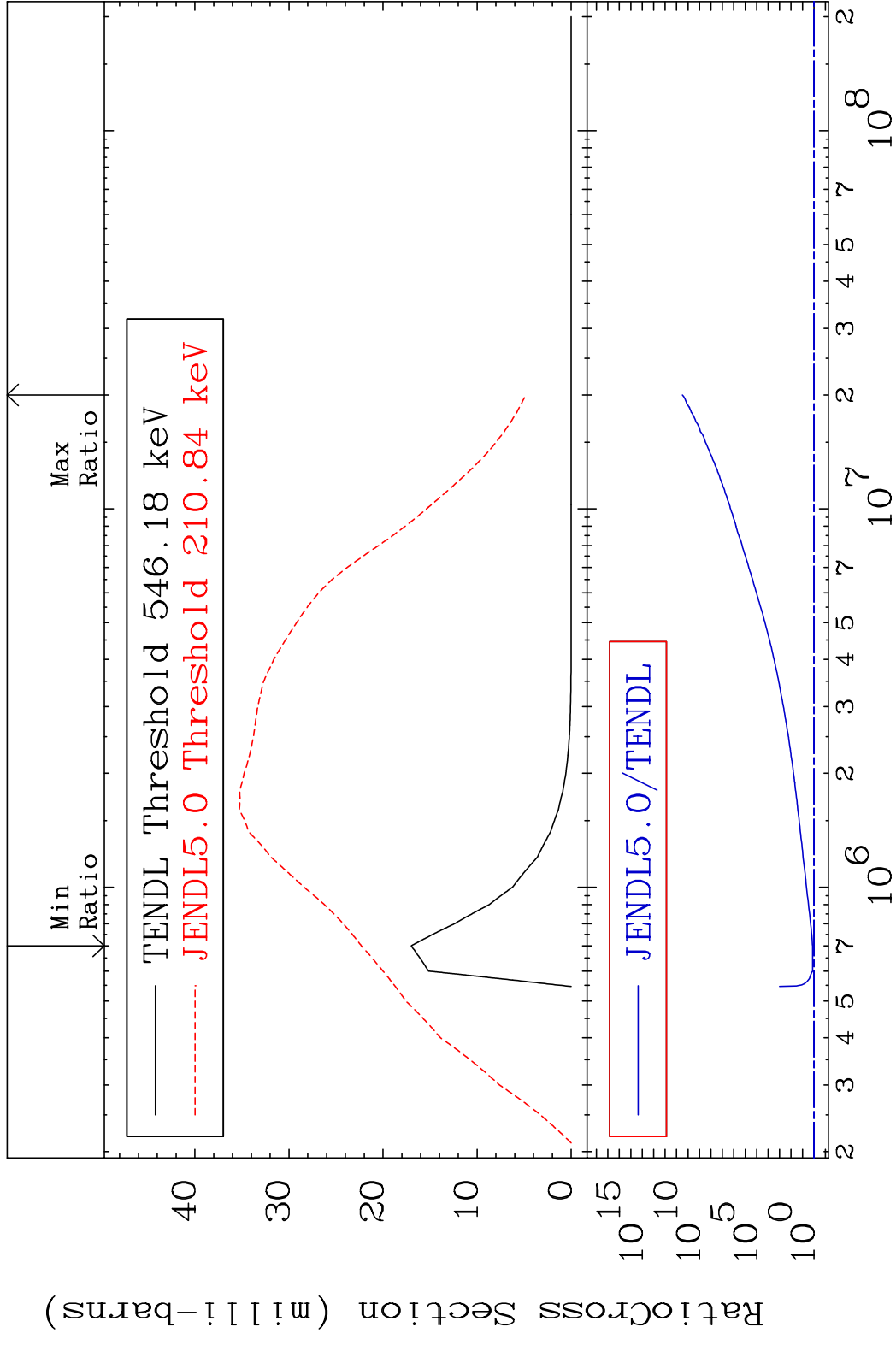
MAT 9912 MT= 53 (n, n') Level 99-Es-252
 Cross Section 1904. To 9999. %



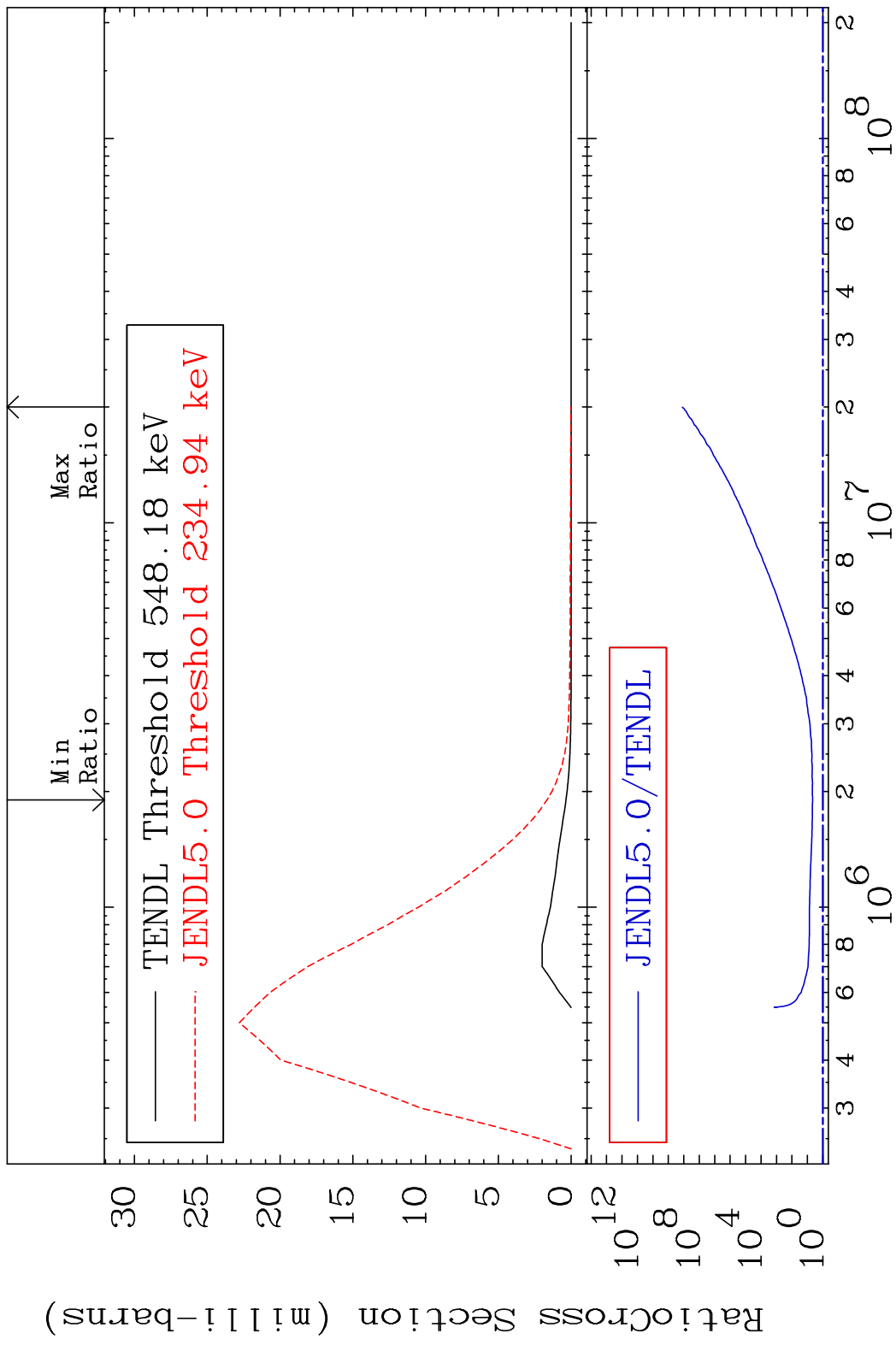
MAT 9912 MT= 54 (n,n') Level 99-Es-252
 Cross Section 387.2 To 9999. %



MAT 9912 MT= 55 (n, n') Level 99-Es-252
 Cross Section 31.16 To 9999. %



MAT 9912 MT= 56 (n, n') Level 99-Es-252
 Cross Section 361.9 To 9999. %

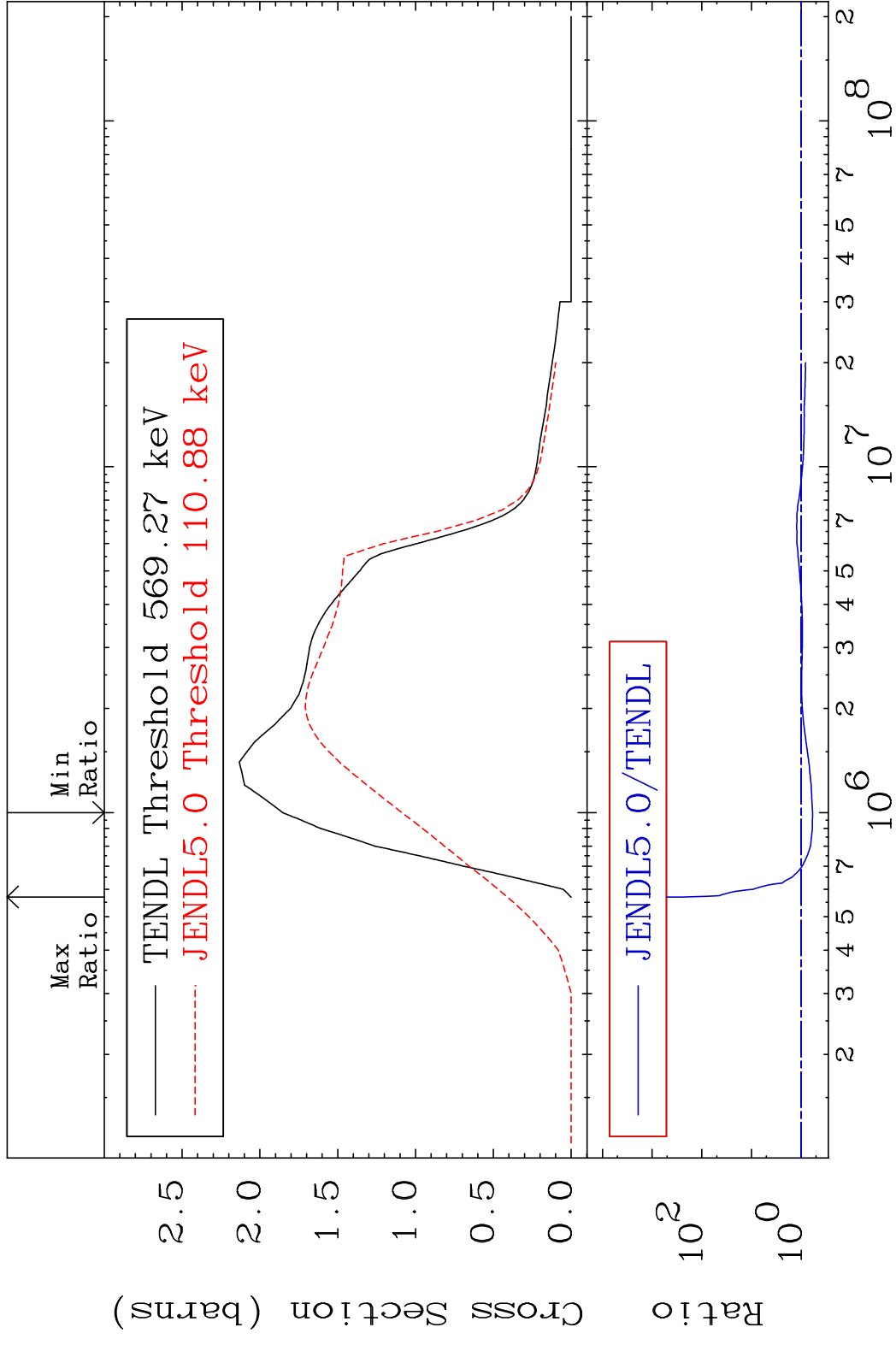


MAT 9912

(n, n') Continuum

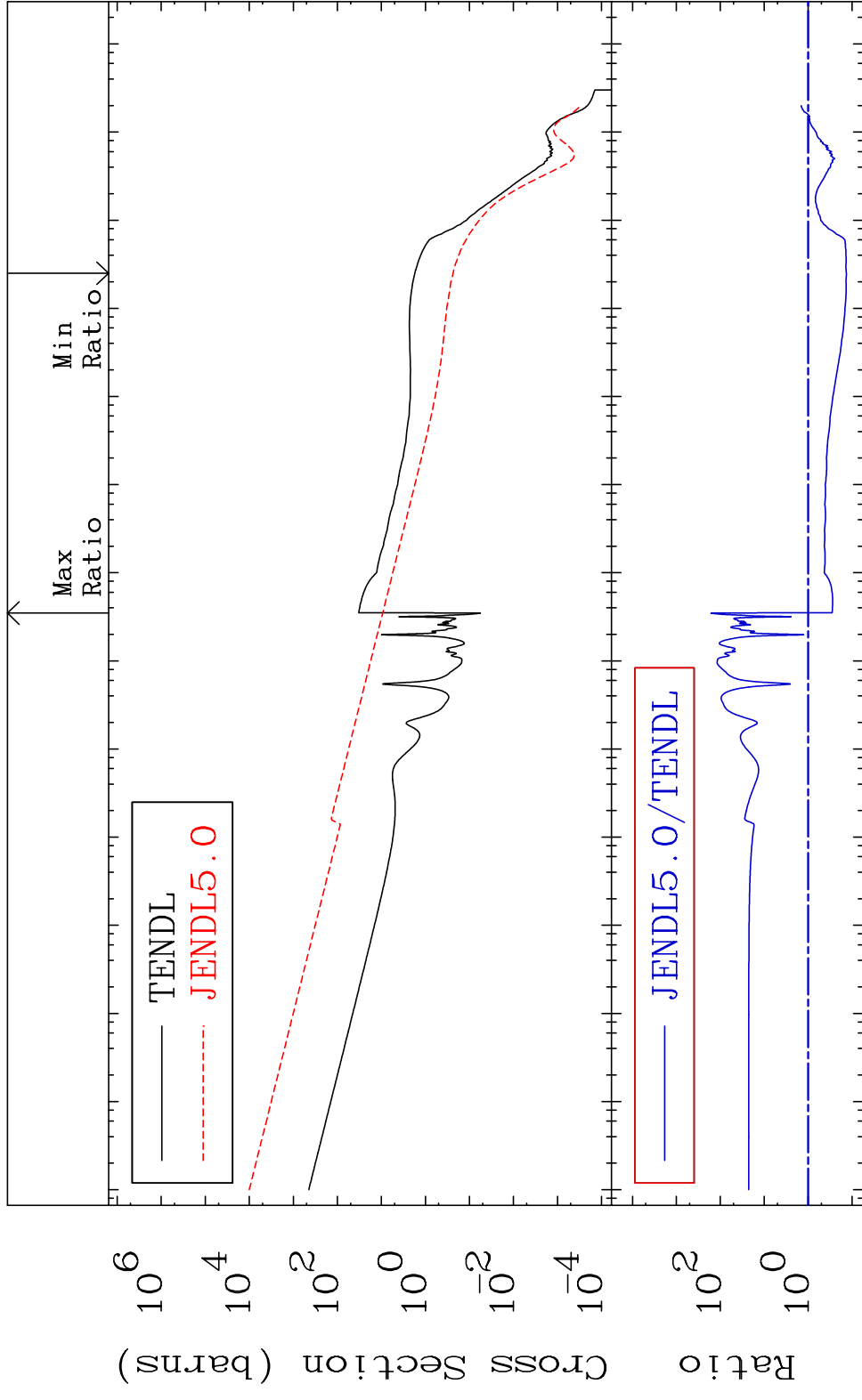
99-Es-252

Cross Section -41.23 To 9999. %



MAT 9912

(n, γ)
Cross Section -86.50 To 9999. %
99-Es-252



15

Incident Energy (eV)

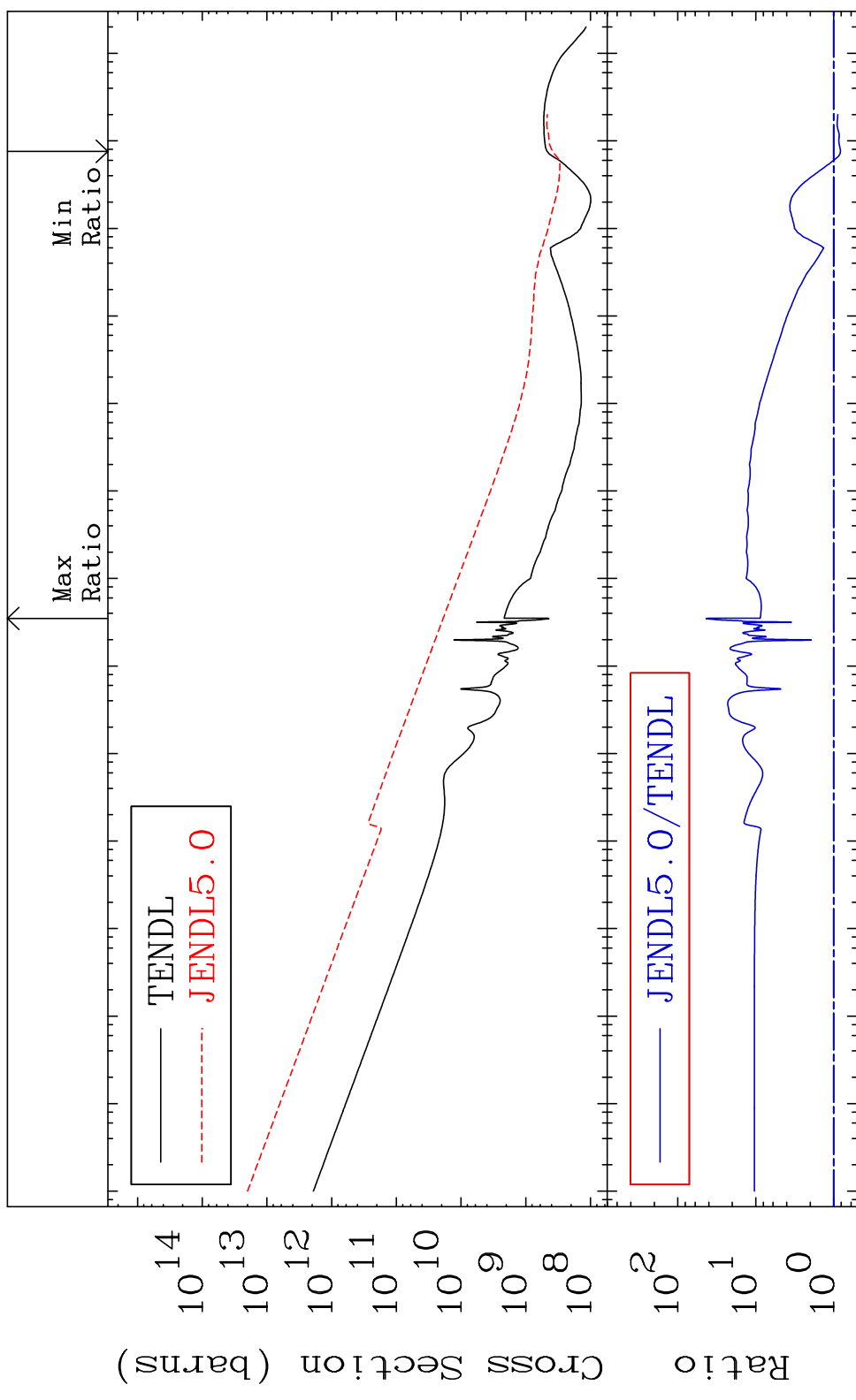
99-Es-252

MAT 9912

Kerma total (eV-barns)

99-Es-252

Cross Section -17.96 To 4276. %



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

16

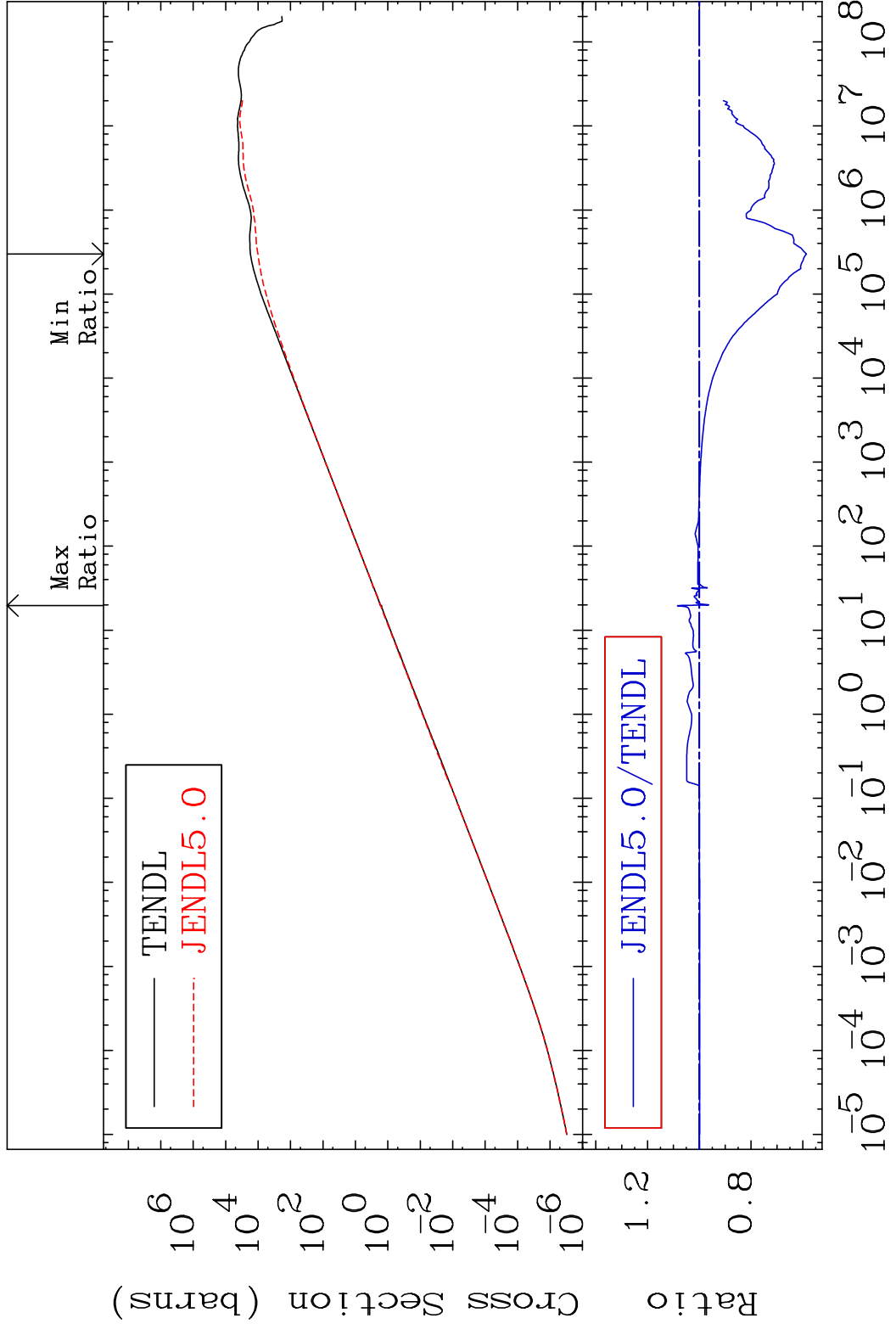
Incident Energy (eV)

99-Es-252

MAT 9912

Kerma elastic
Cross Section

99-Es-252
-41.40 To 8.545 %

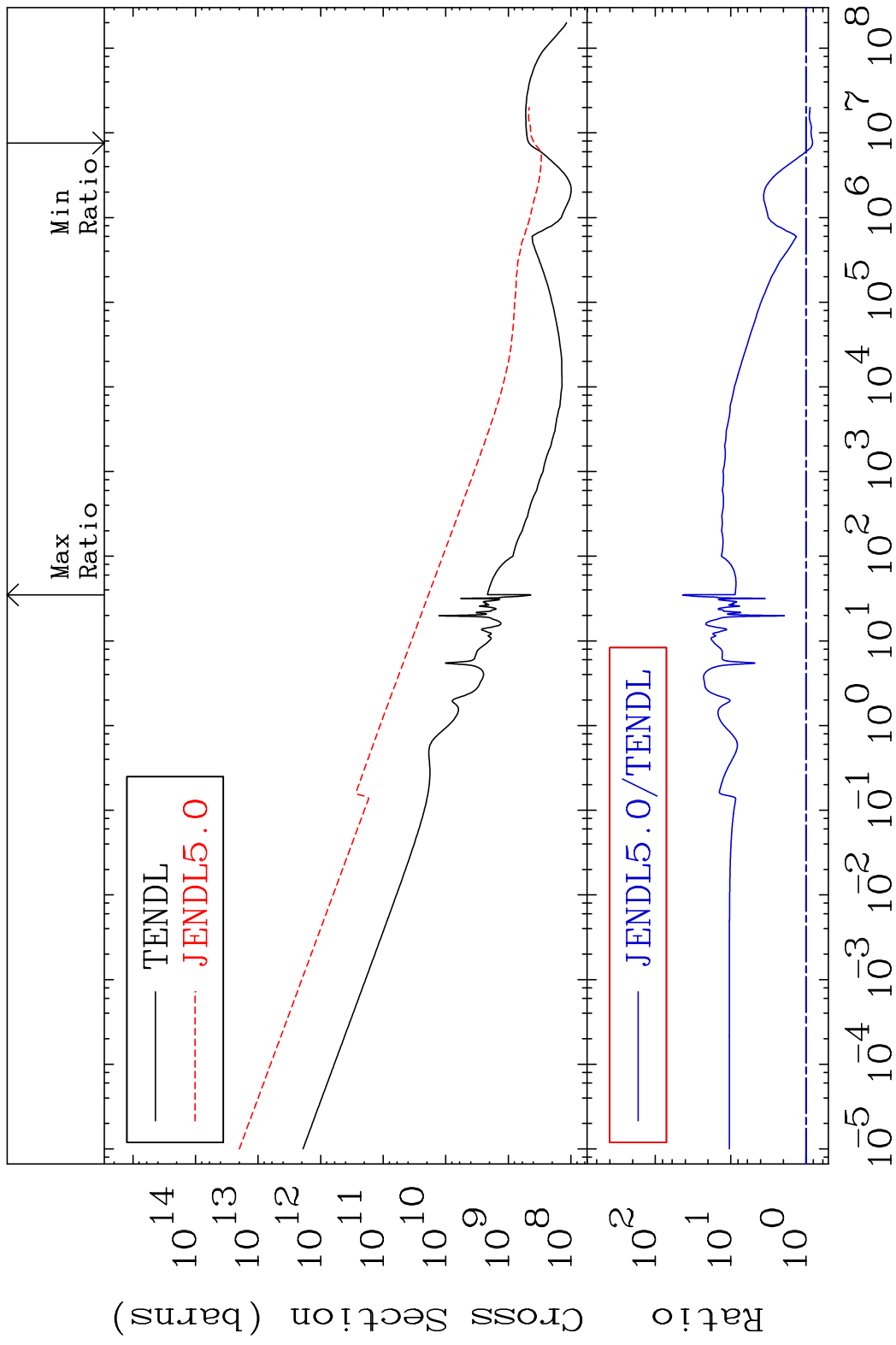


17

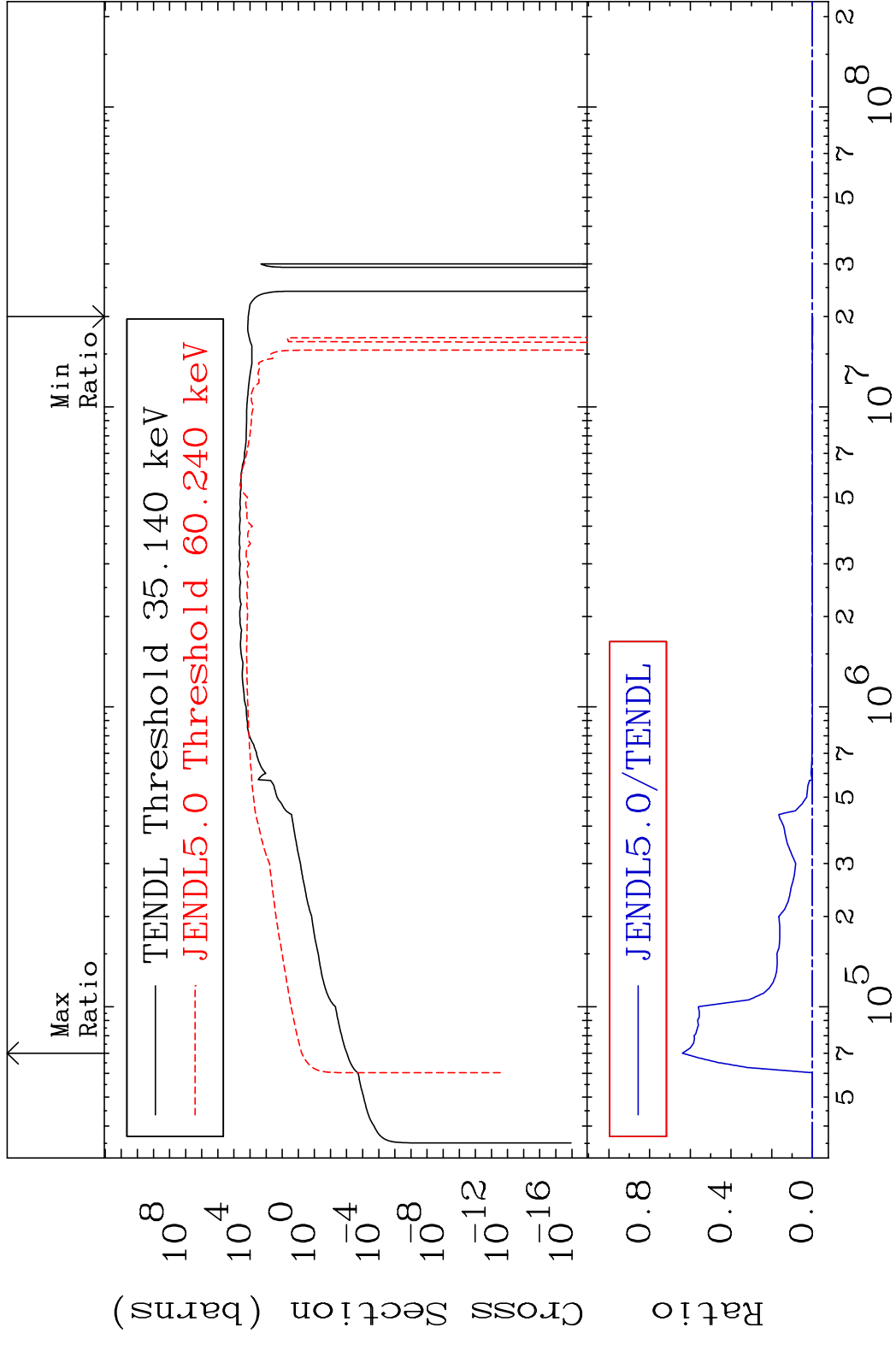
Incident Energy (eV)

99-Es-252

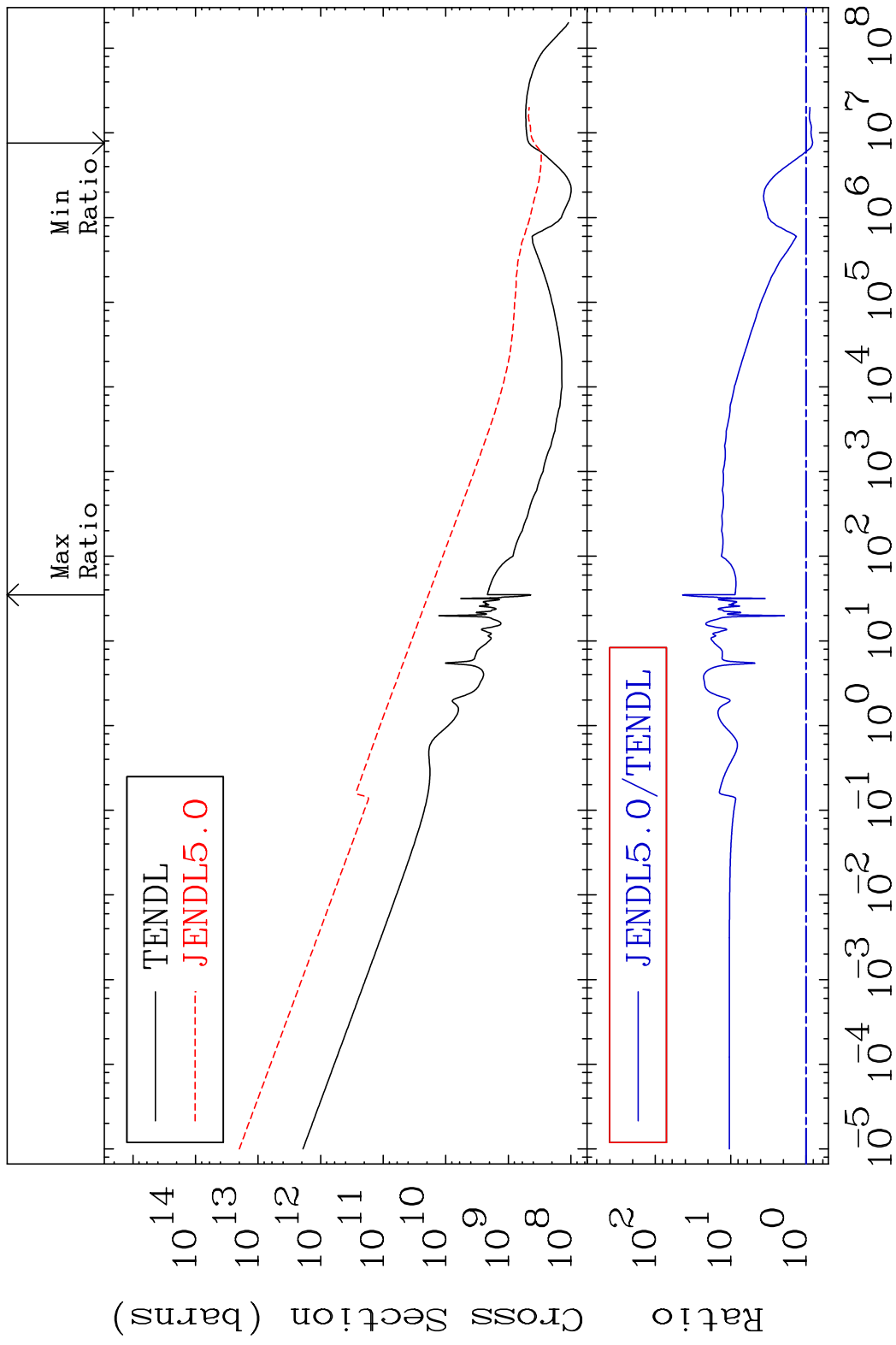
MAT 9912 Kerma non-elastic (all but mt2) 99-Es-252
 Cross Section -17.96 To 4276. %



MAT 9912 Kerma inelastic (mt51-91) 99-Es-252
 Cross Section -132.4 To 9999. %

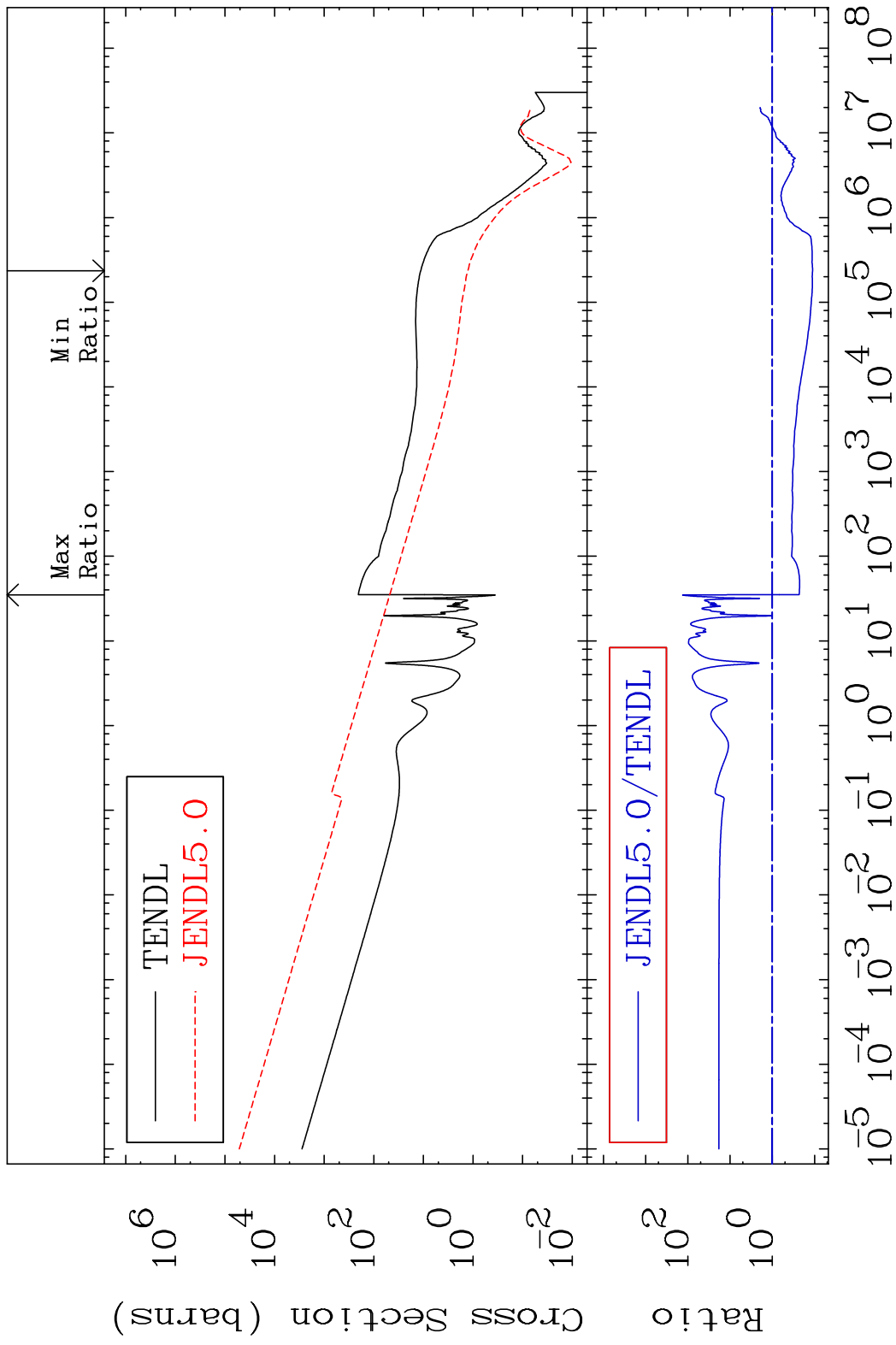


MAT 9912 Kerma fission (mt18 or mt19-20-21-38) 99-Es-252
 Cross Section -17.97 To 4276. %

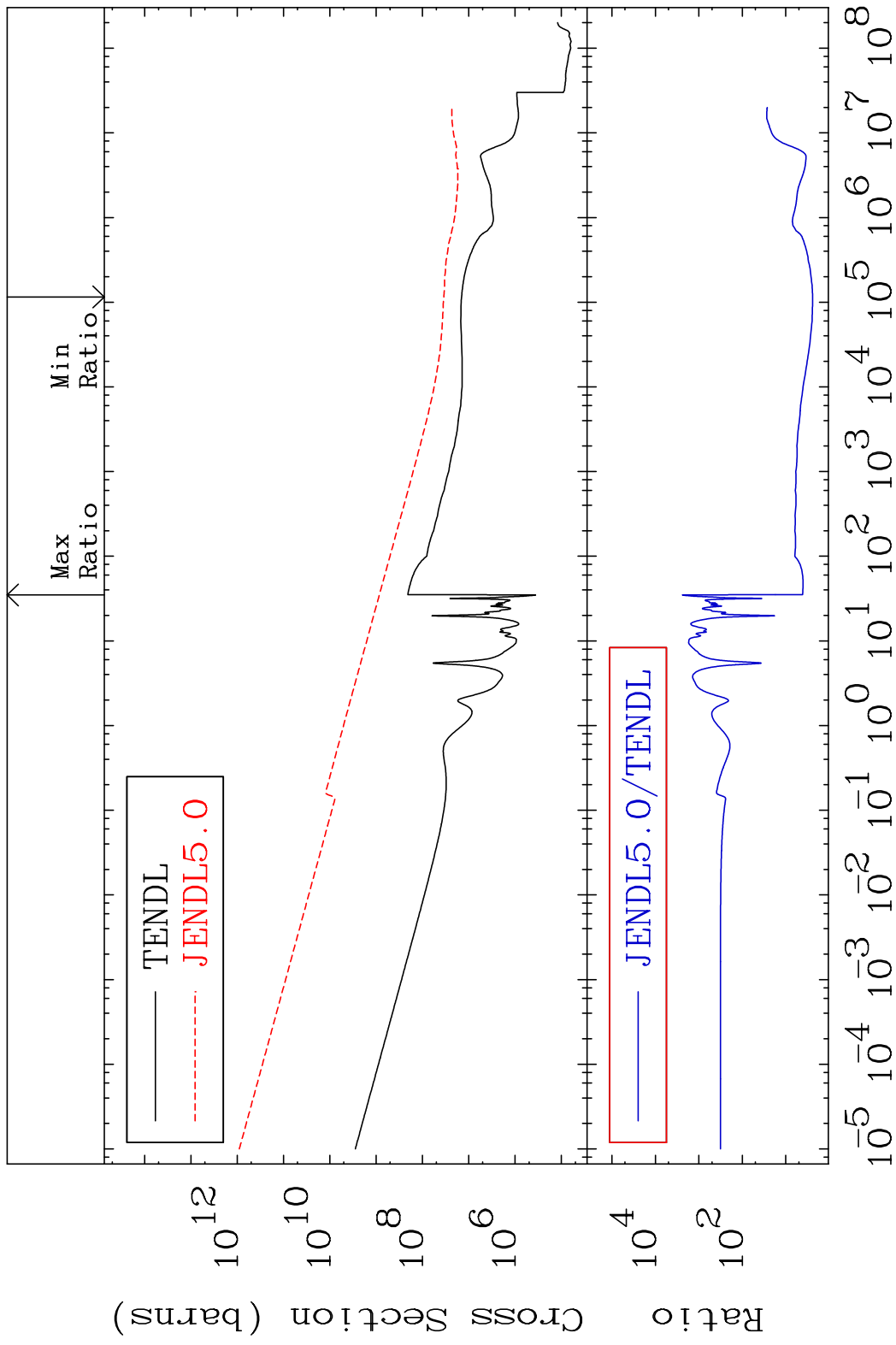


20 Incident Energy (eV) 99-Es-252

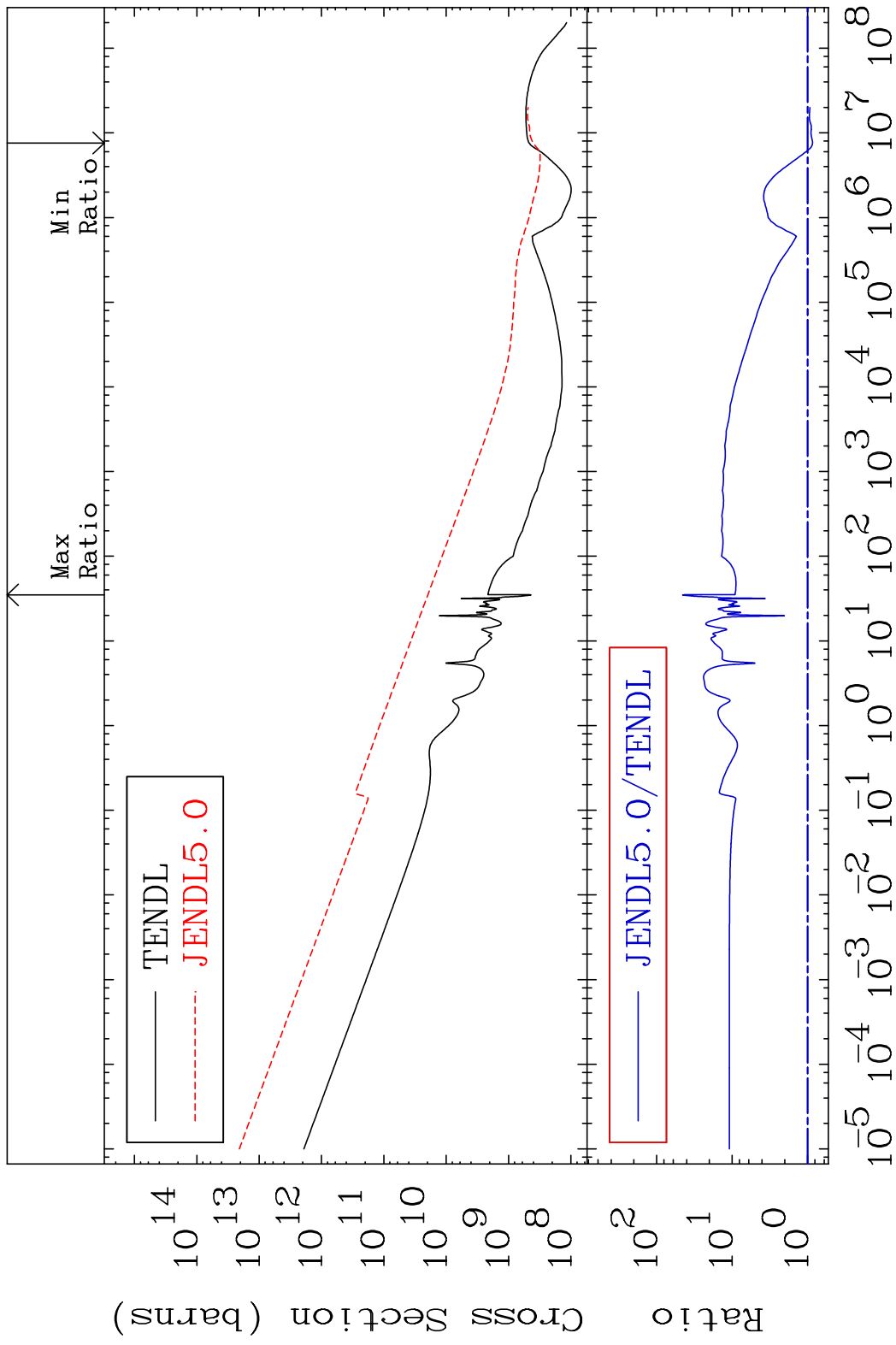
MAT 9912 Kerma capture (mt102) 99-Es-252
 Cross Section -88.84 To 9999. %



MAT 9912 Total photon (eV-barns) 99-Es-252
 Cross Section 142.2 To 9999. %



MAT 9912 Total kinematic kerma (high limit) 99-Es-252
 Cross Section -14.35 To 4460. %

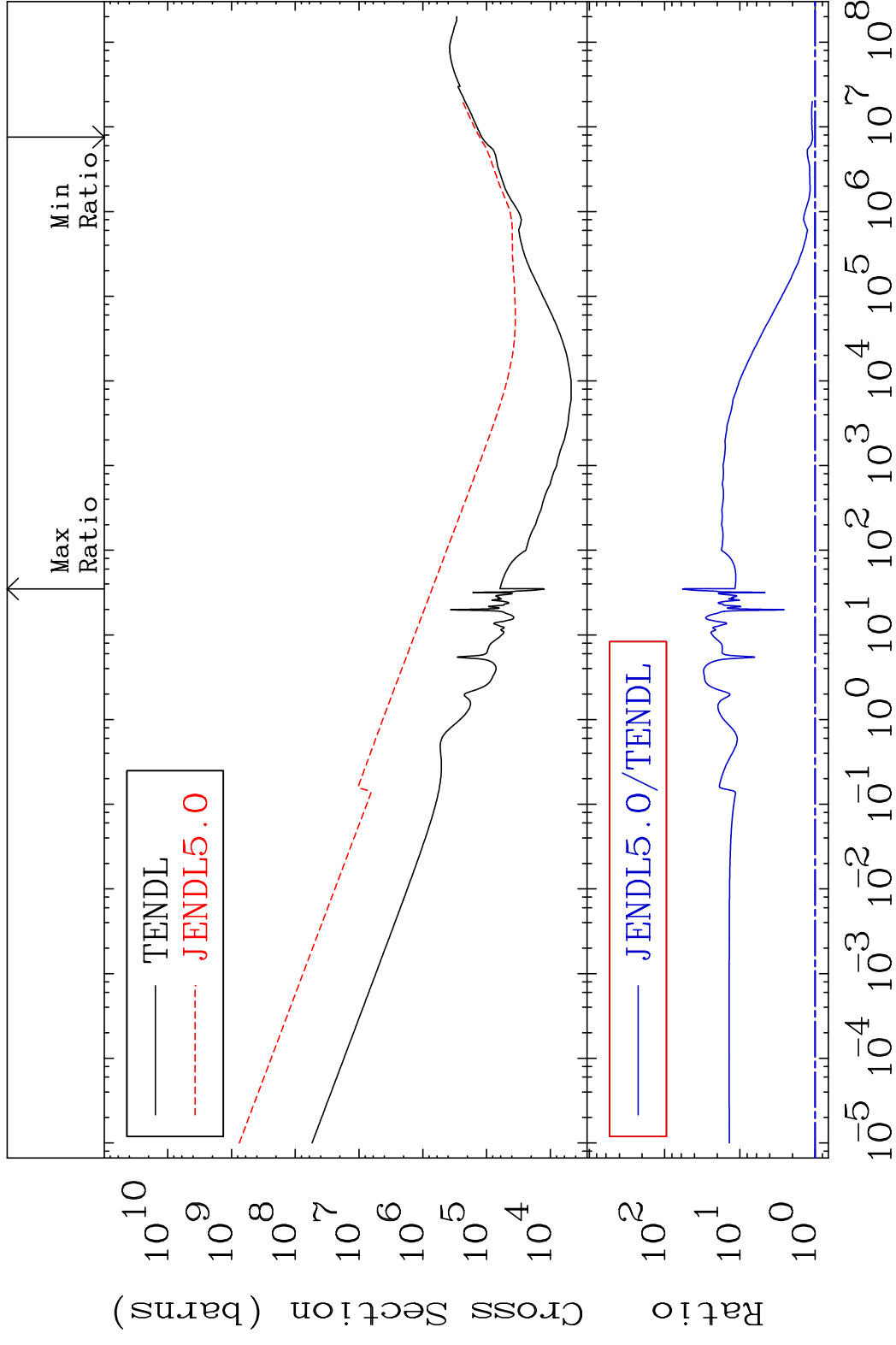


MAT 9912

Dpa total (eV-barns)

99-Es-252

Cross Section 8.055 To 5713. %

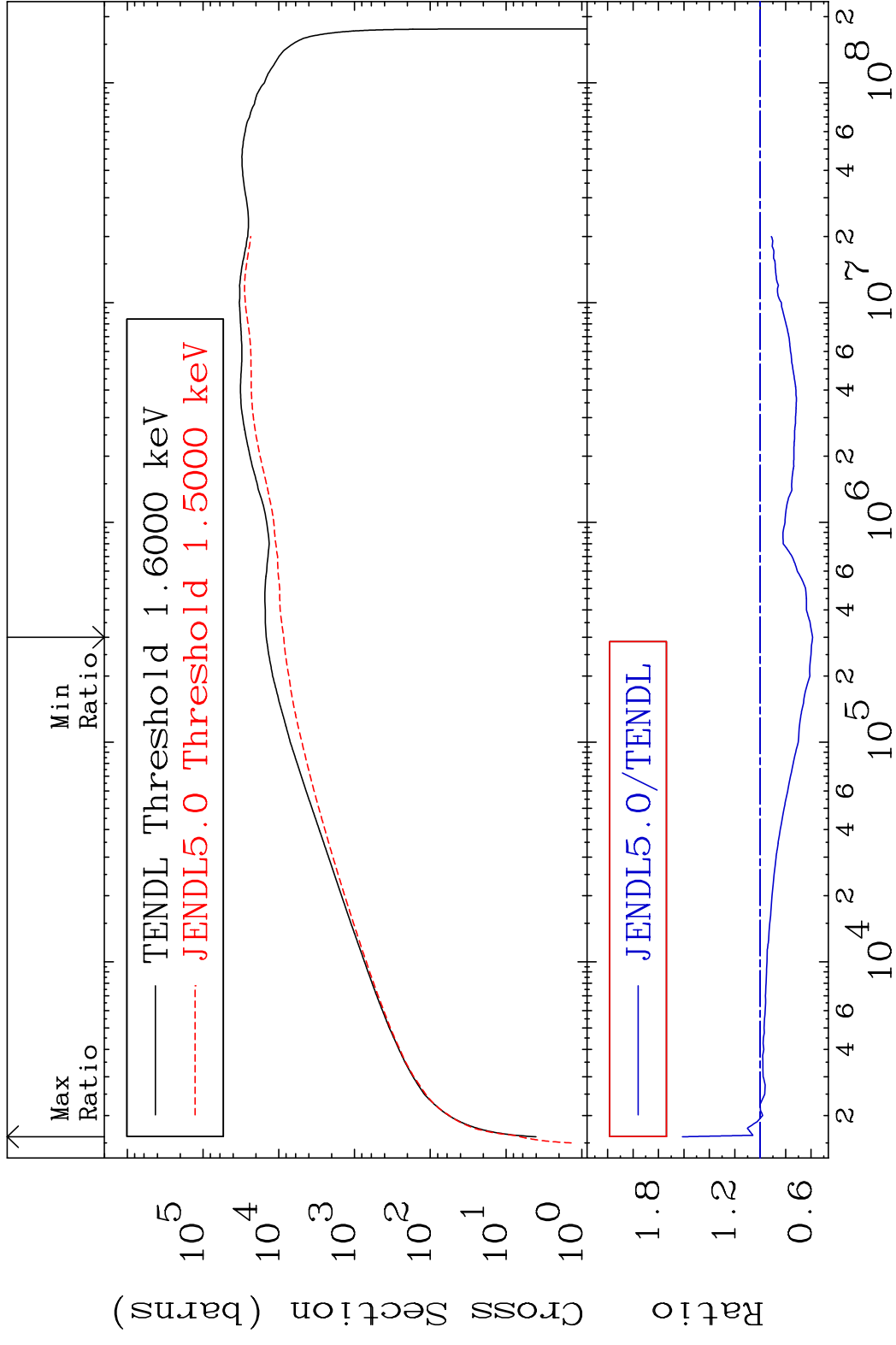


24

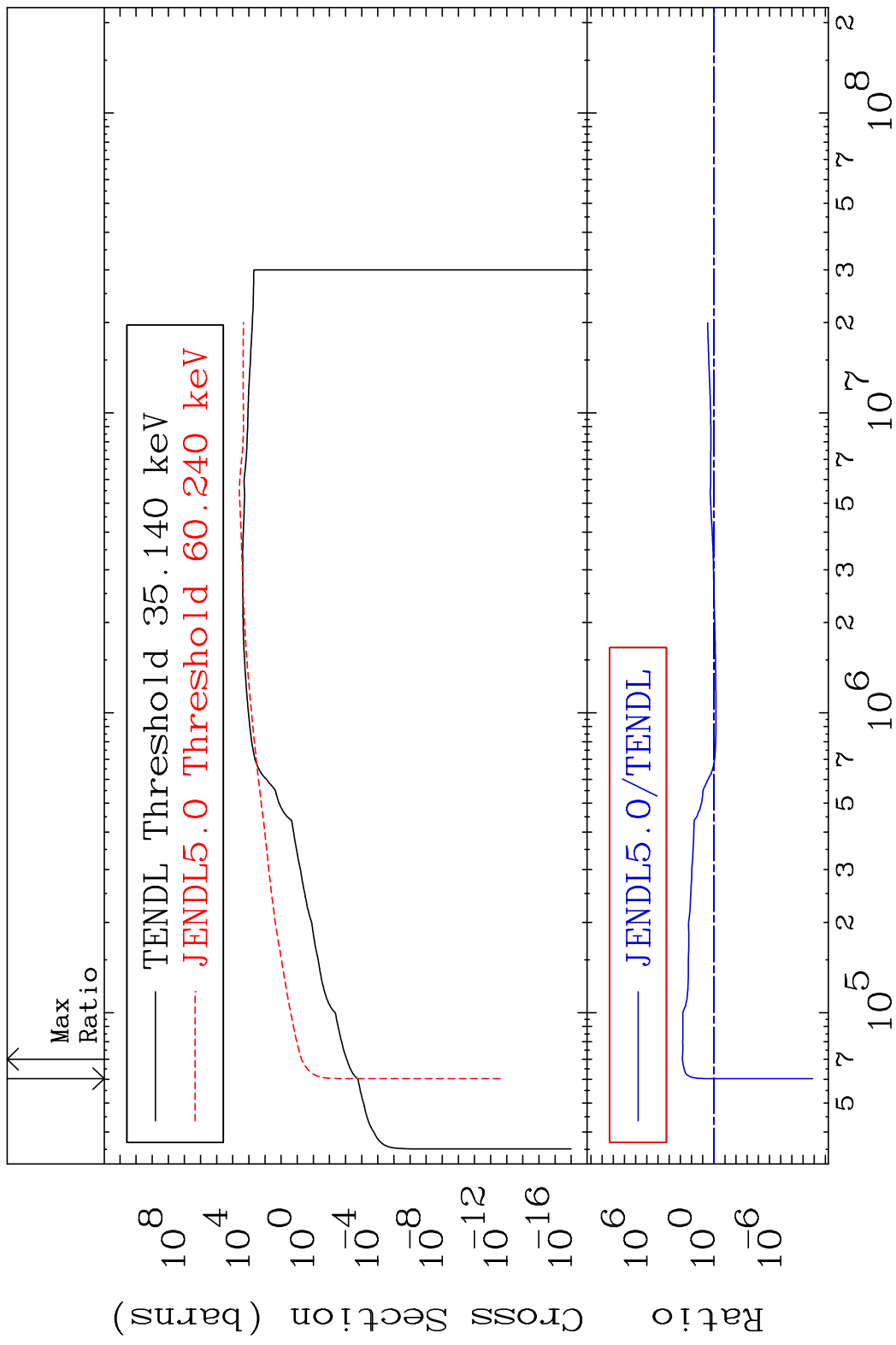
Incident Energy (eV)

99-Es-252

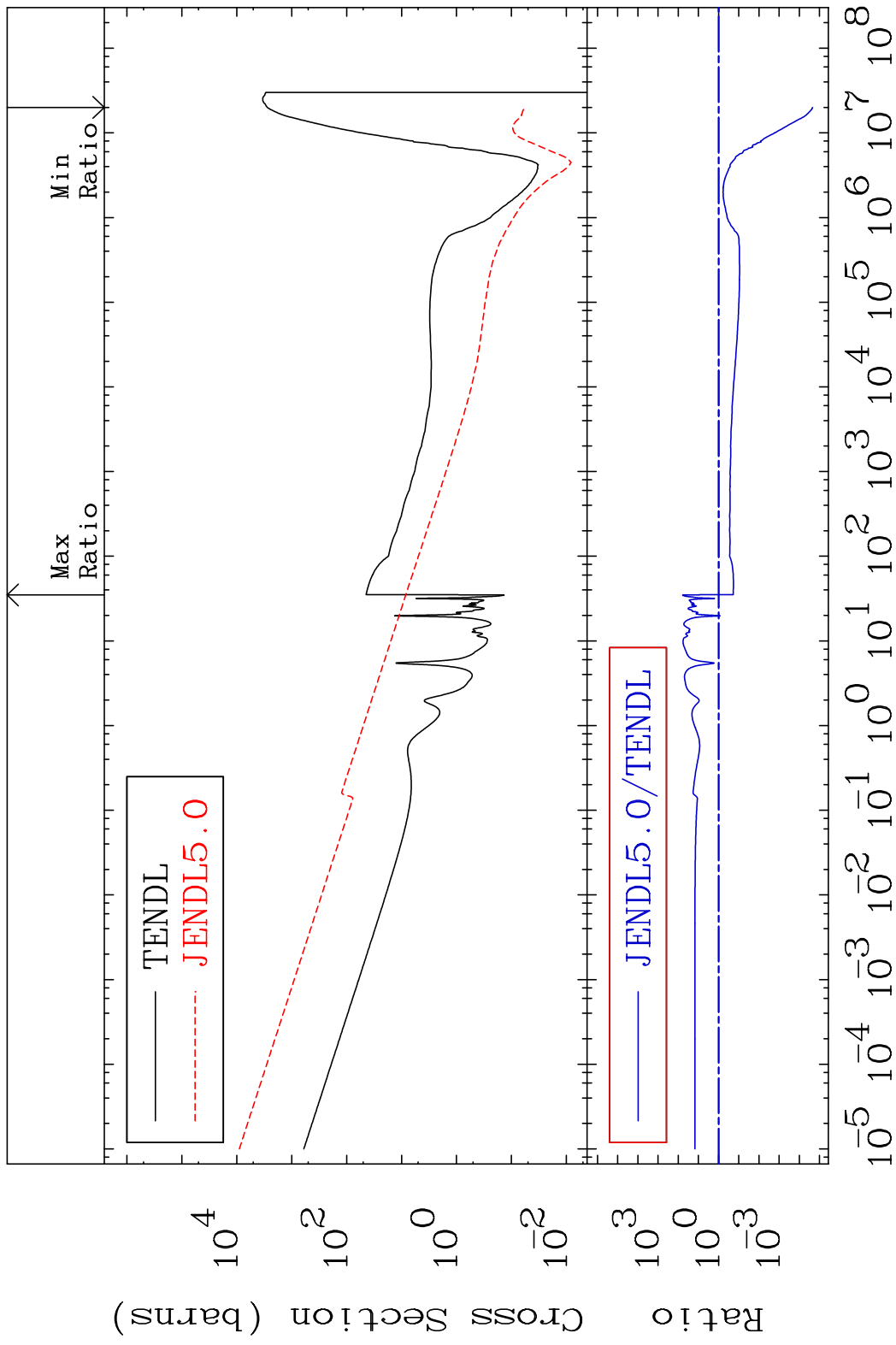
Cross Section -41.14 To 61.22 %



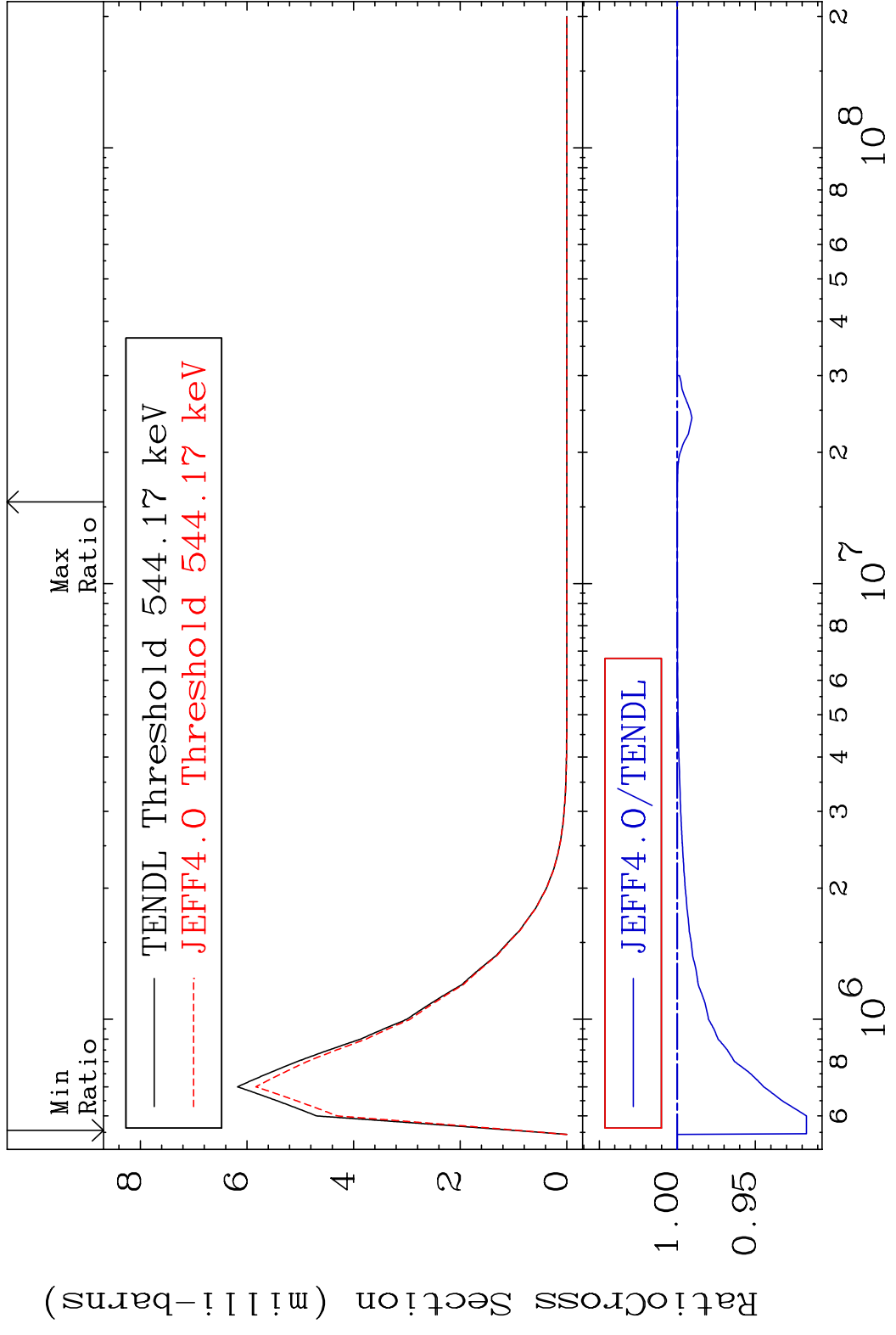
MAT 9912 Dpa inelastic (mt51-91) 99-Es-252
 Cross Section -100.0 To 9999. %



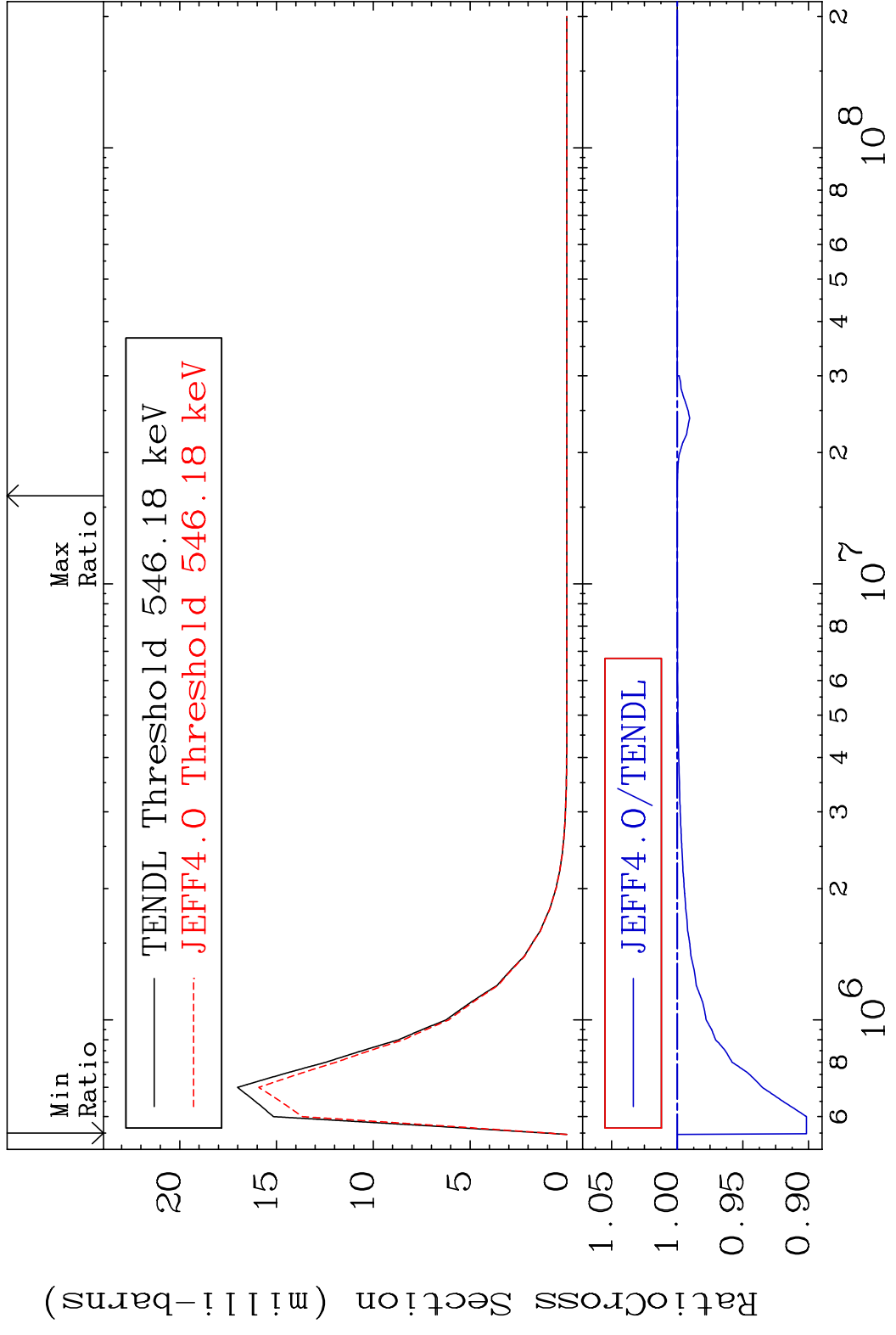
MAT 9912 Dpa disappearance (mt102 -120) 99-Es-252
 Cross Section -100.0 To 6129. %



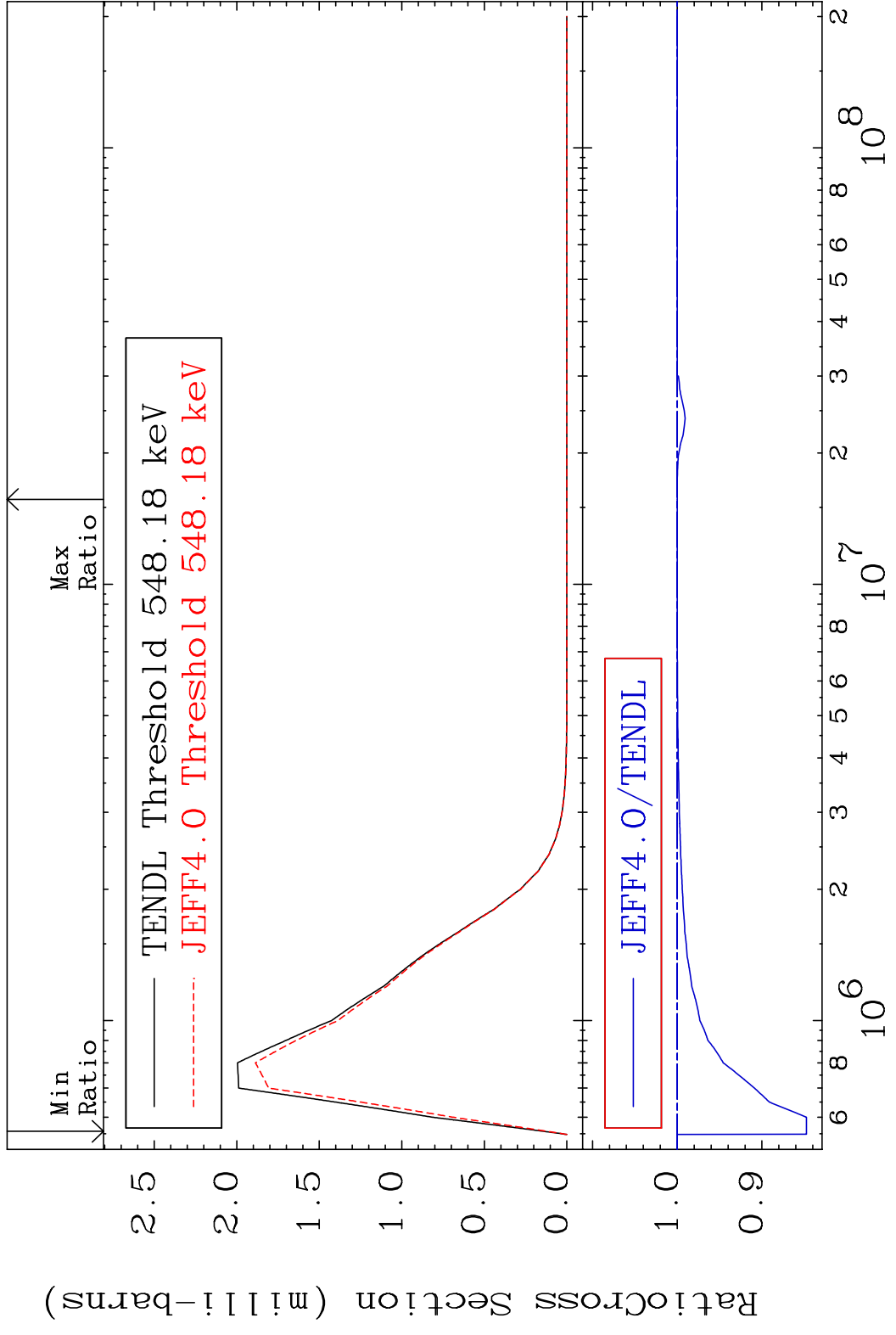
MAT 9912 MT= 54 (n, n') Level 99-Es-252
 Cross Section -8.279 To 0.005 %



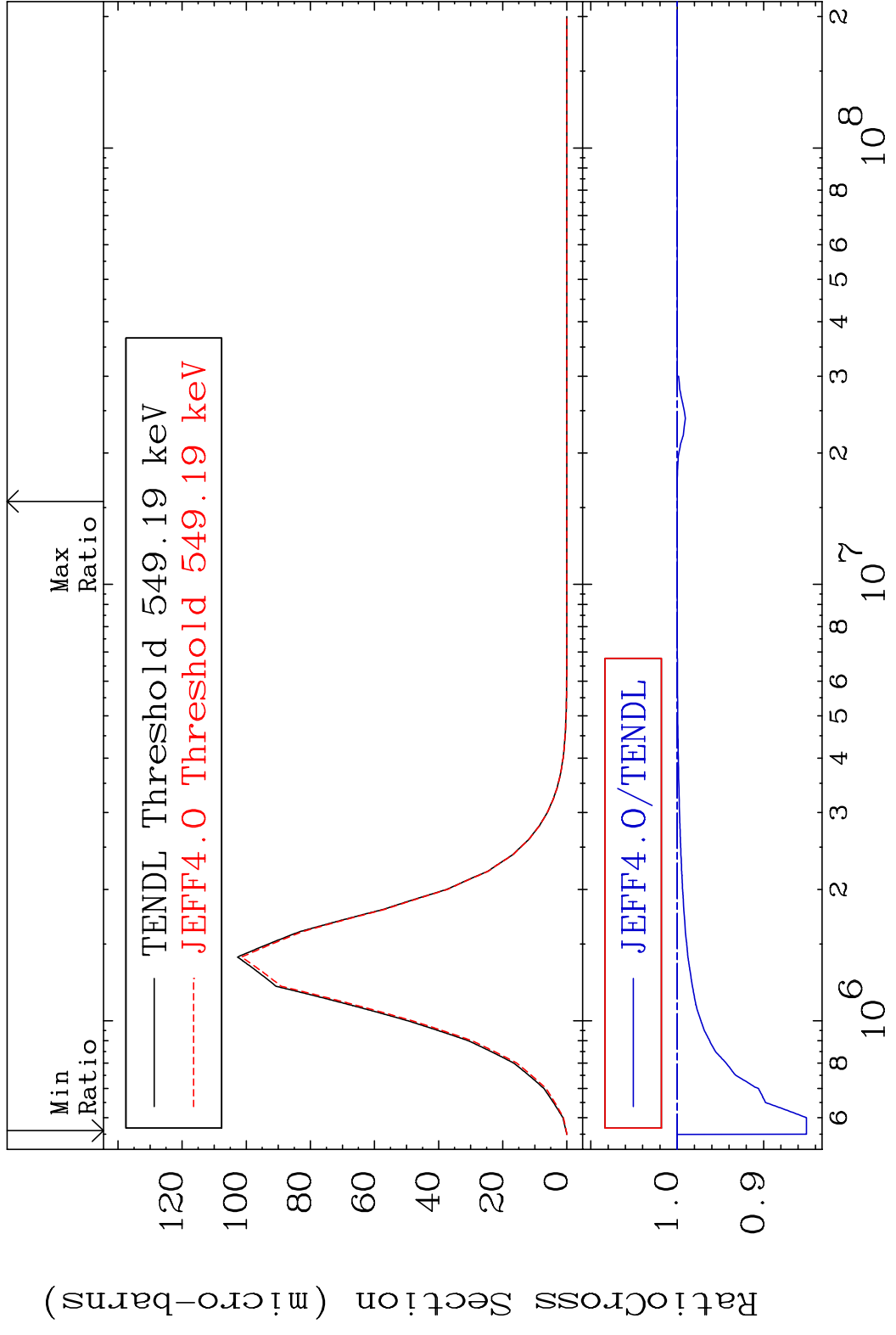
MAT 9912 MT= 55 (n, n') Level 99-Es-252
 Cross Section -9.838 To 0.005 %



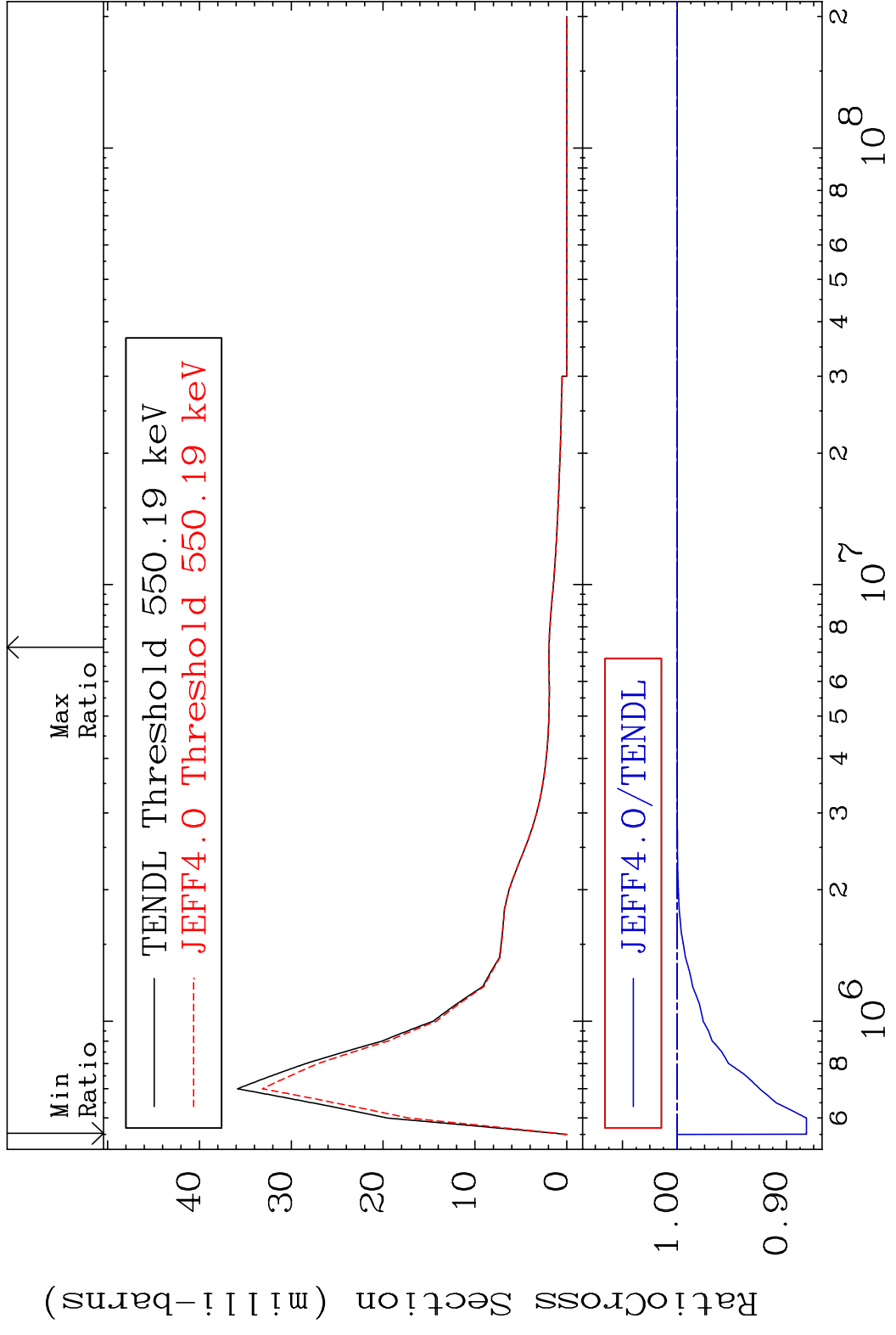
MAT 9912 MT= 56 (n, n') Level 99-Es-252
 Cross Section -15.25 To 0.005 %



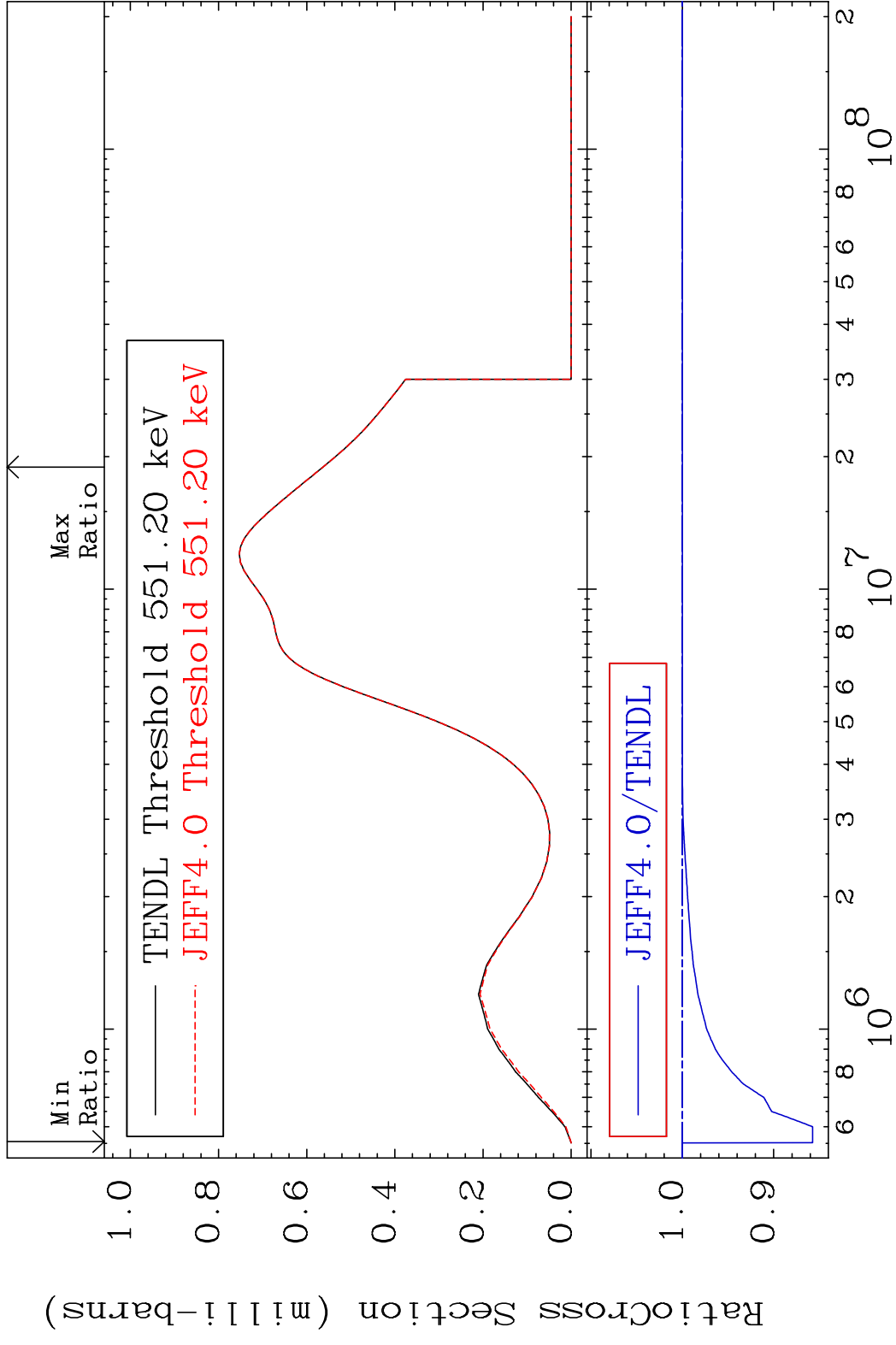
MAT 9912 MT= 57 (n, n') Level 99-Es-252
 Cross Section -14.95 To 0.005 %



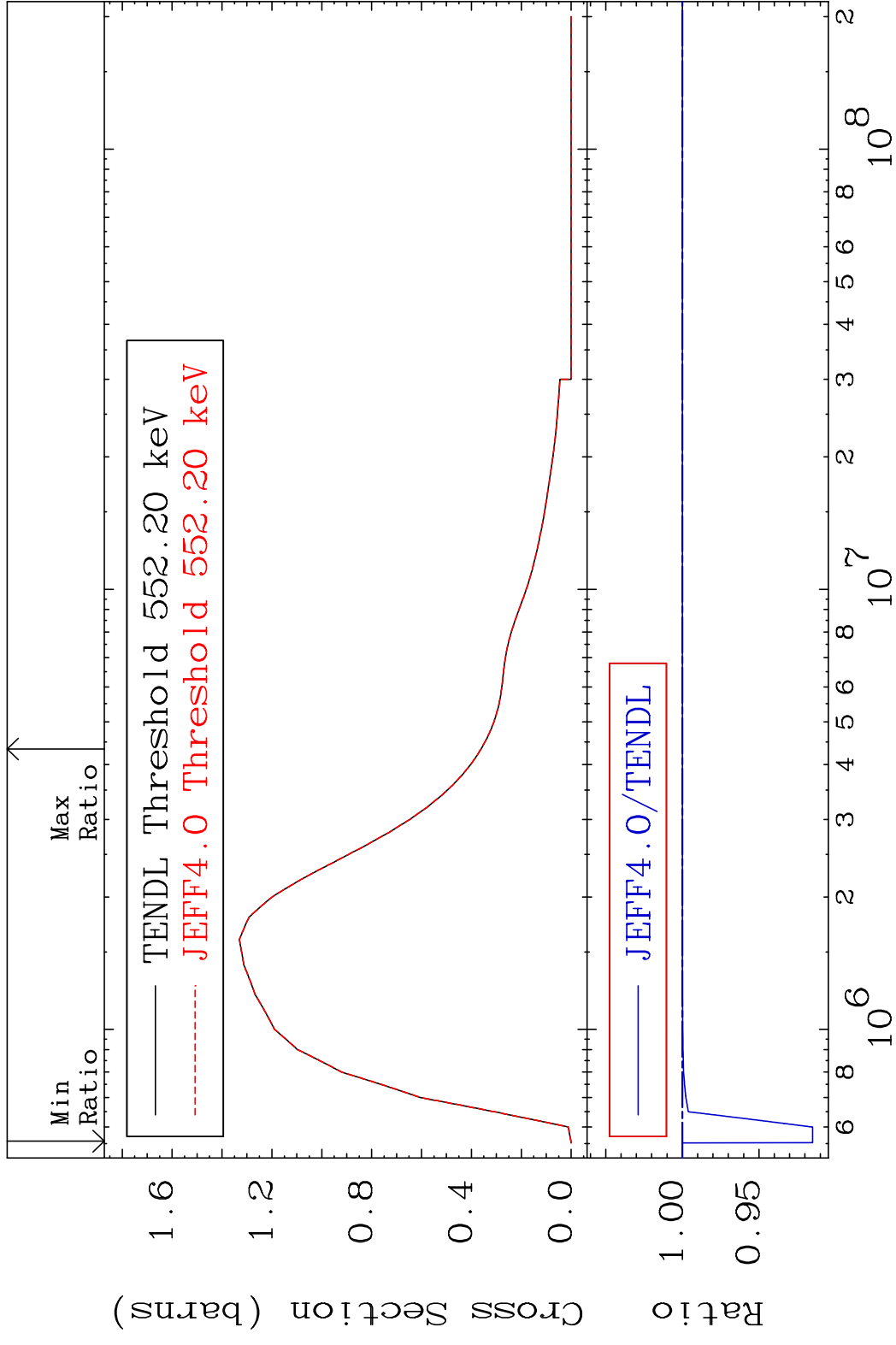
MAT 9912 MT= 58 (n, n') Level 99-Es-252
 Cross Section -11.83 To 0.000 %



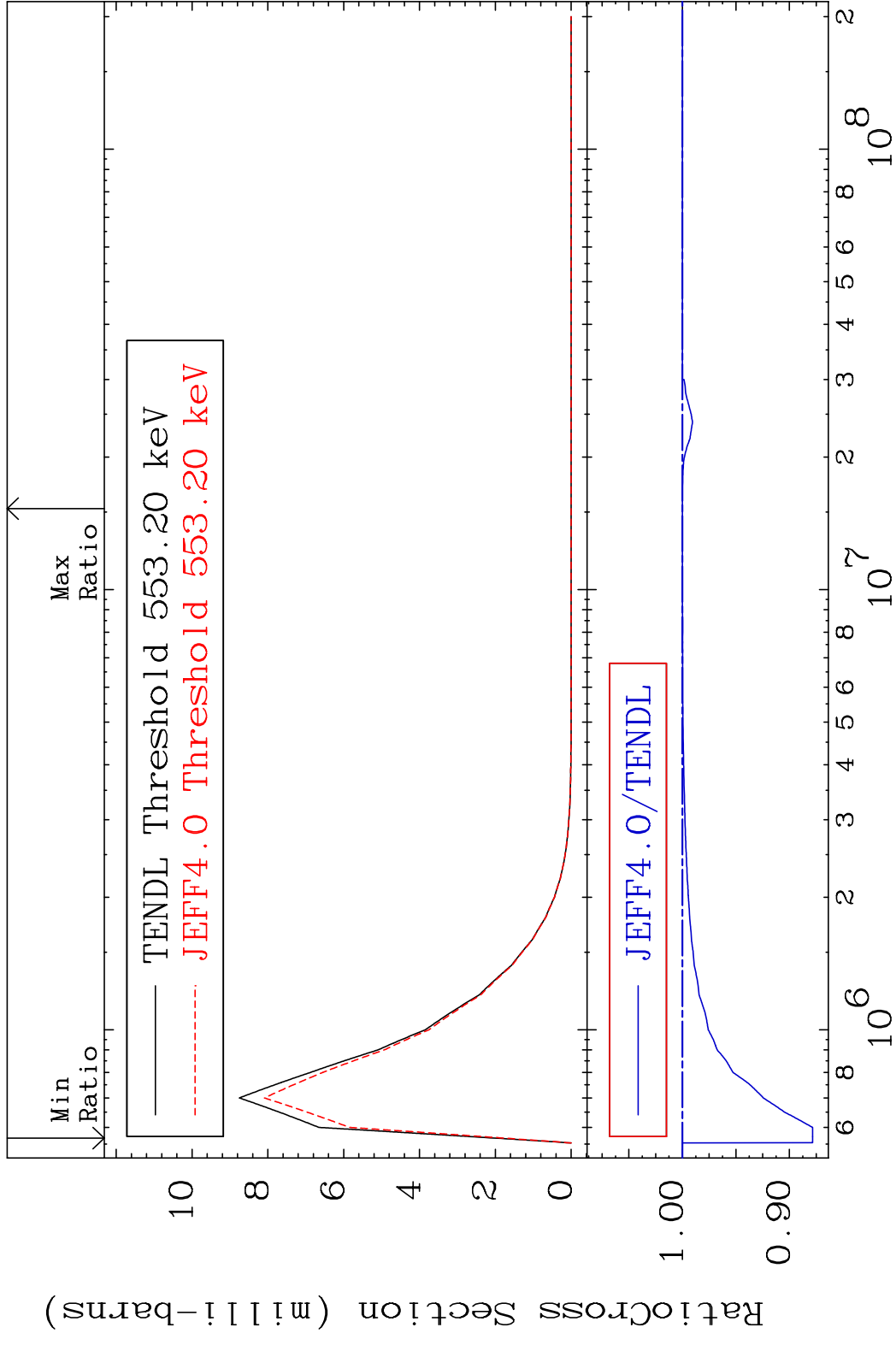
MAT 9912 MT= 59 (n, n') Level 99-Es-252
 Cross Section -14.25 To 0.000 %



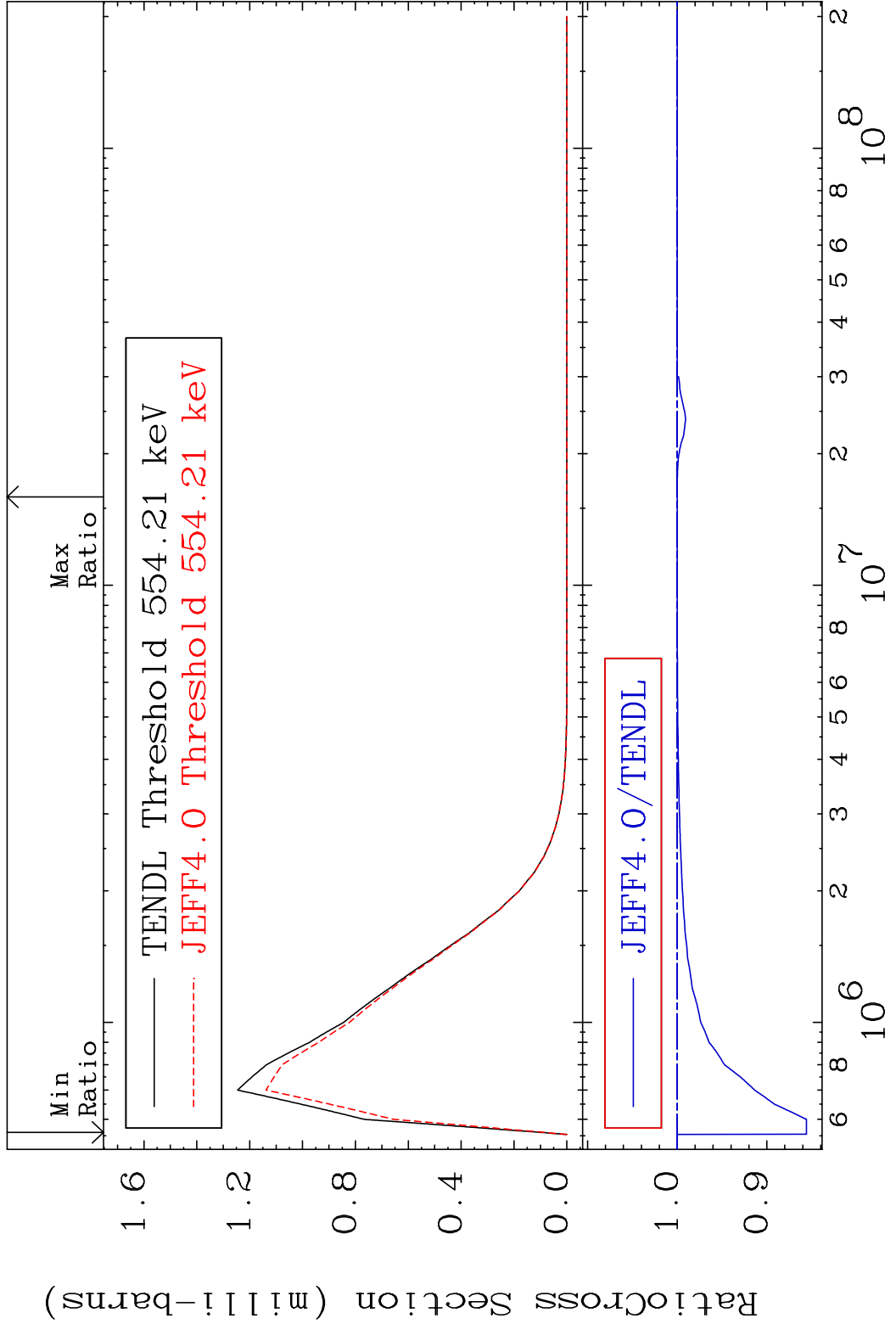
MAT 9912 MT= 60 (n, n') Level 99-Es-252
 Cross Section -8.496 To 0.000 %



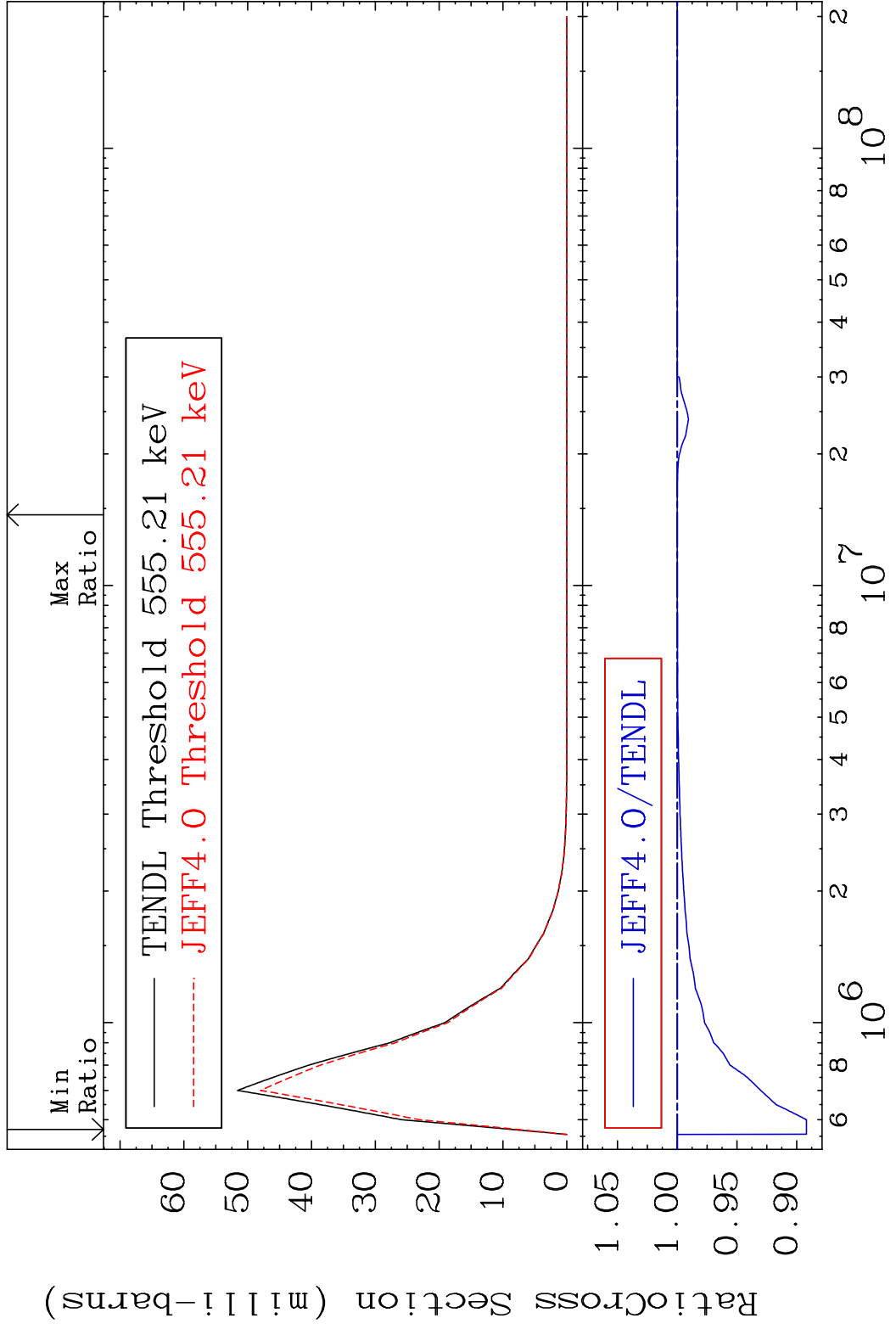
MAT 9912 MT= 61 (n, n') Level 99-Es-252
 Cross Section -12.16 To 0.005 %



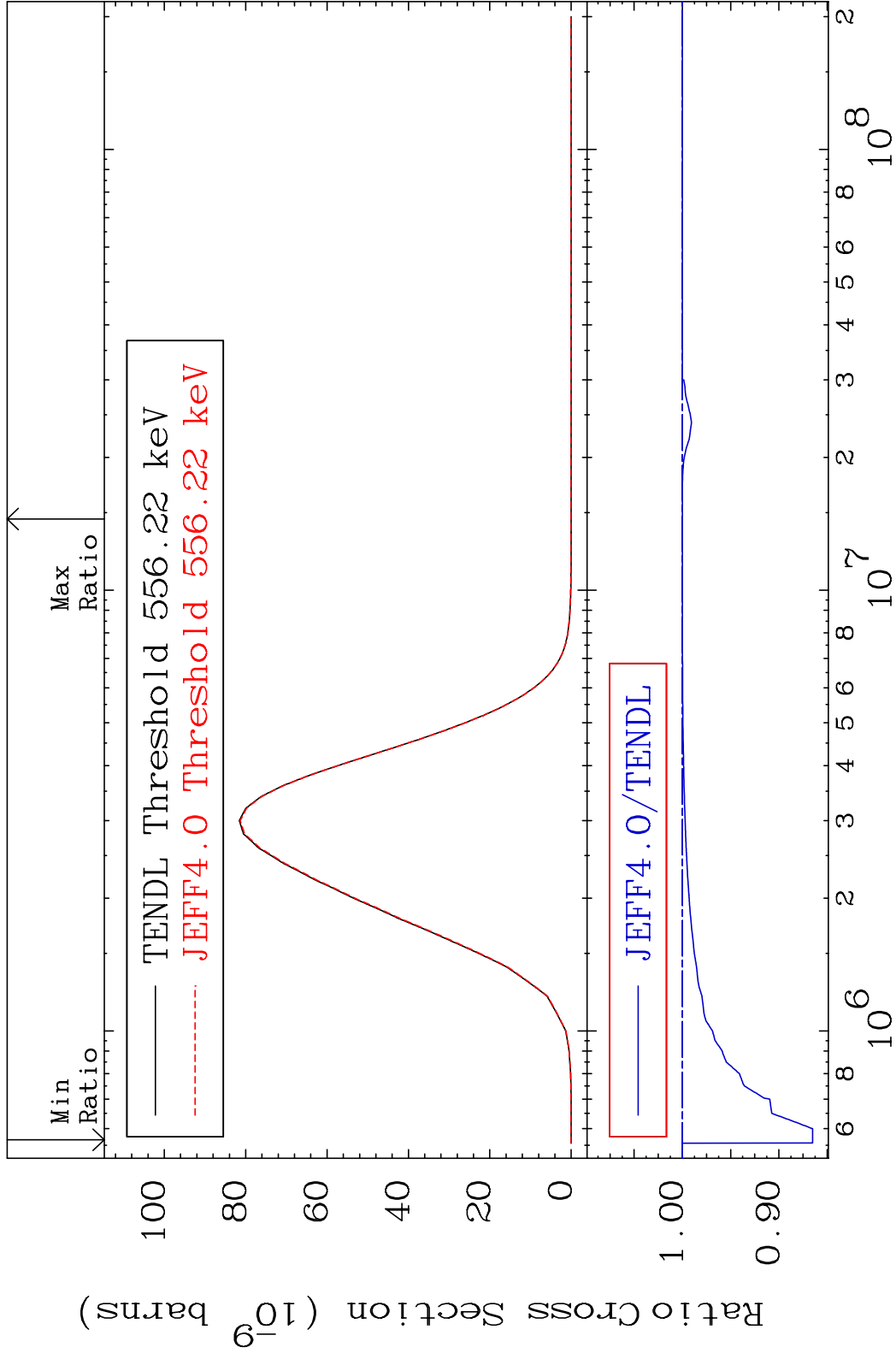
MAT 9912 MT= 62 (n, n') Level 99-Es-252
 Cross Section -14.41 To 0.005 %



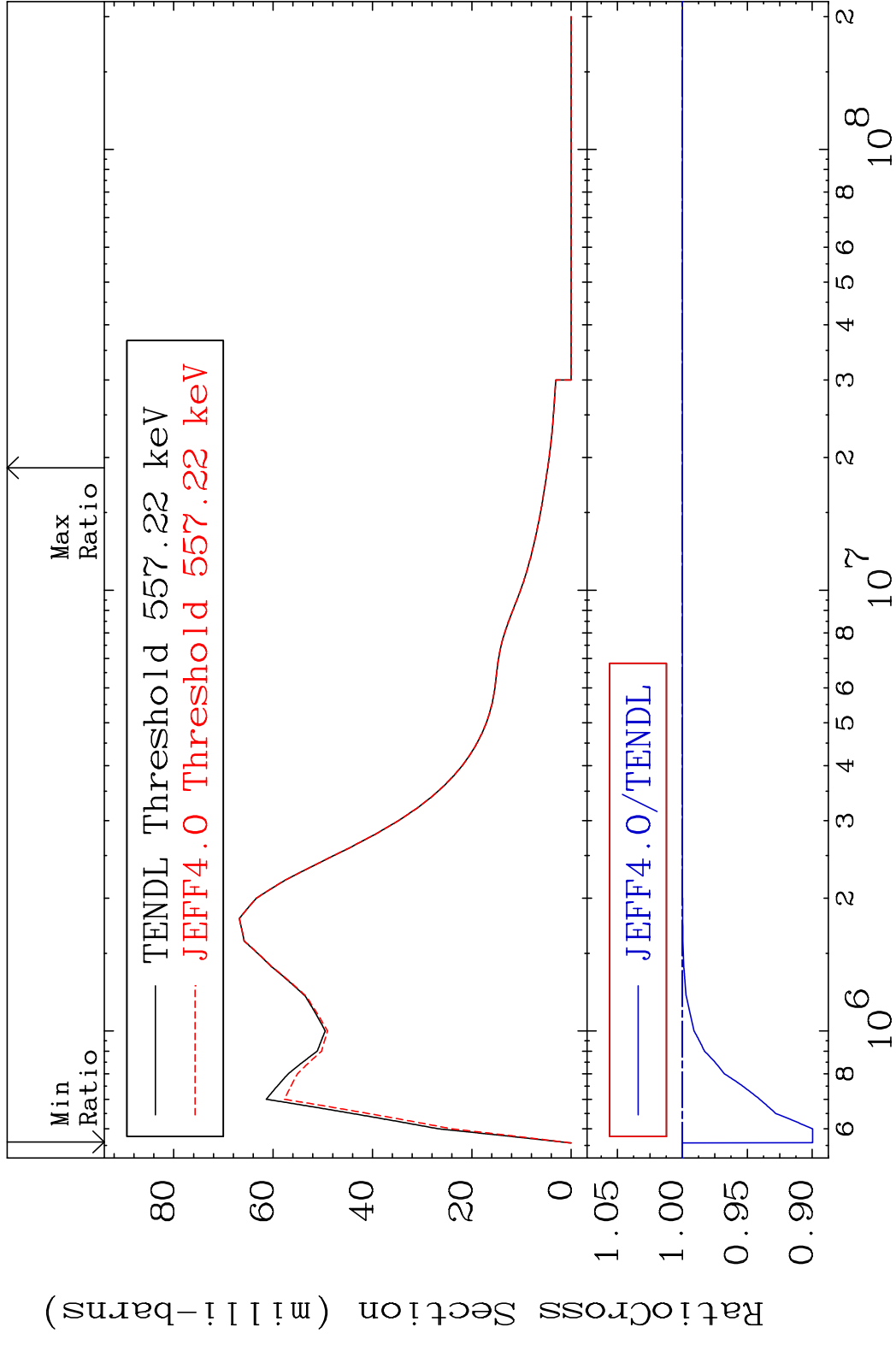
MAT 9912 MT= 63 (n, n') Level 99-Es-252
 Cross Section -10.82 To 0.004 %



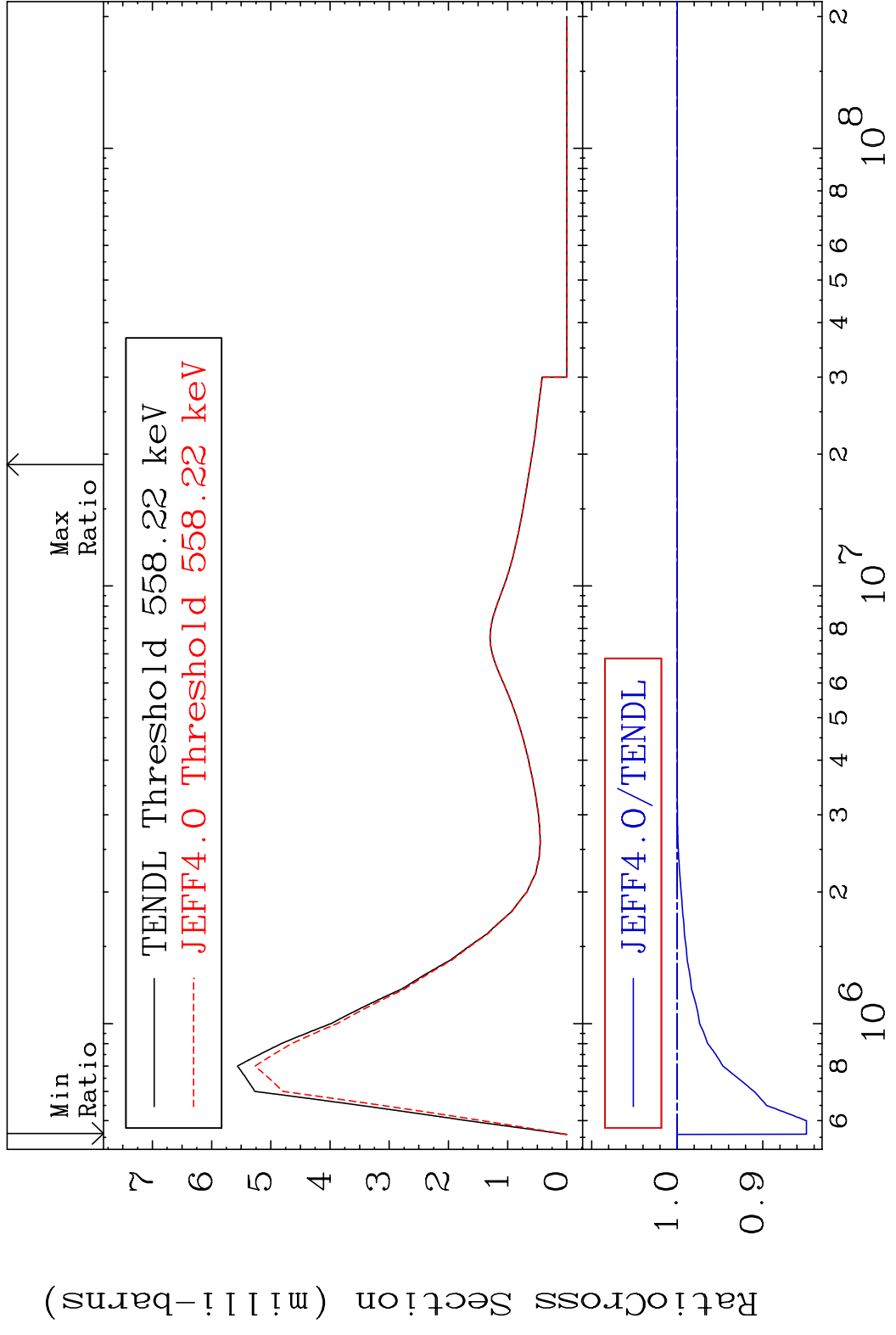
MAT 9912 MT= 64 (n, n') Level 99-Es-252
 Cross Section -13.49 To 0.005 %



MAT 9912 MT= 65 (n, n') Level 99-Es-252
 Cross Section -10.03 To 0.000 %

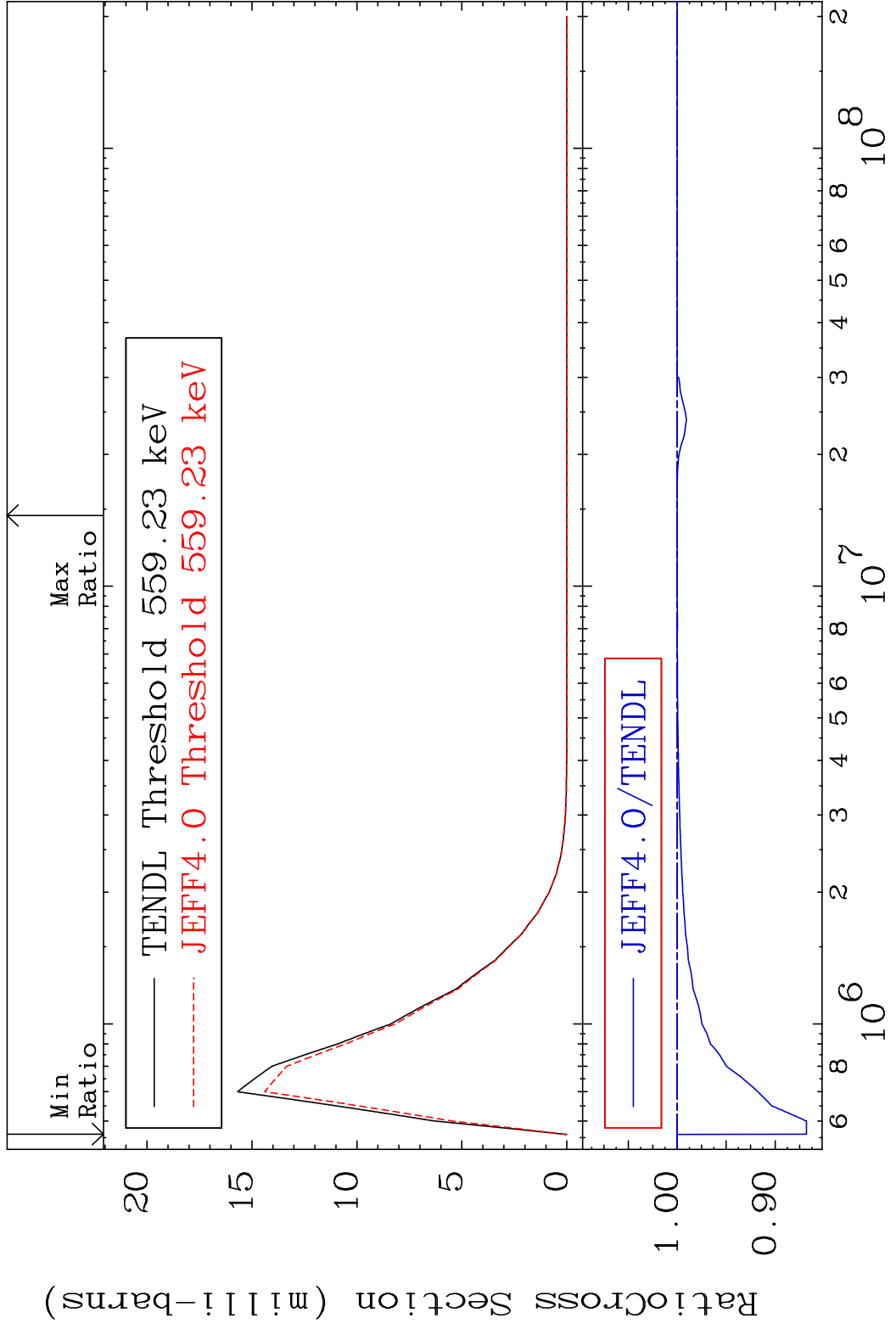


MAT 9912 MT= 66 (n, n') Level 99-Es-252
 Cross Section -15.09 To 0.000 %

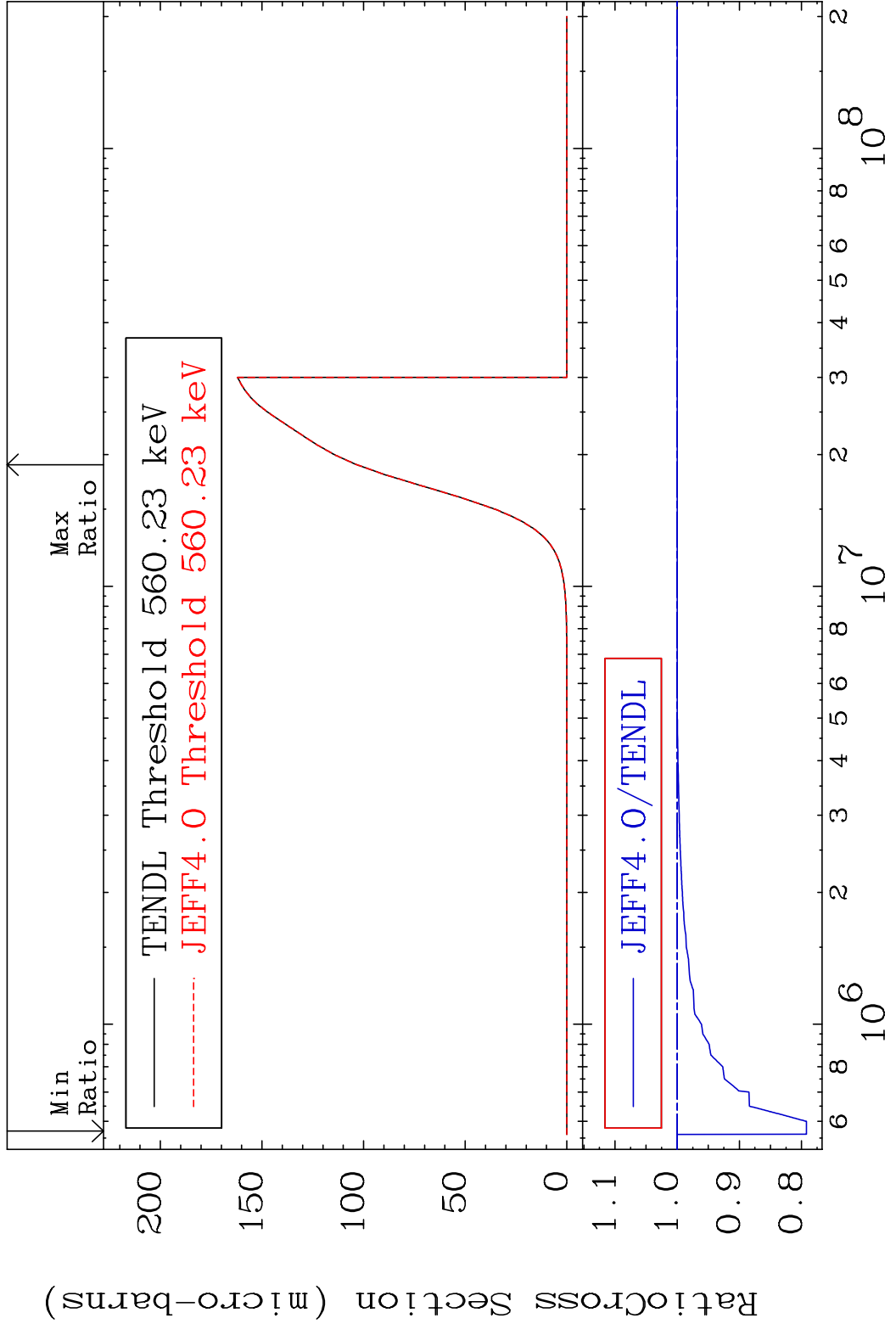


40 Incident Energy (eV) 99-Es-252

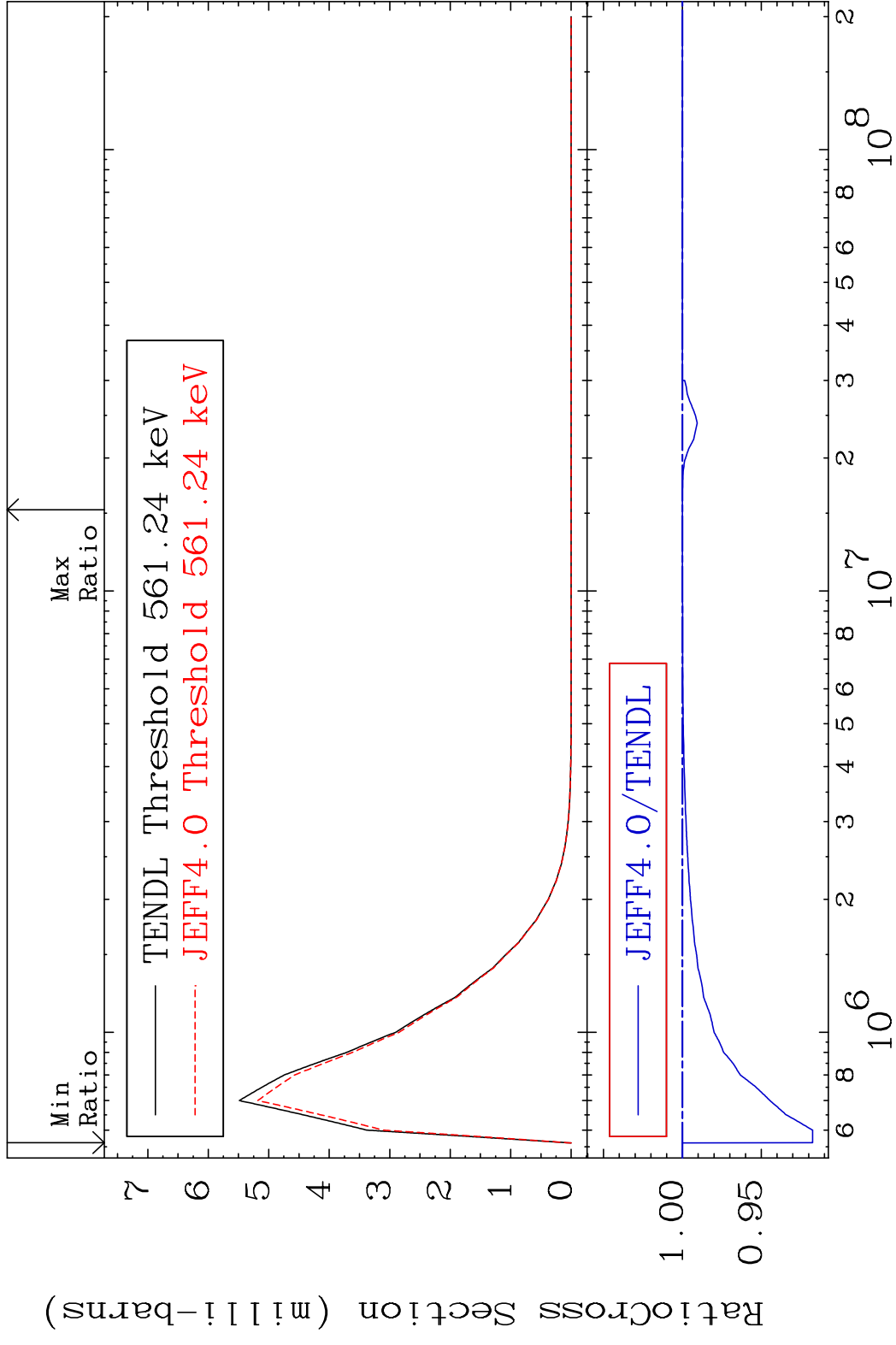
MAT 9912 MT= 67 (n, n') Level 99-Es-252
 Cross Section -13.20 To 0.005 %



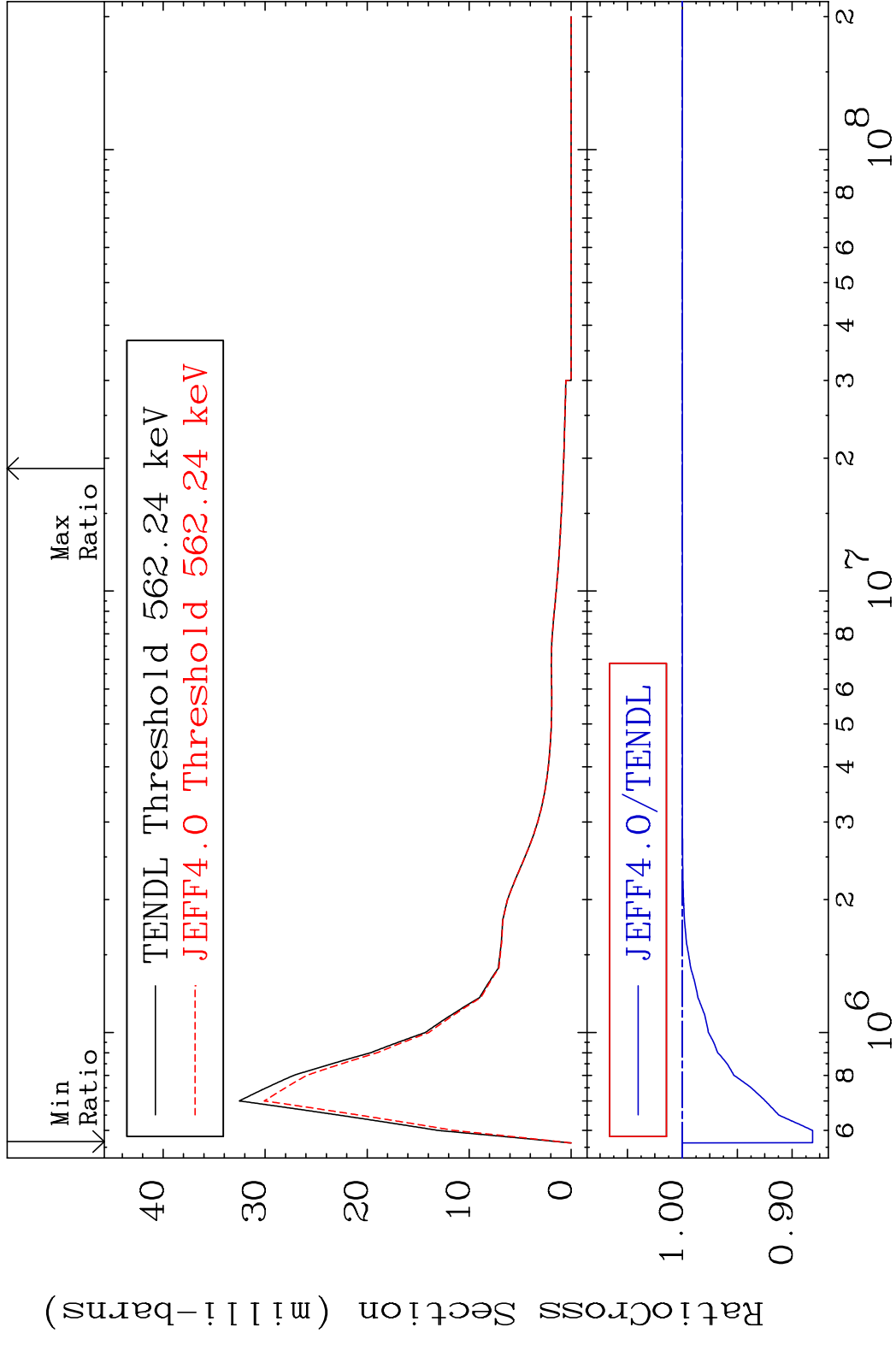
MAT 9912 MT= 68 (n, n') Level 99-Es-252
 Cross Section -20.78 To 0.000 %



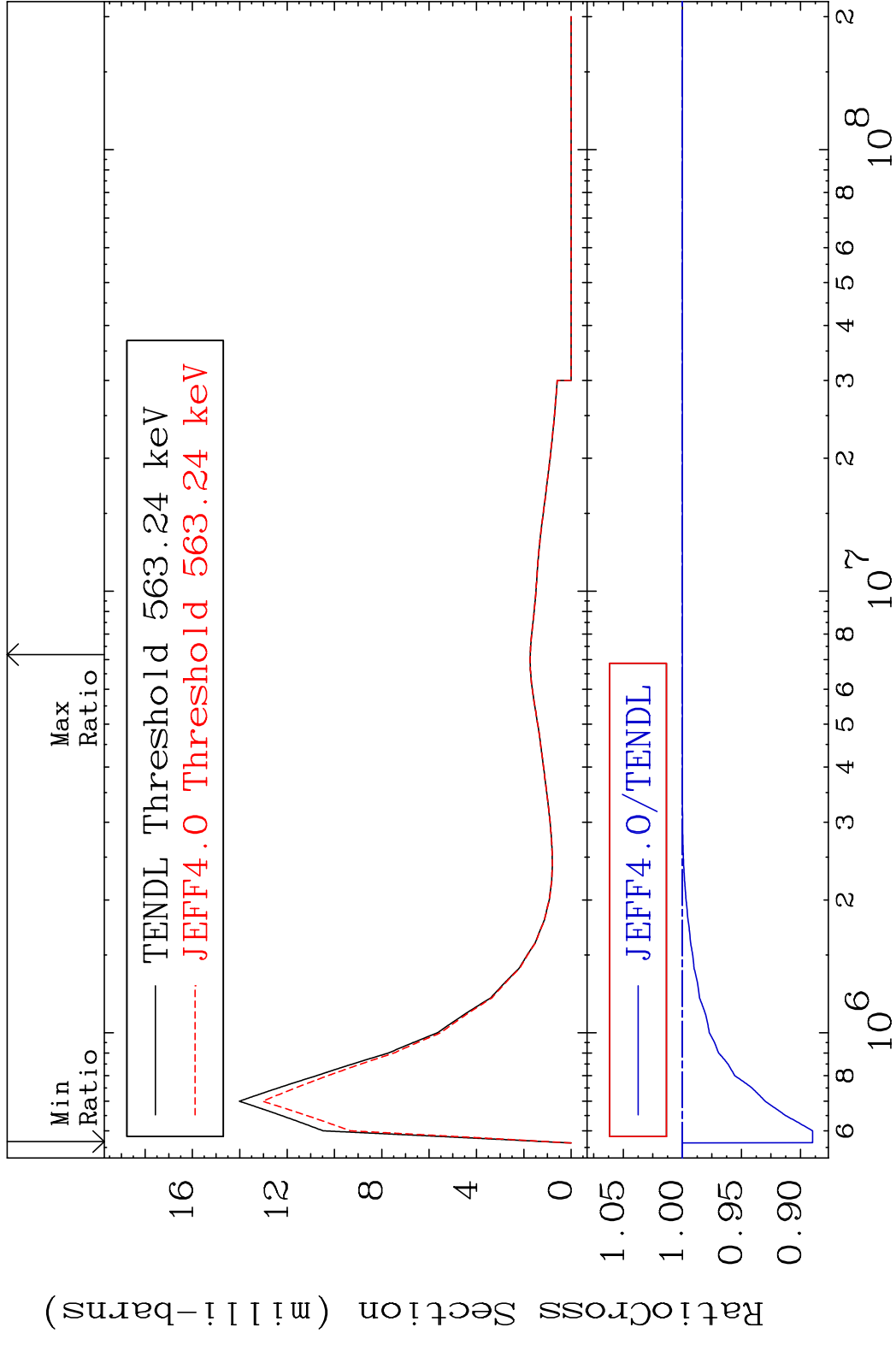
MAT 9912 MT= 69 (n, n') Level 99-Es-252
 Cross Section -8.248 To 0.005 %



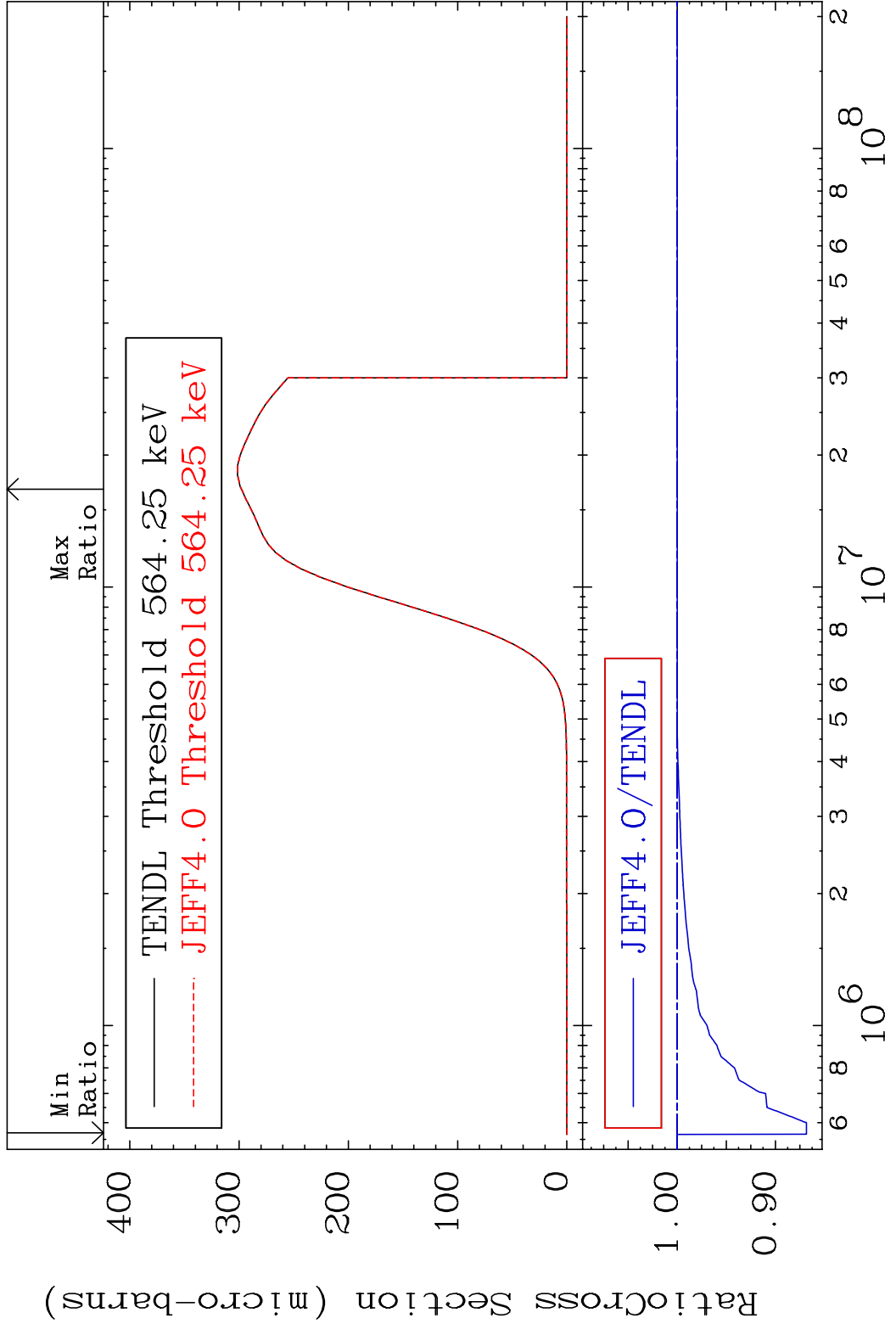
MAT 9912 MT= 70 (n, n') Level 99-Es-252
 Cross Section -11.86 To 0.000 %



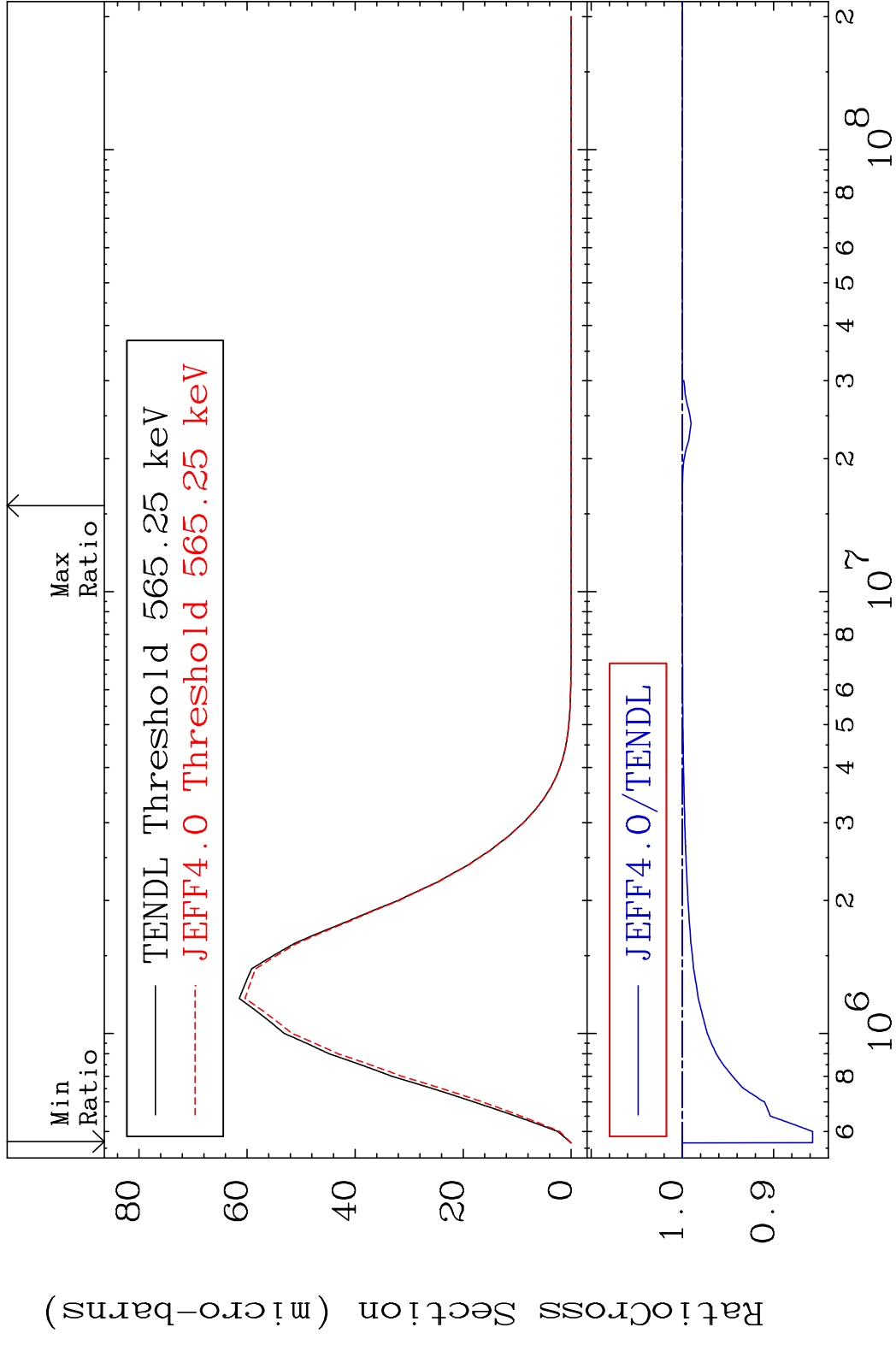
MAT 9912 MT= 71 (n, n') Level 99-Es-252
 Cross Section -11.02 To 0.000 %



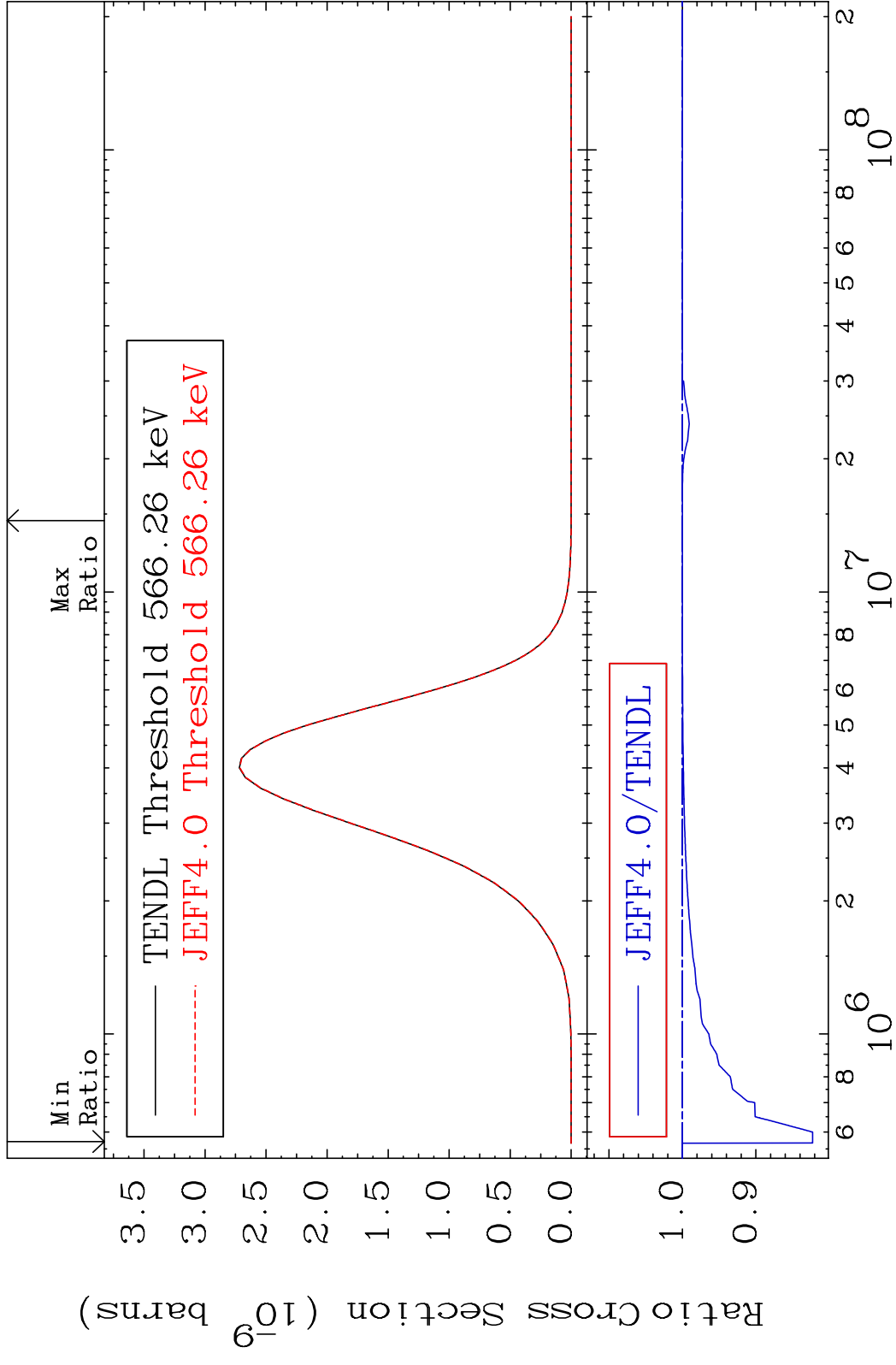
MAT 9912 MT= 72 (n, n') Level 99-Es-252
 Cross Section -13.16 To 0.000 %



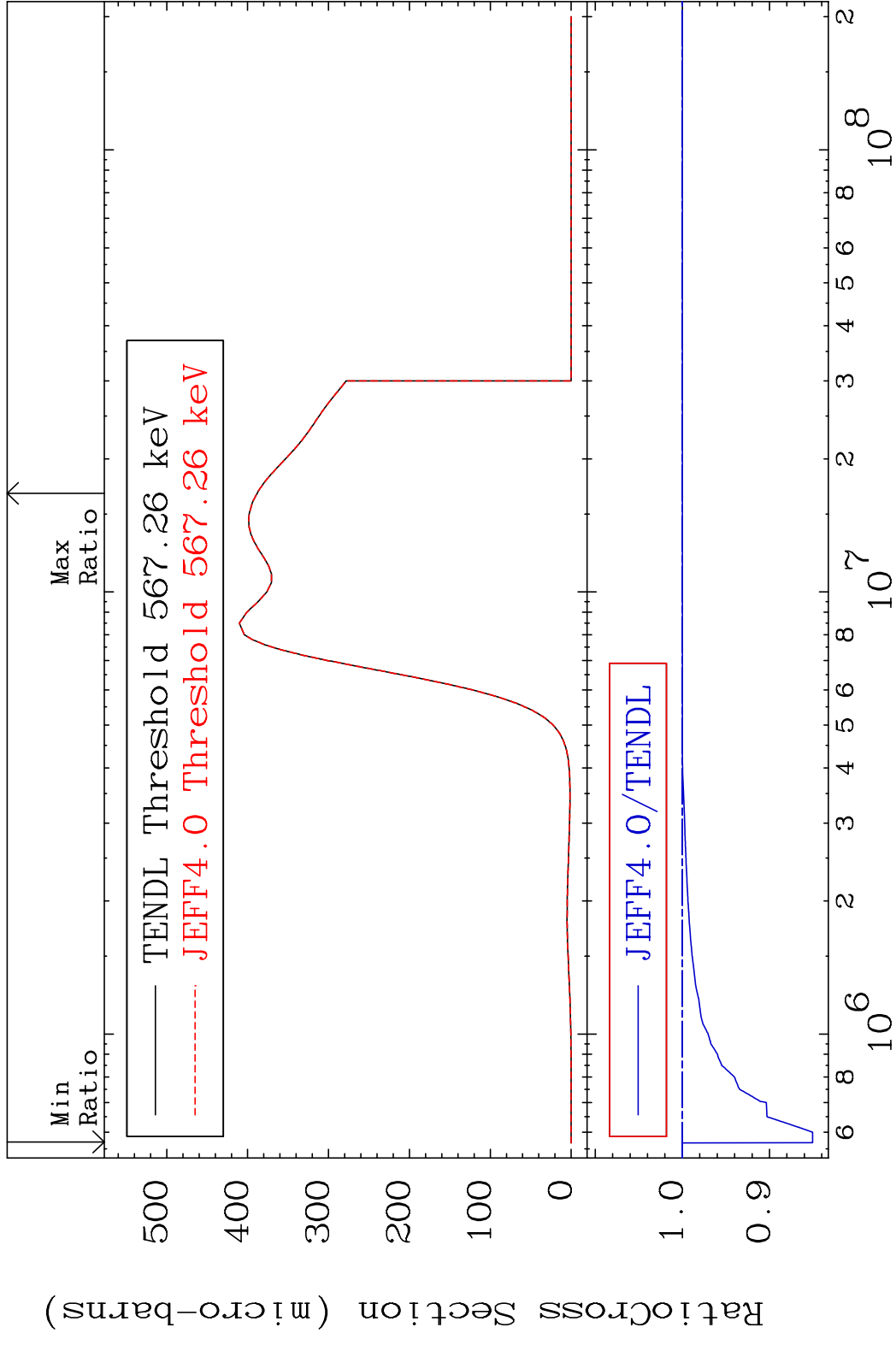
MAT 9912 MT= 73 (n, n') Level 99-Es-252
 Cross Section -14.26 To 0.005 %



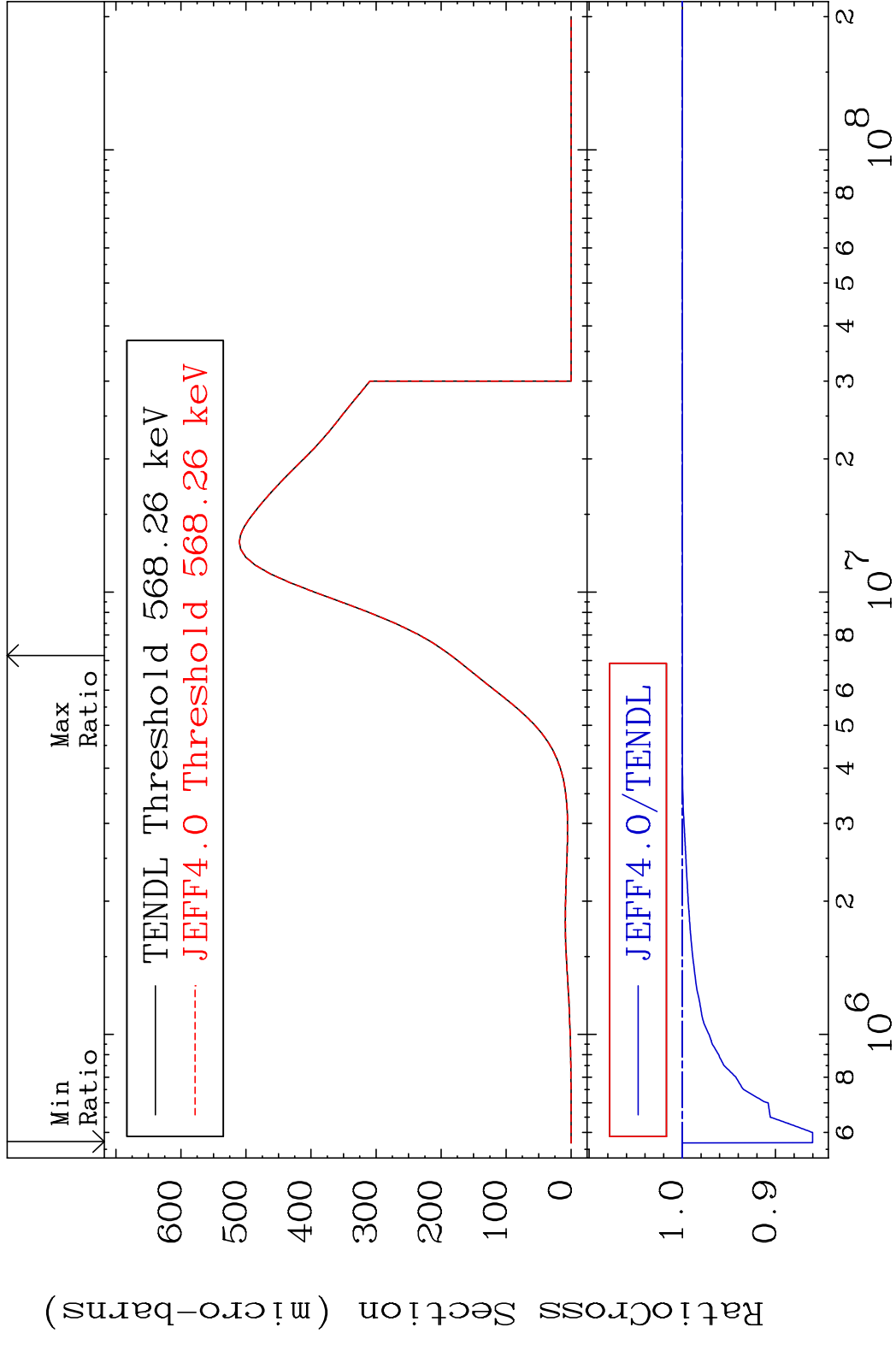
MAT 9912 MT= 74 (n, n') Level 99-Es-252
 Cross Section -17.70 To 0.005 %



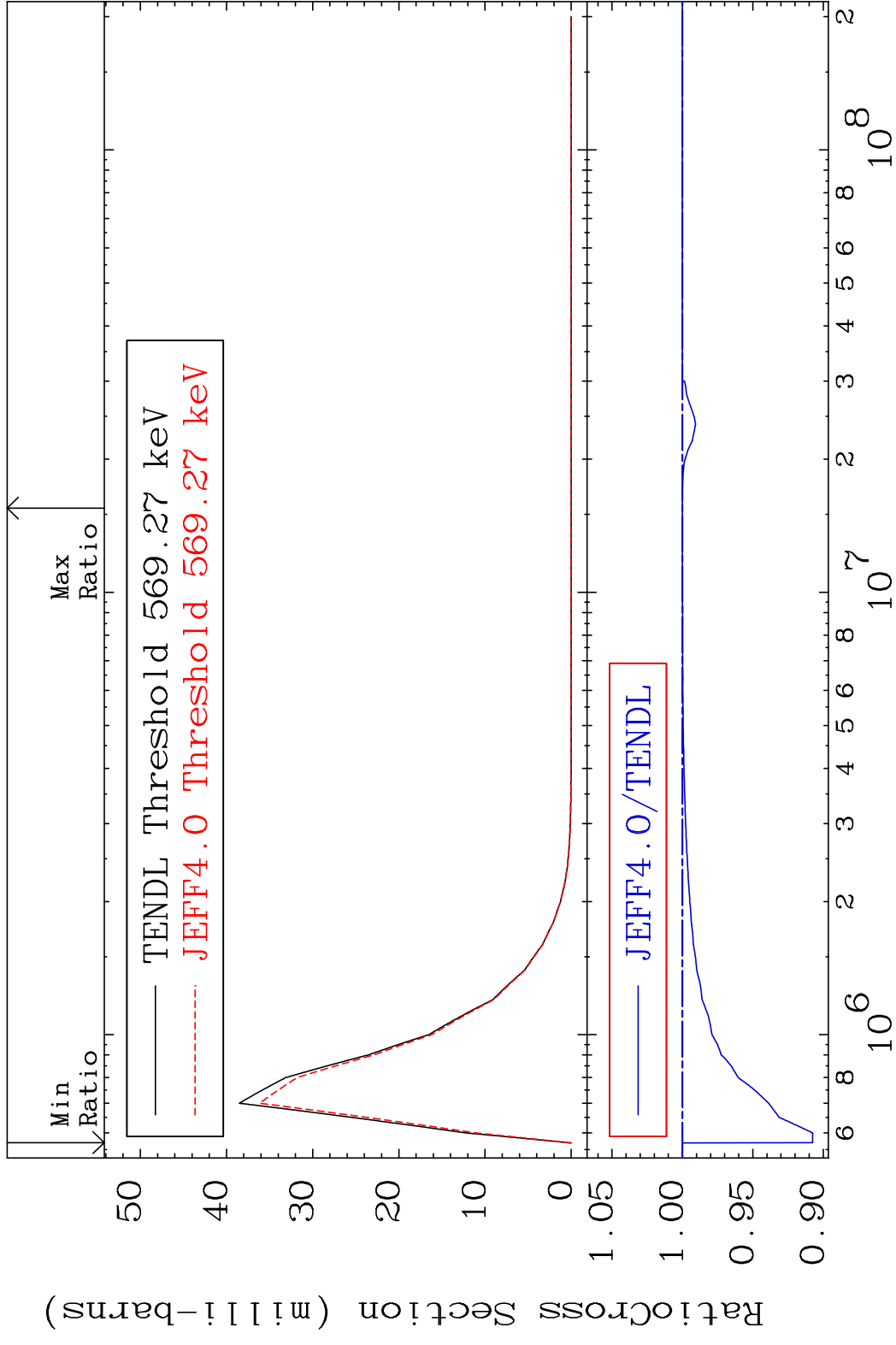
MAT 9912 MT= 75 (n, n') Level 99-Es-252
 Cross Section -14.94 To 0.000 %



MAT 9912 MT= 76 (n, n') Level 99-Es-252
 Cross Section -13.98 To 0.000 %



MAT 9912 MT= 77 (n, n') Level 99-Es-252
 Cross Section -9.241 To 0.005 %

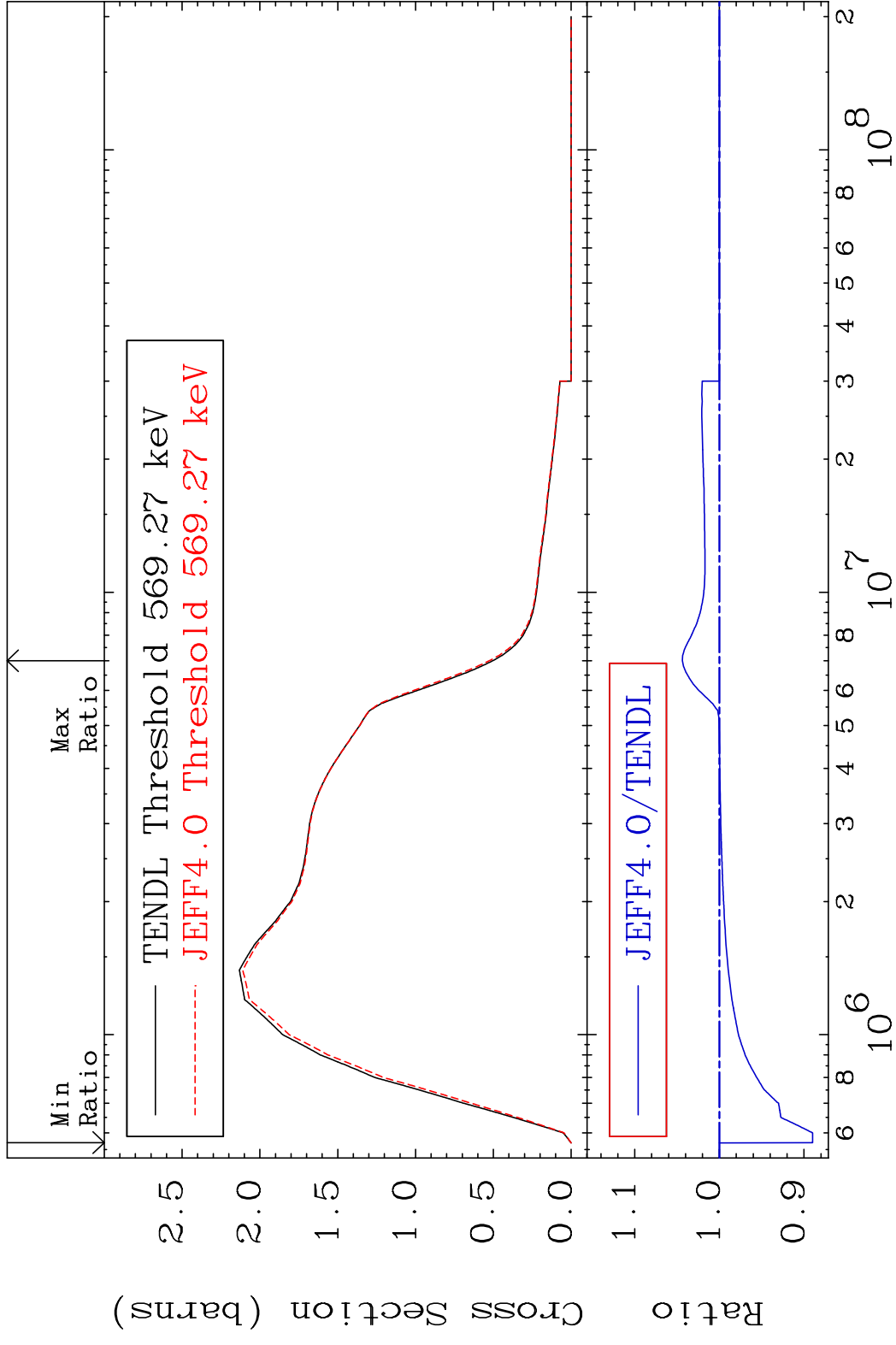


MAT 9912

(n,n') Continuum

99-Es-252

Cross Section -11.01 To 4.377 %

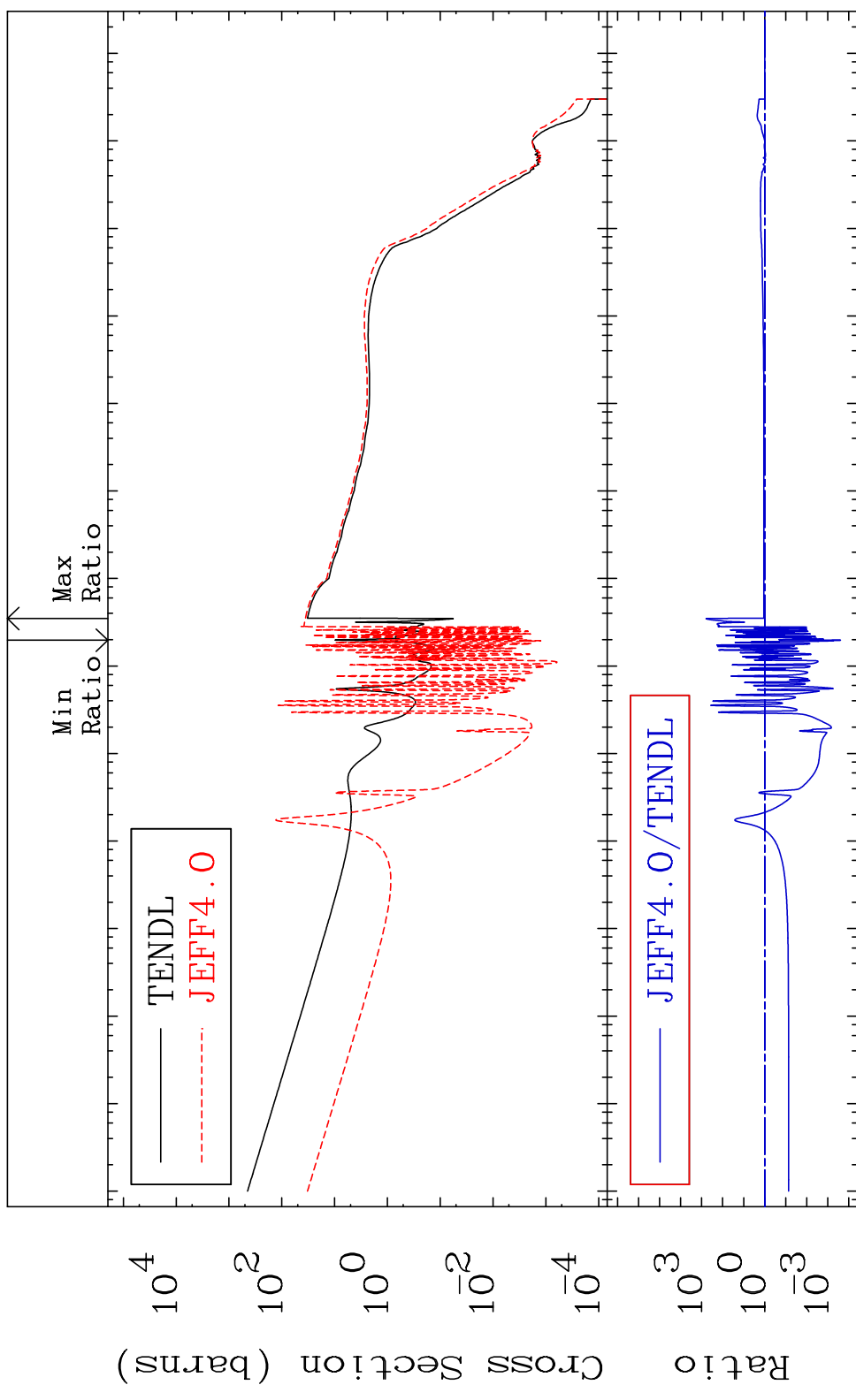


MAT 9912

(n, γ)

99-Es-252

Cross Section -99.97 To 9999. %

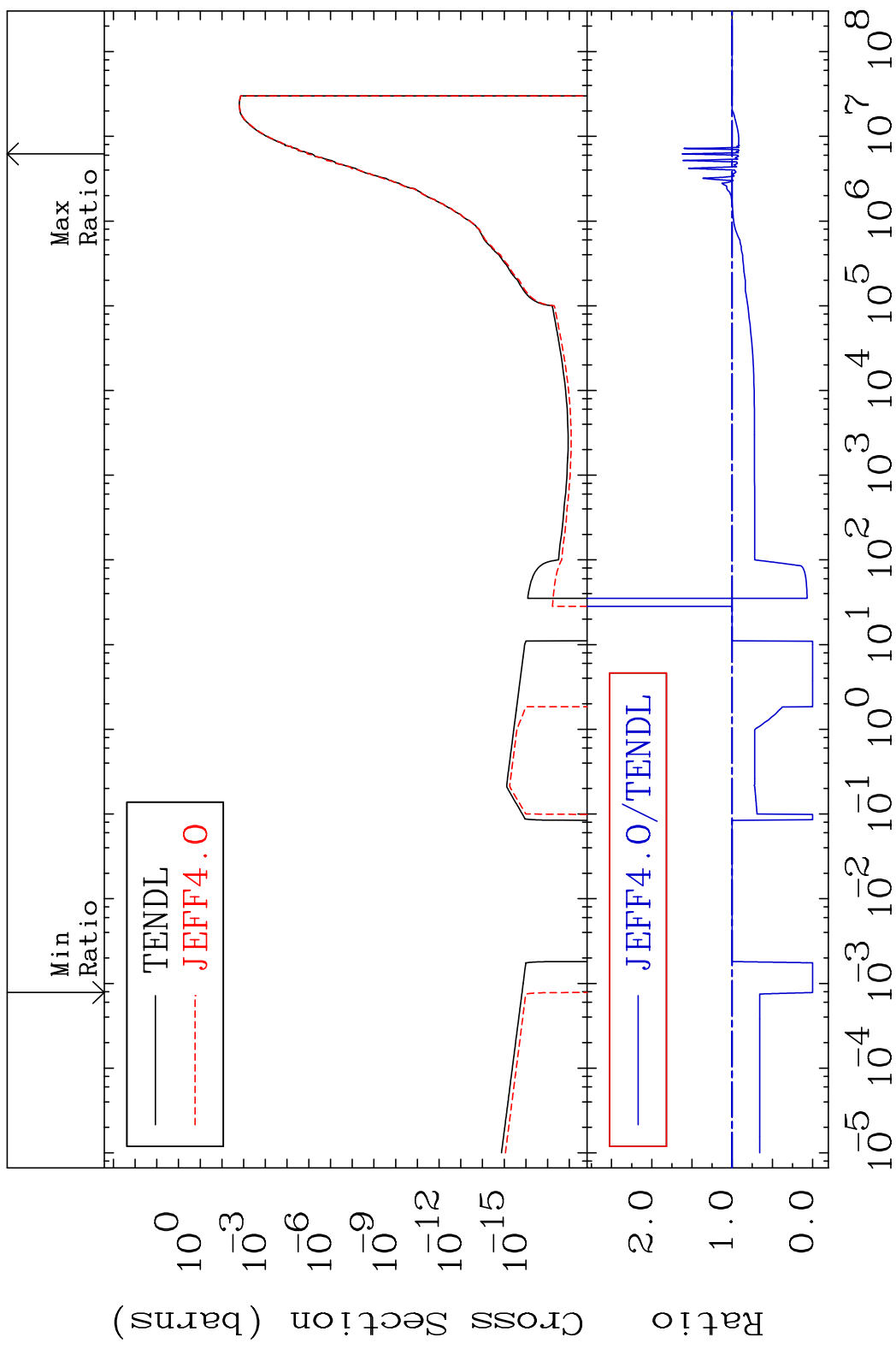


MAT 9912

(n, p)

99-Es-252

Cross Section -100.0 To 61.95 %

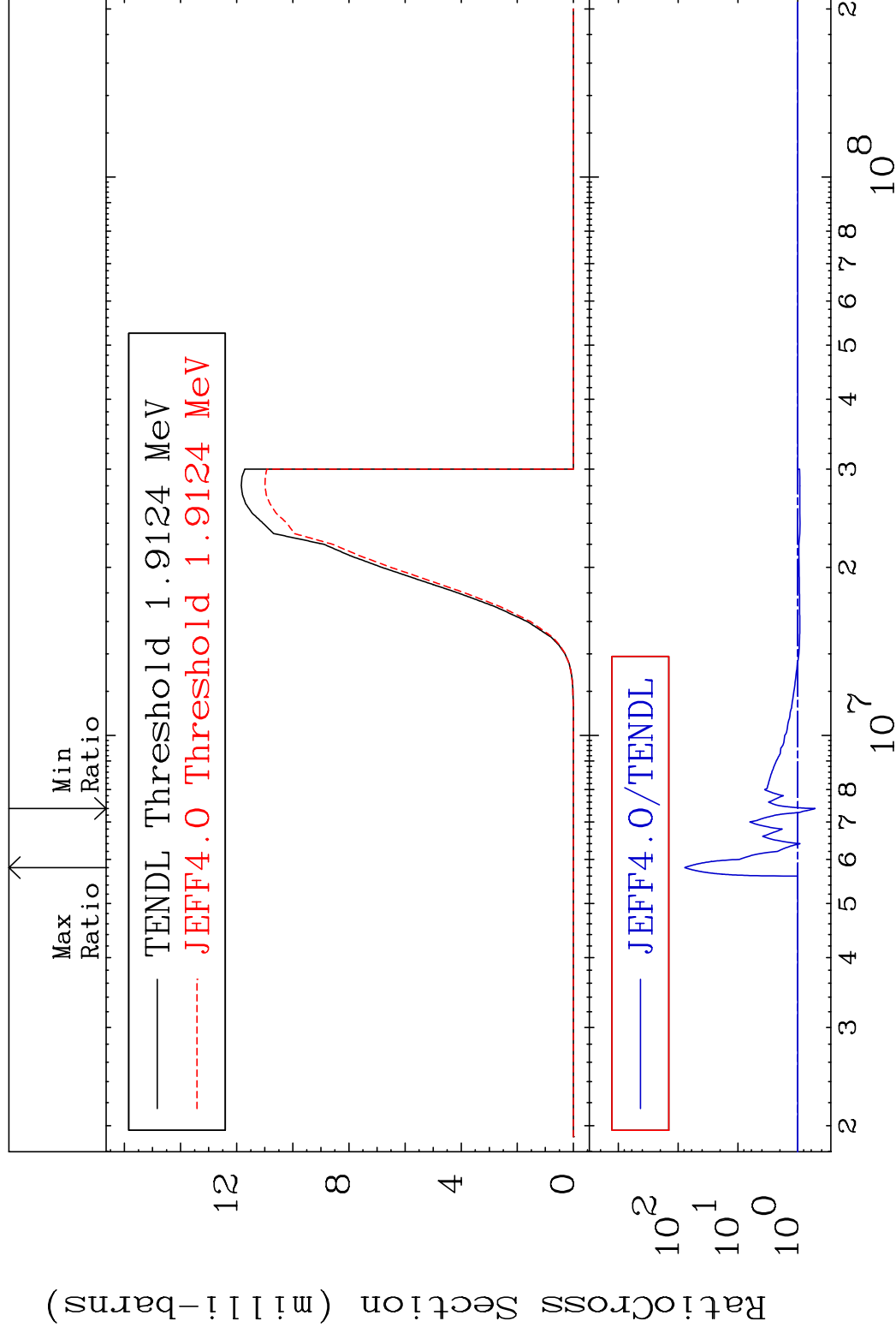


MAT 9912

(n, d)

99-Es-252

Cross Section -48.41 To 7689. %



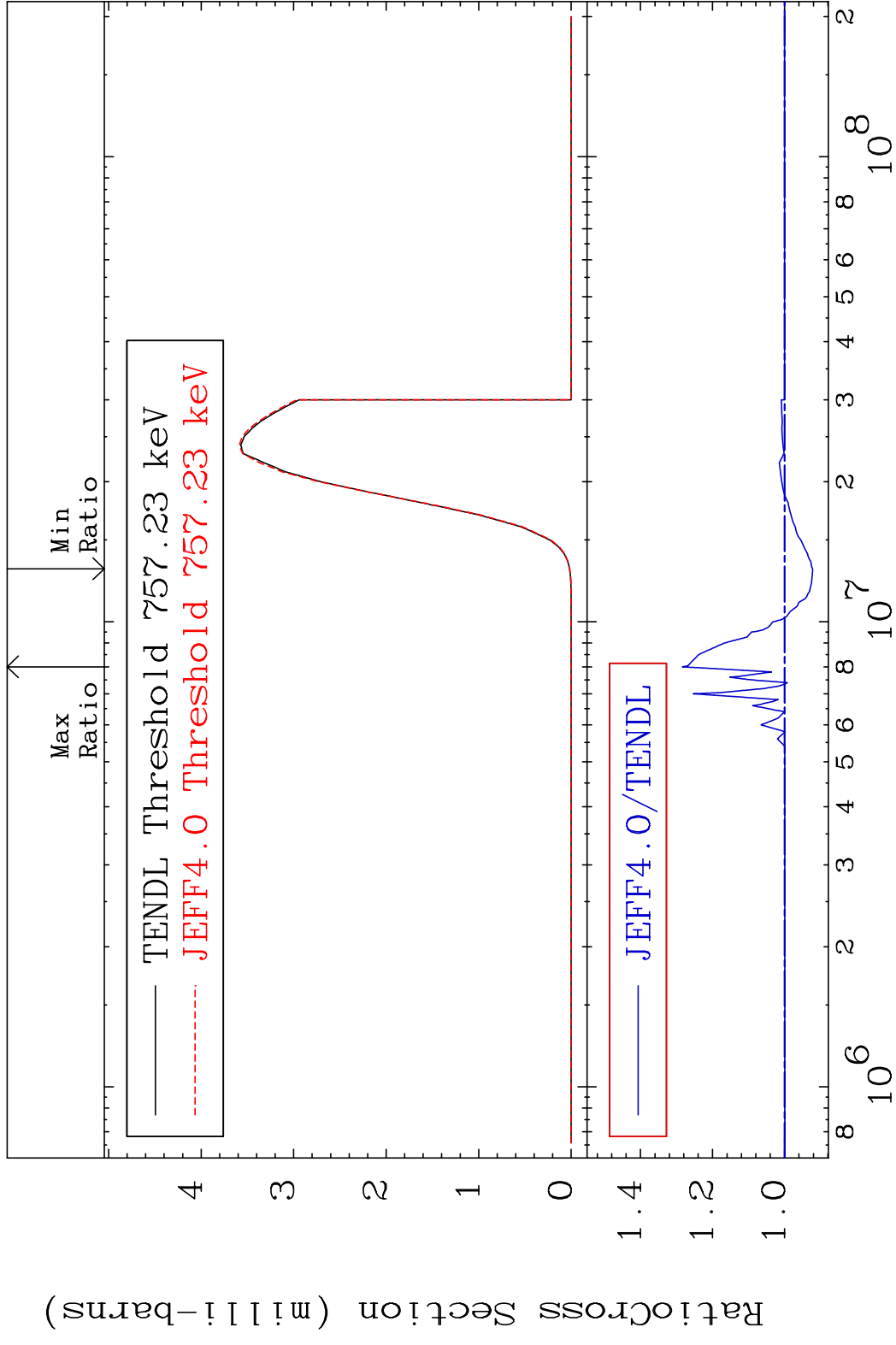
55

Incident Energy (eV)

99-Es-252

MAT 9912

(n, t) Cross Section -7.758 To 28.39 %
99-Es-252

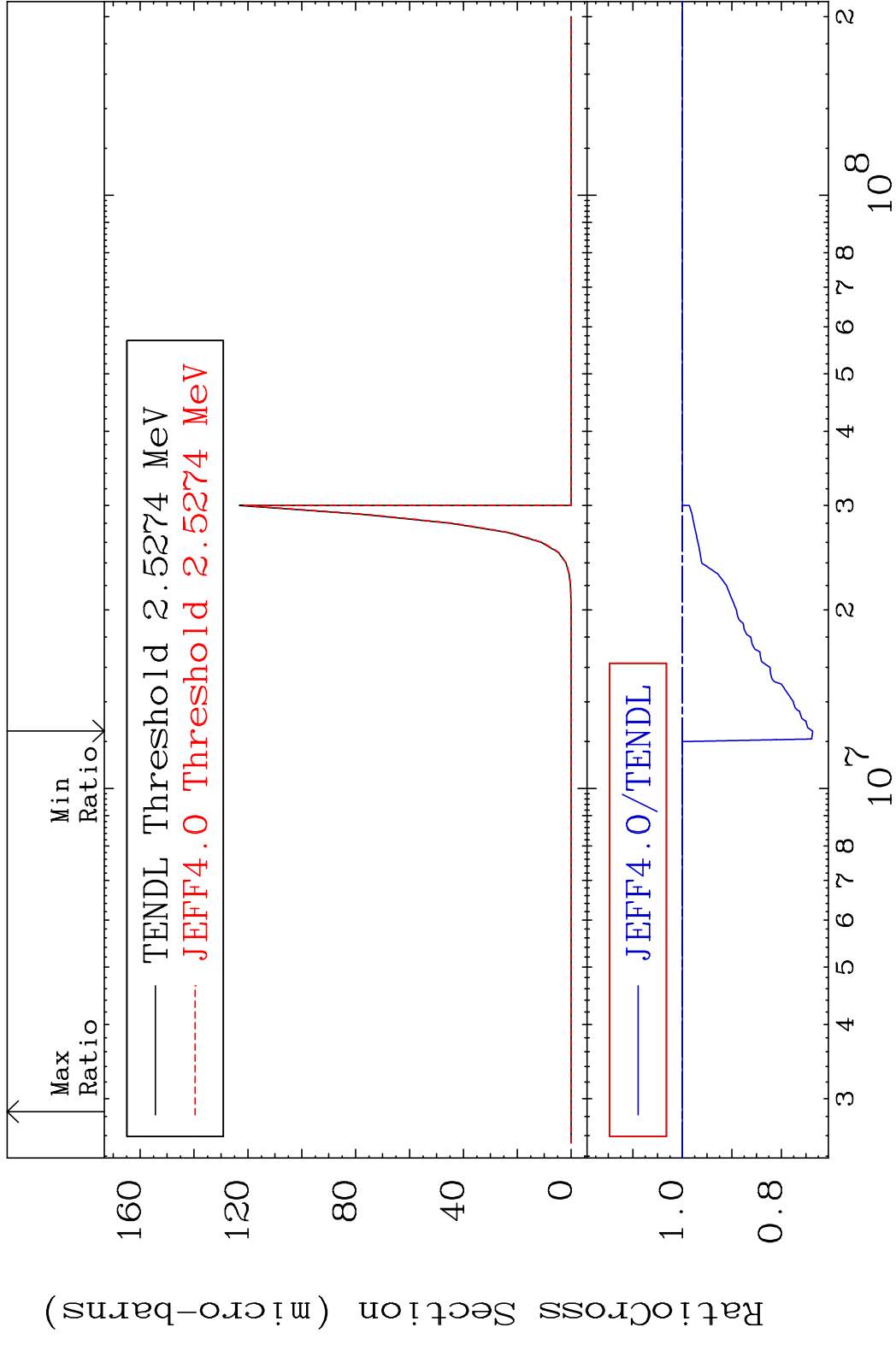


MAT 9912

(n, He-3)

99-Es-252

Cross Section -26.32 To 0.000 %

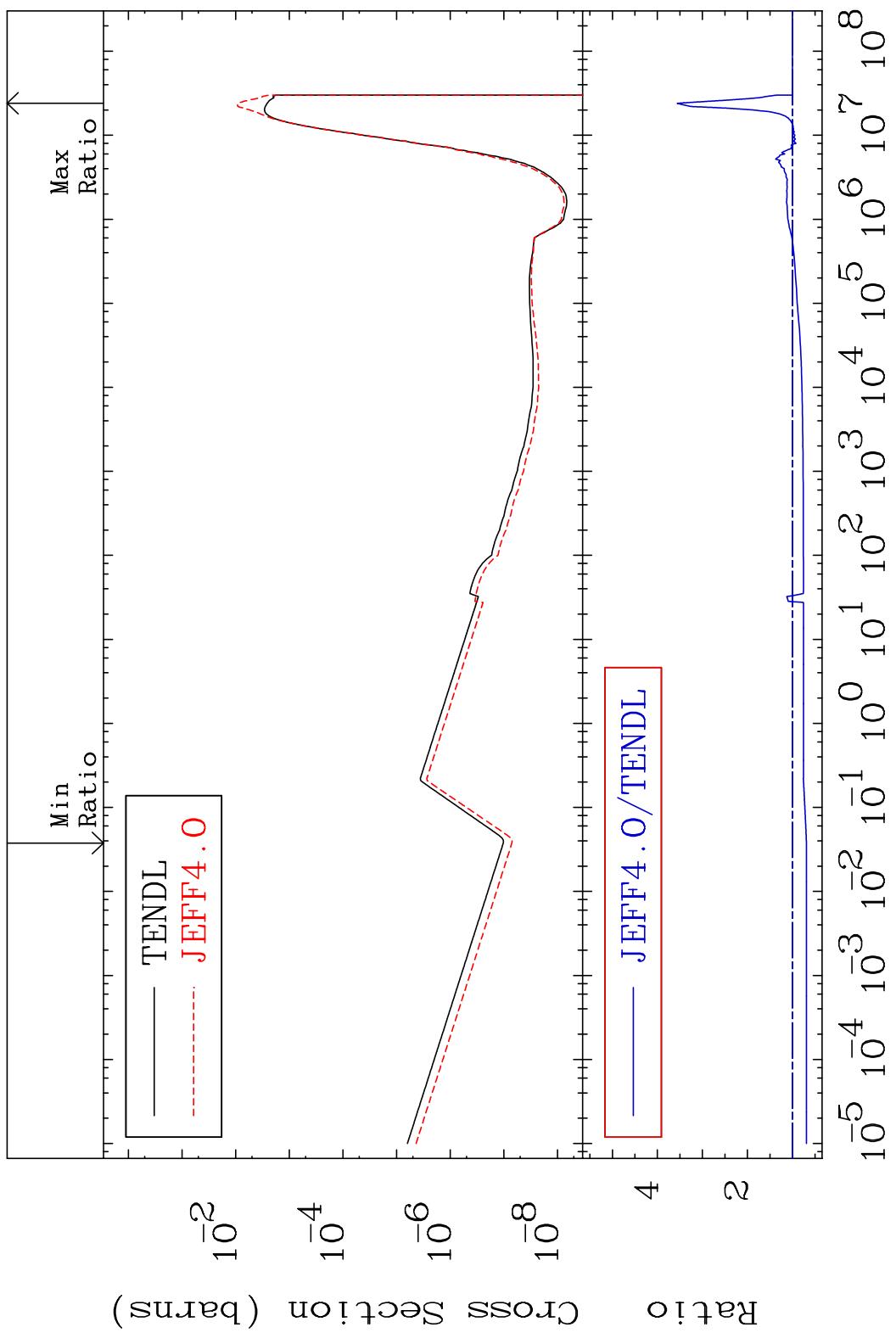


MAT 9912

(n, α)

99-Es-252

Cross Section -31.03 To 256.0 %



58

Incident Energy (eV)

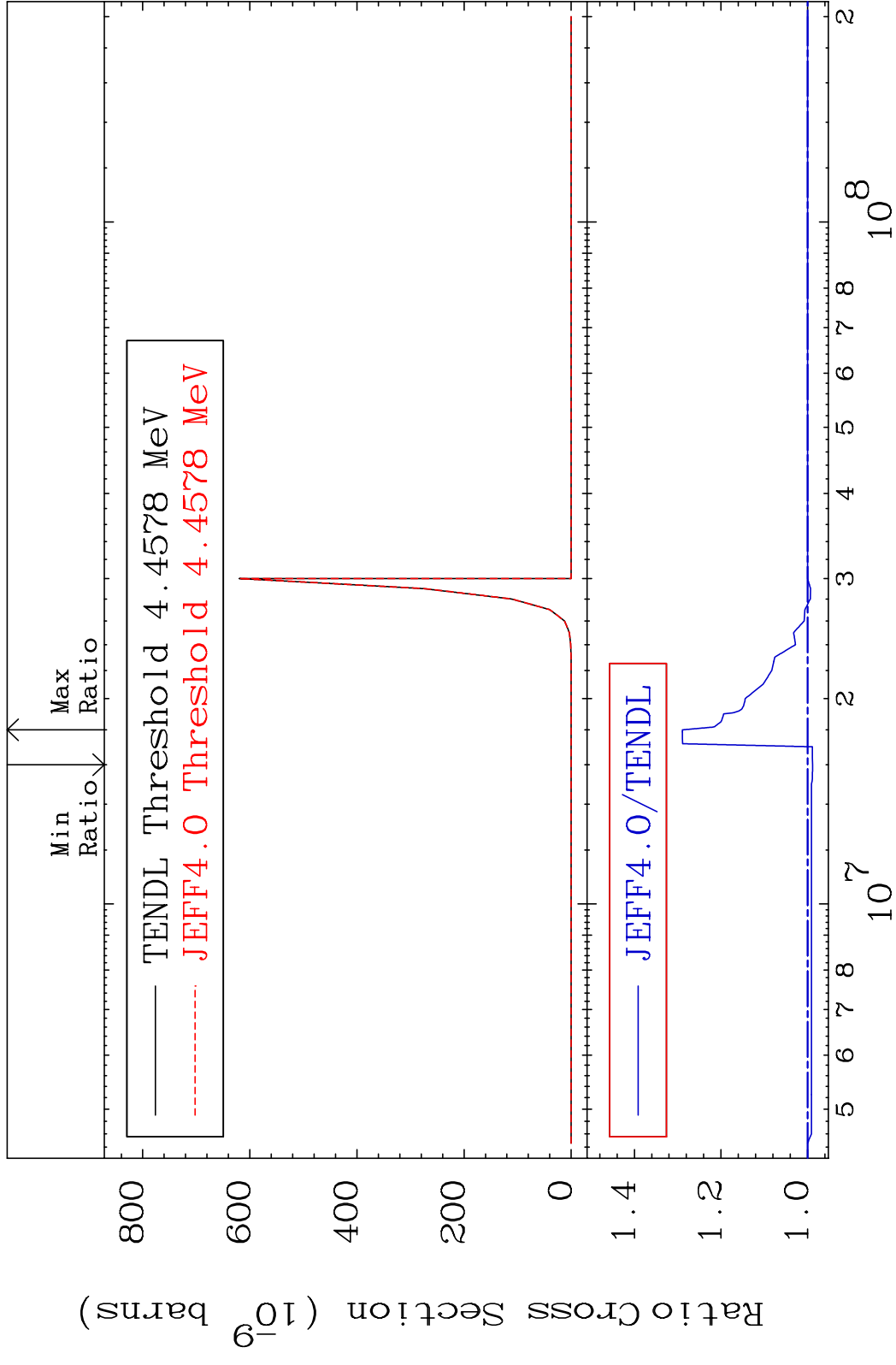
99-Es-252

MAT 9912

(n,2p)

99-Es-252

Cross Section -1.158 To 28.92 %



59

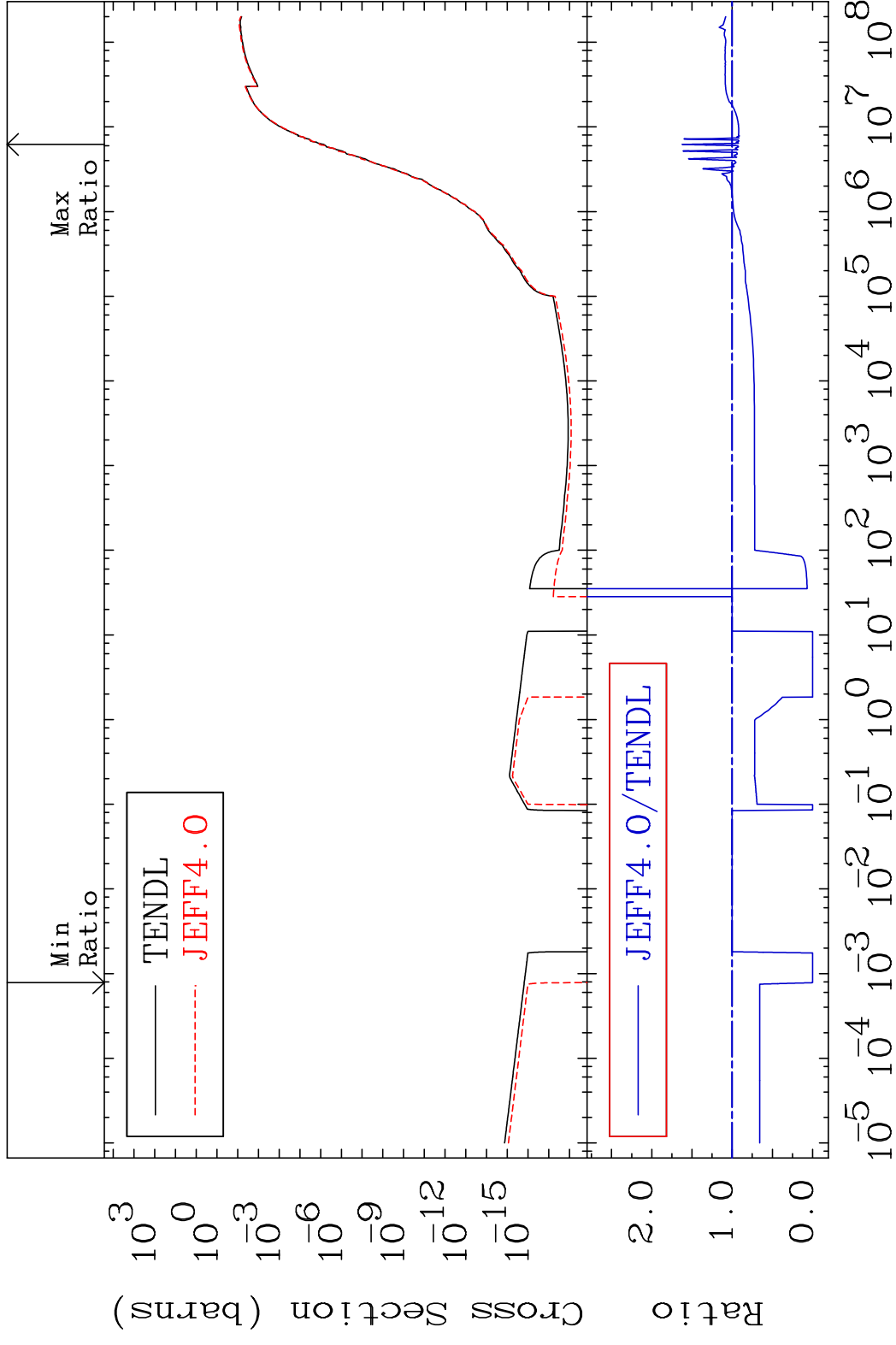
Incident Energy (eV)

99-Es-252

MAT 9912

Hydrogen Production
Cross Section -100.0 To 61.95 %

99-Es-252

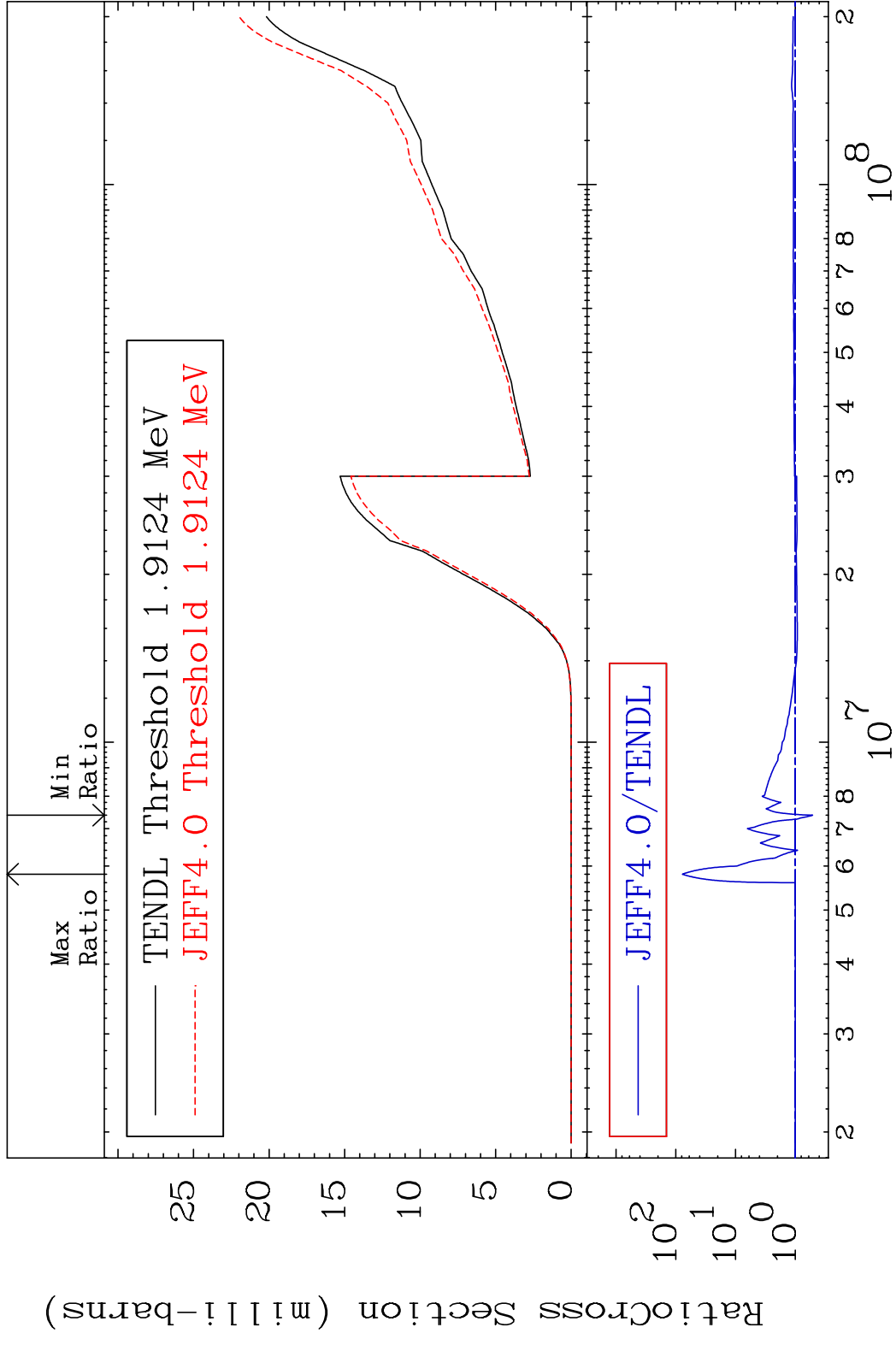


60

Incident Energy (eV)

99-Es-252

Cross Section -48.41 To 7689. %

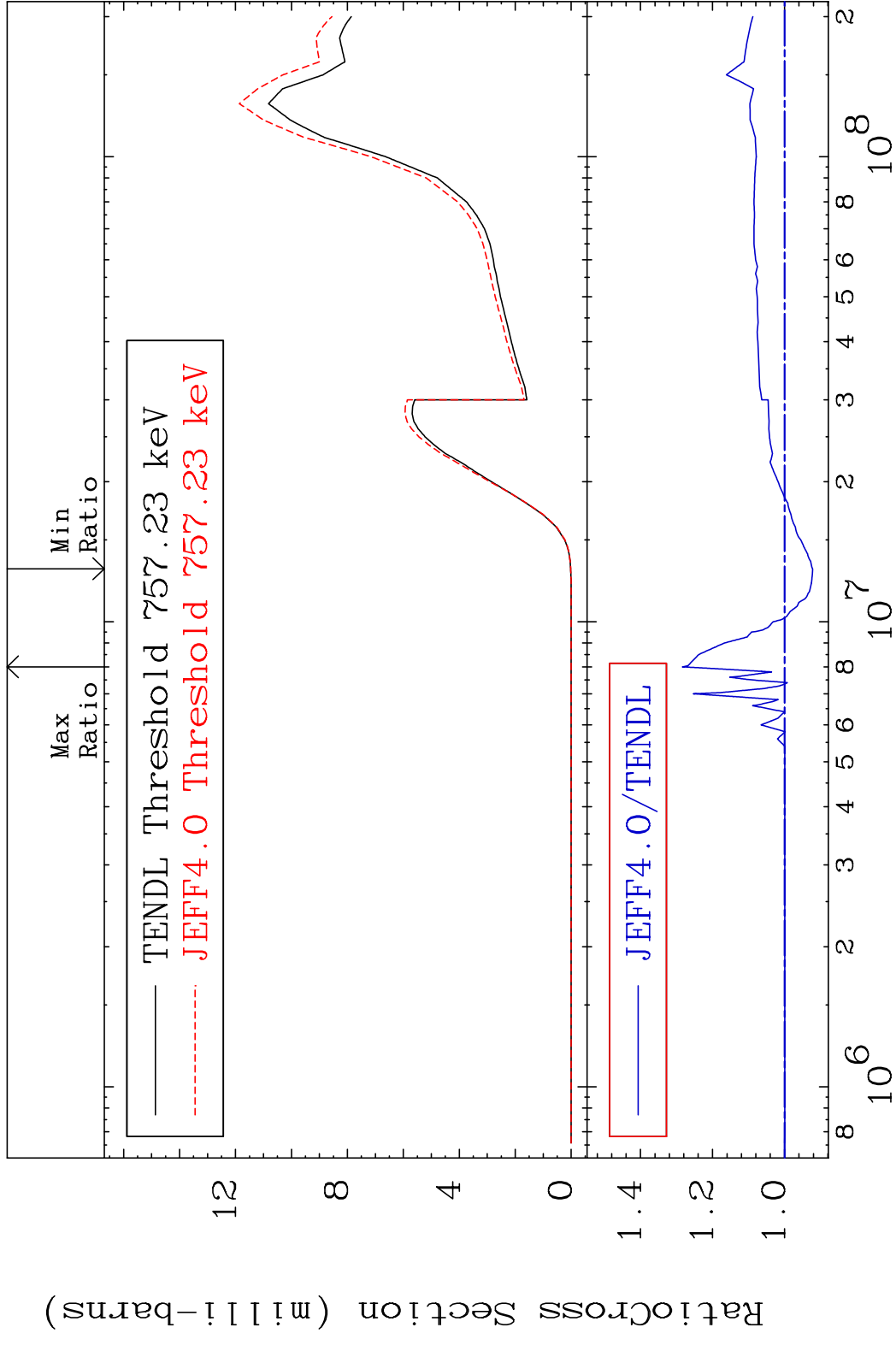


MAT 9912

Tritium Production

99-Es-252

Cross Section -7.758 To 28.39 %



62

Incident Energy (eV)

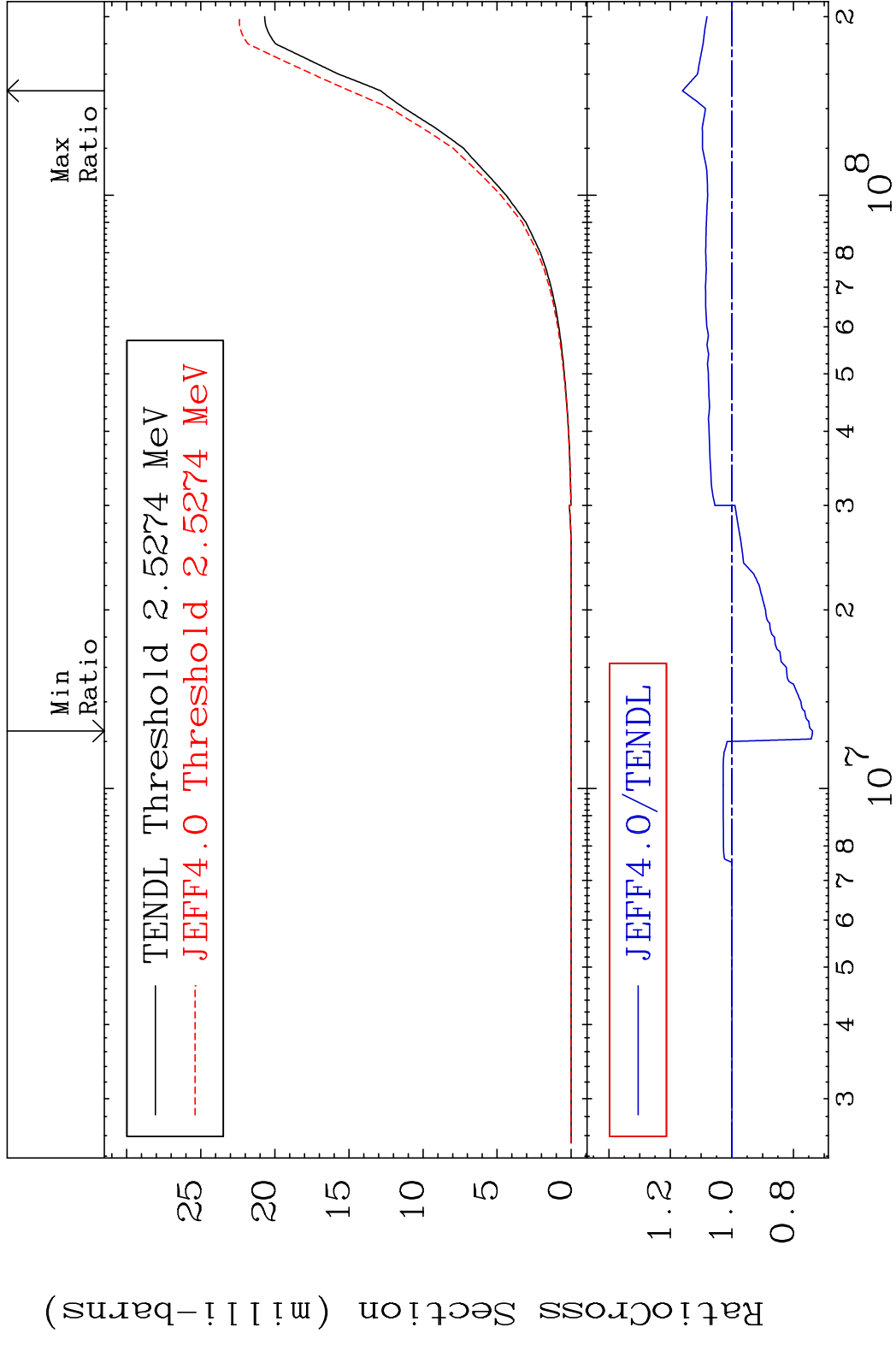
99-Es-252

MAT 9912

He-3 Production

99-Es-252

Cross Section -26.23 To 16.11 %



63

Incident Energy (eV)

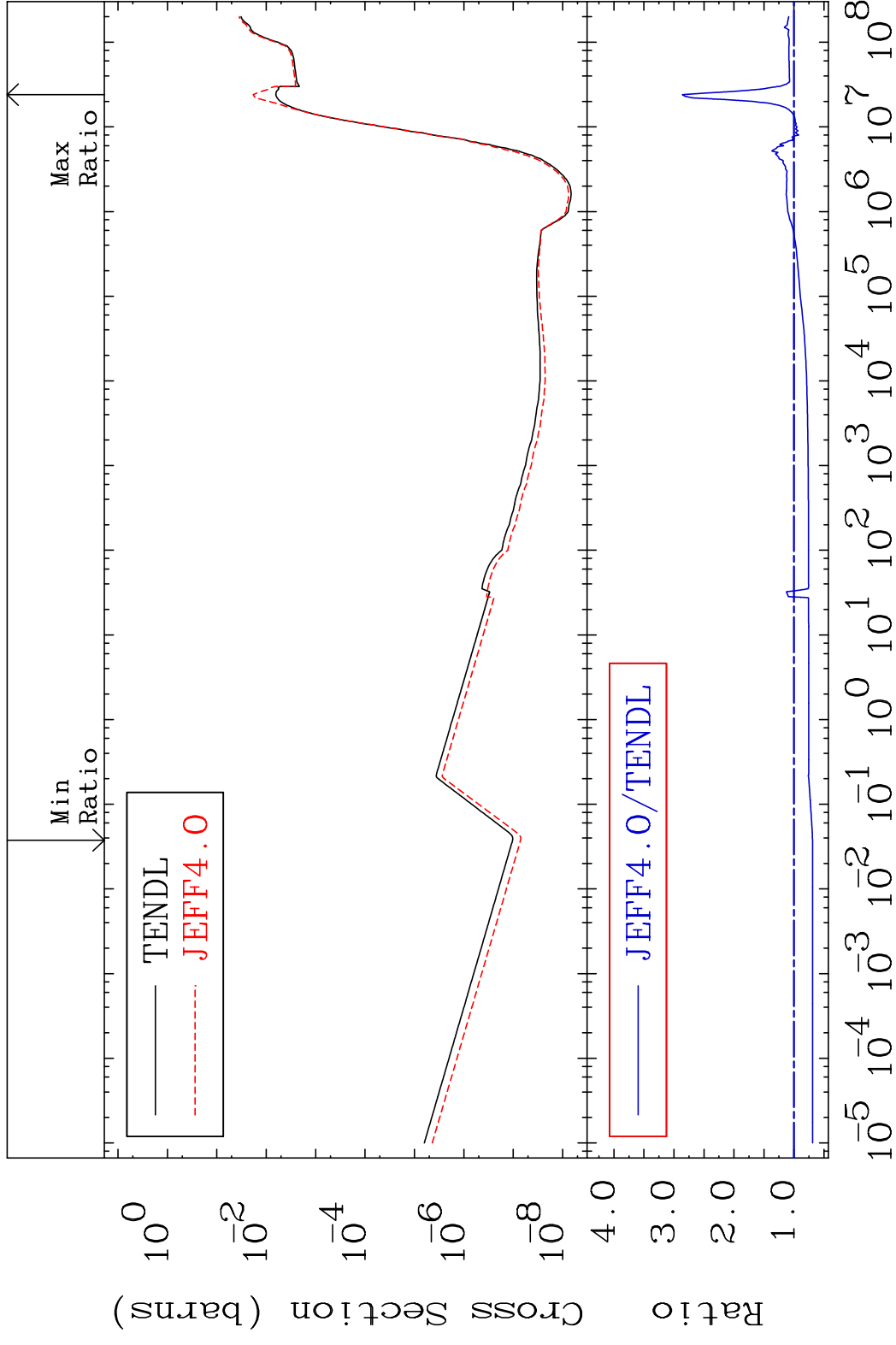
99-Es-252

MAT 9912

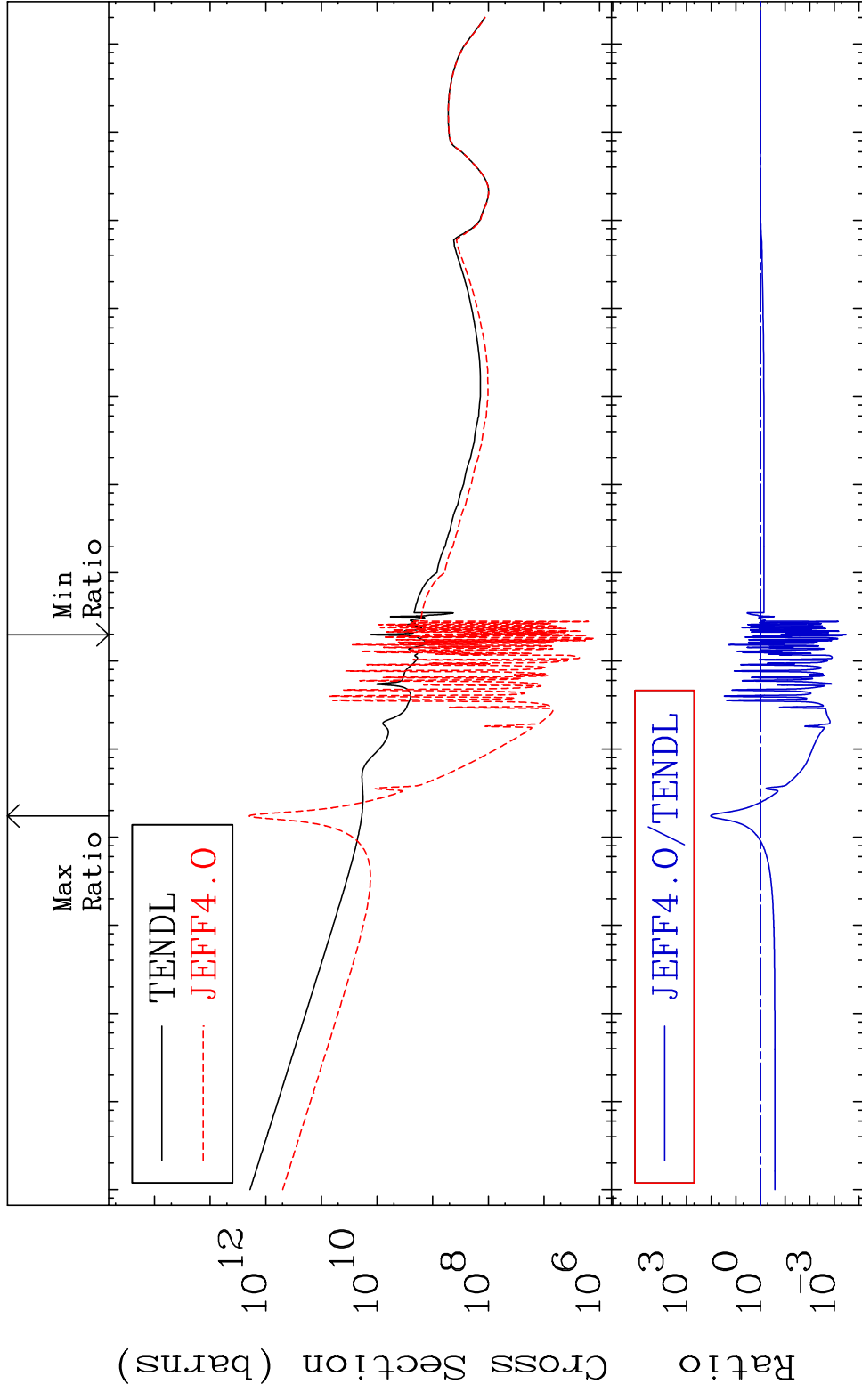
He-4 Production

99-Es-252

Cross Section -31.03 To 186.0 %



MAT 9912 Kerma total (eV-barns) 99-Es-252
 Cross Section -99.97 To 9999. %



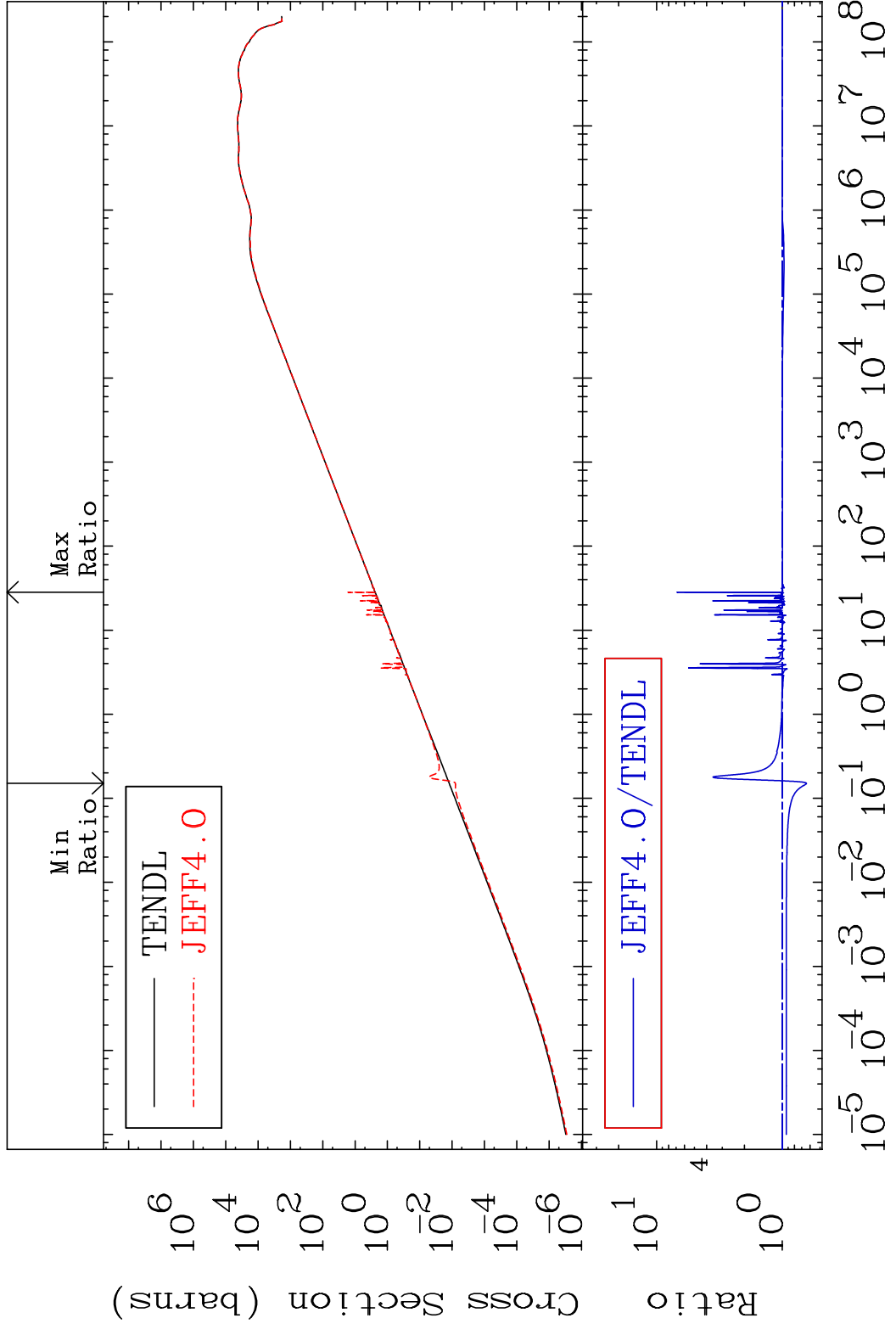
MAT 9912

Kerma elastic

99-Es-252

Cross Section

-35.71 To 585.0 %

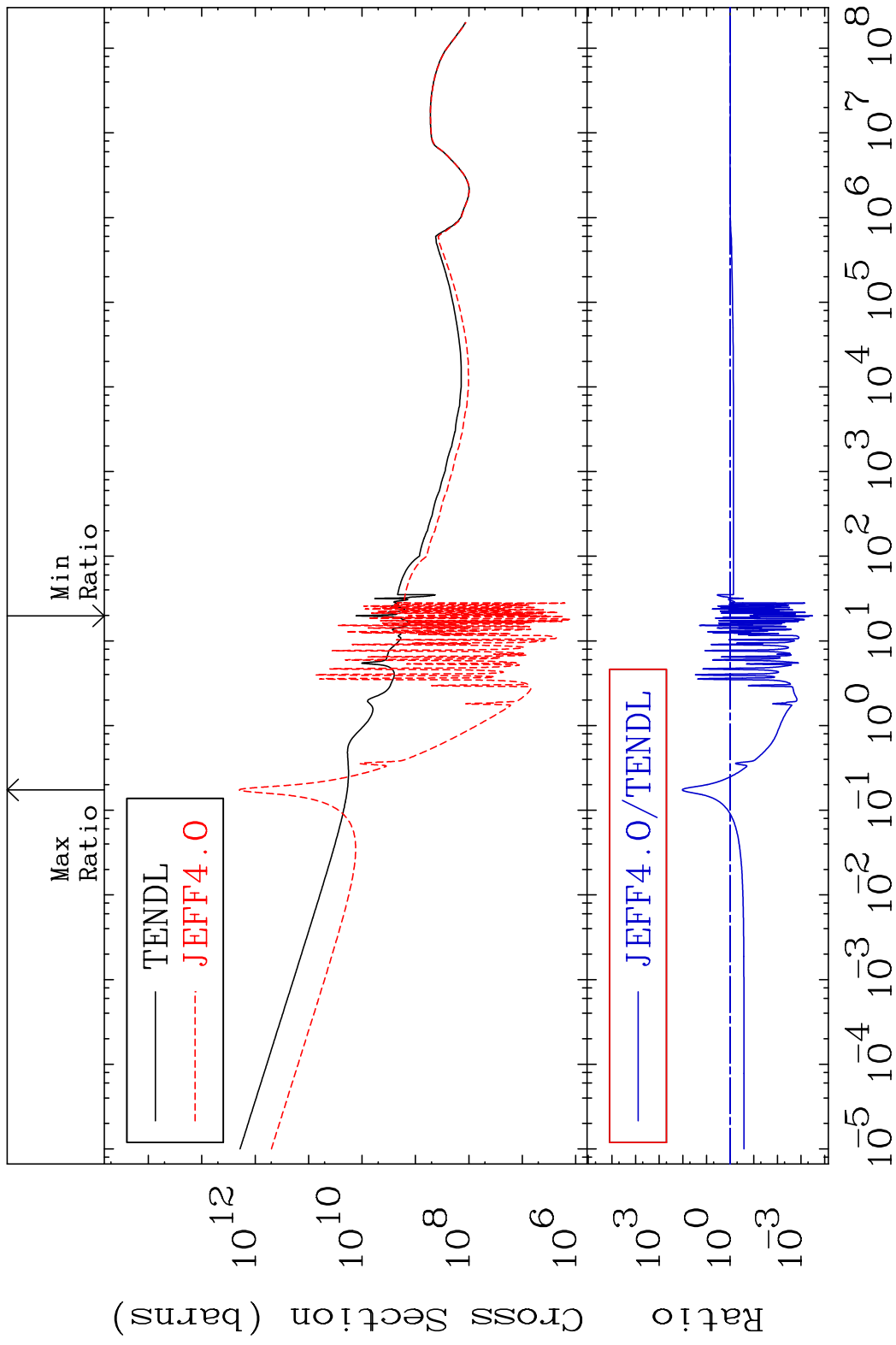


66

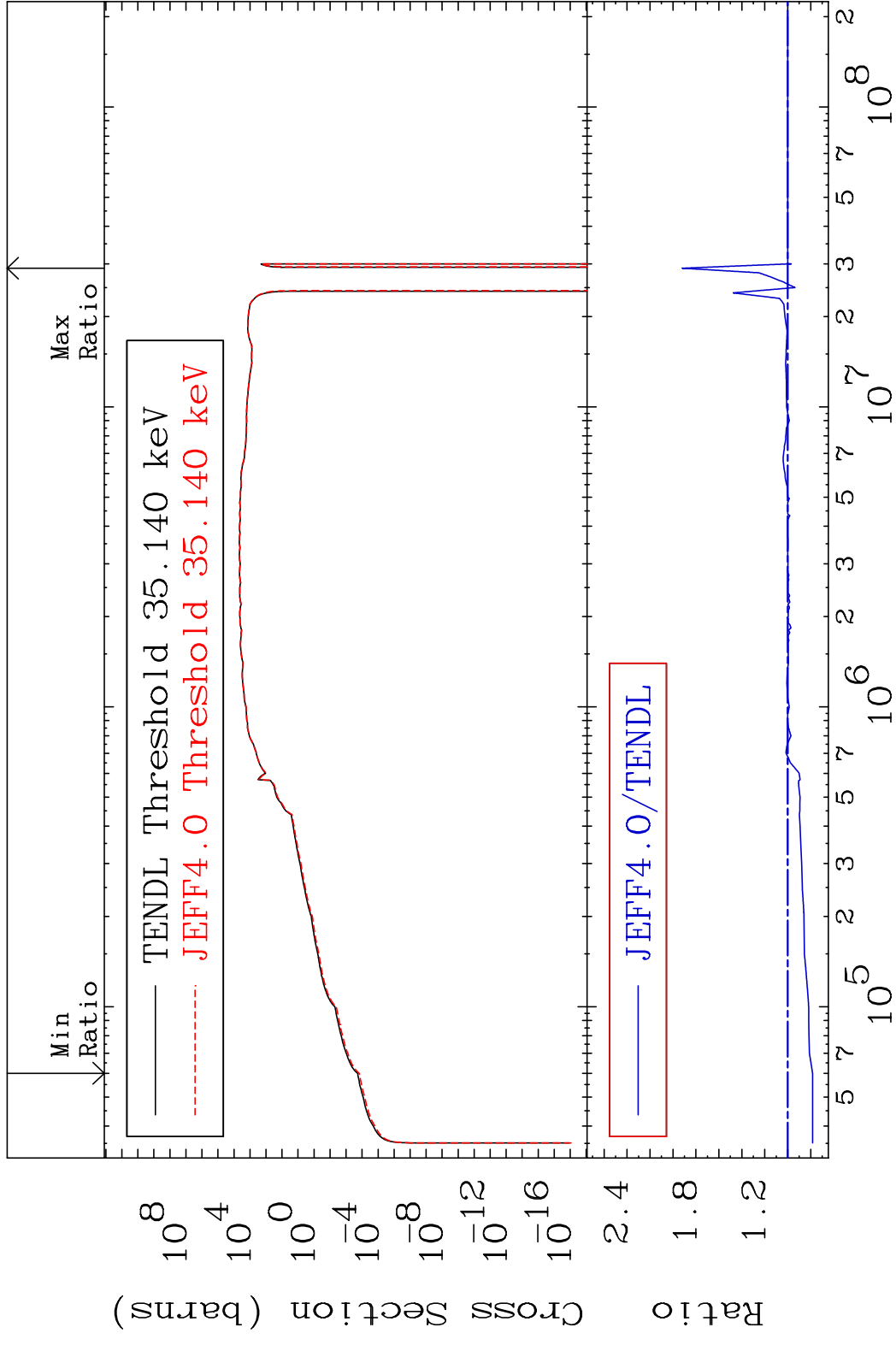
Incident Energy (eV)

99-Es-252

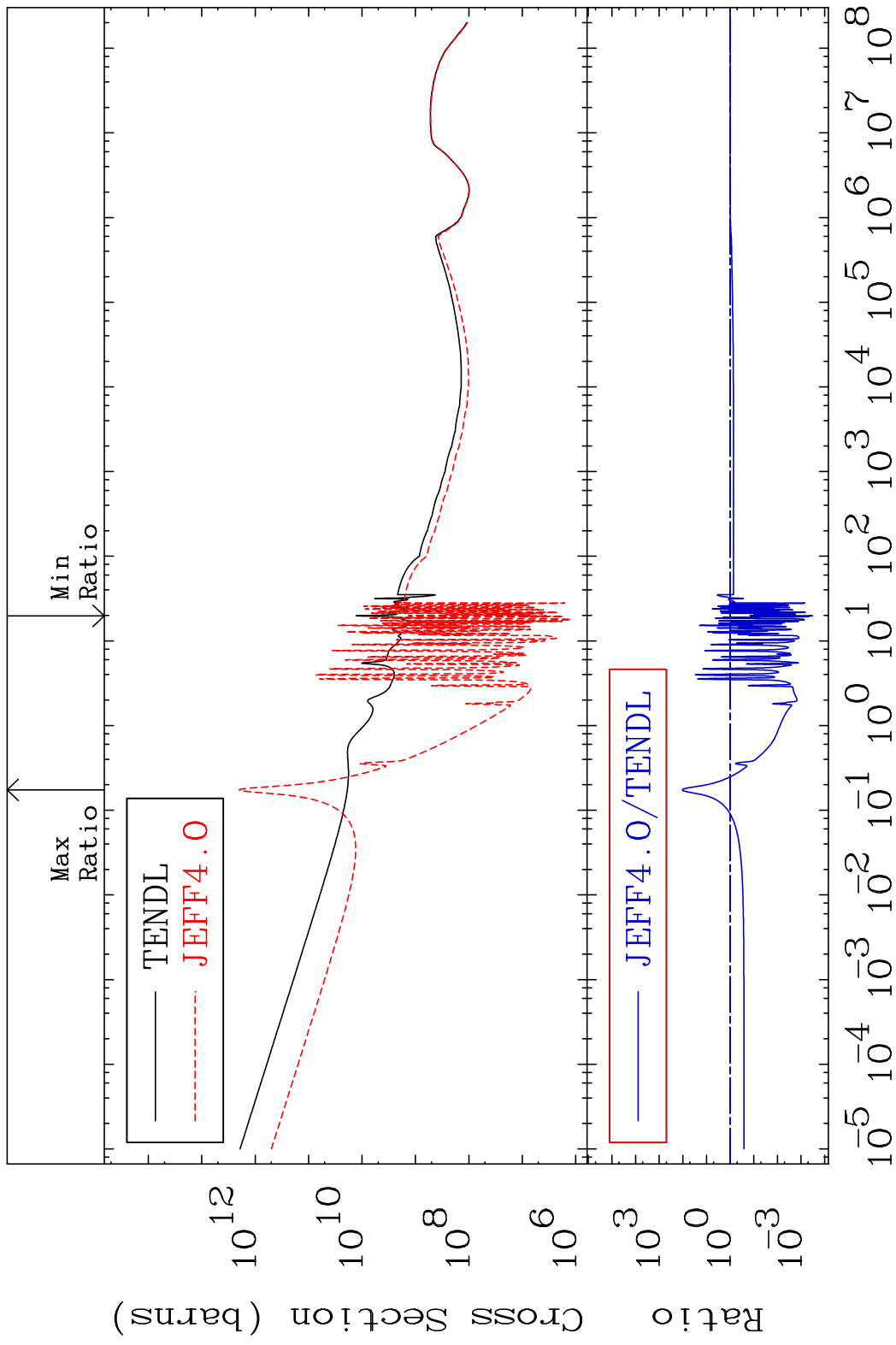
MAT 9912 Kerma non-elastic (all but mt2) 99-Es-252
Cross Section -99.97 To 9999. %



MAT 9912 Kerma inelastic (mt51-91) 99-Es-252
 Cross Section -21.59 To 91.84 %

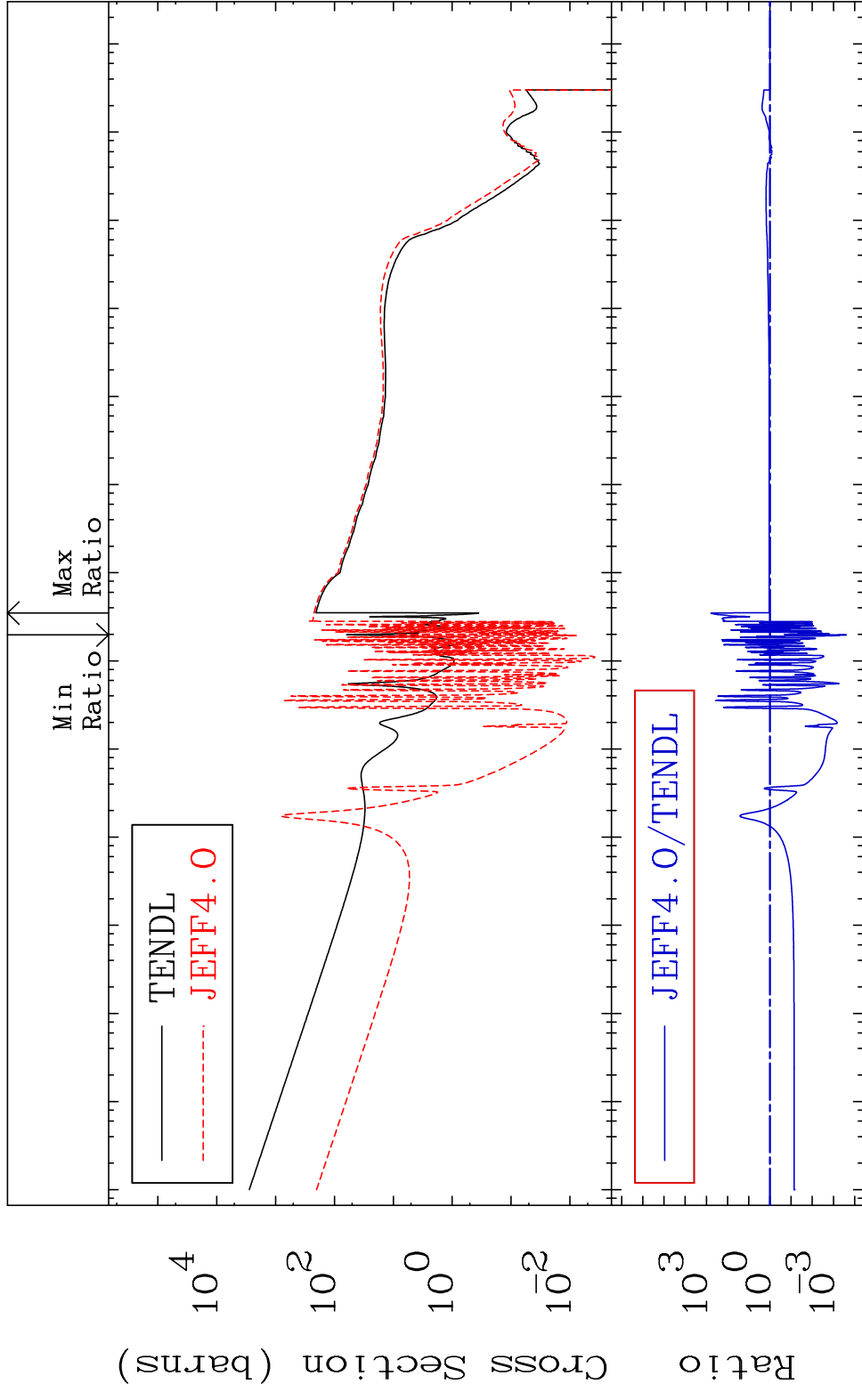


MAT 9912 Kerma fission (mt18 or mt19-20-21-38) 99-Es-252
 Cross Section -99.97 To 9999. %



MAT 9912

Kerma capture (mt102) 99-Es-252
Cross Section -99.98 To 9999. %

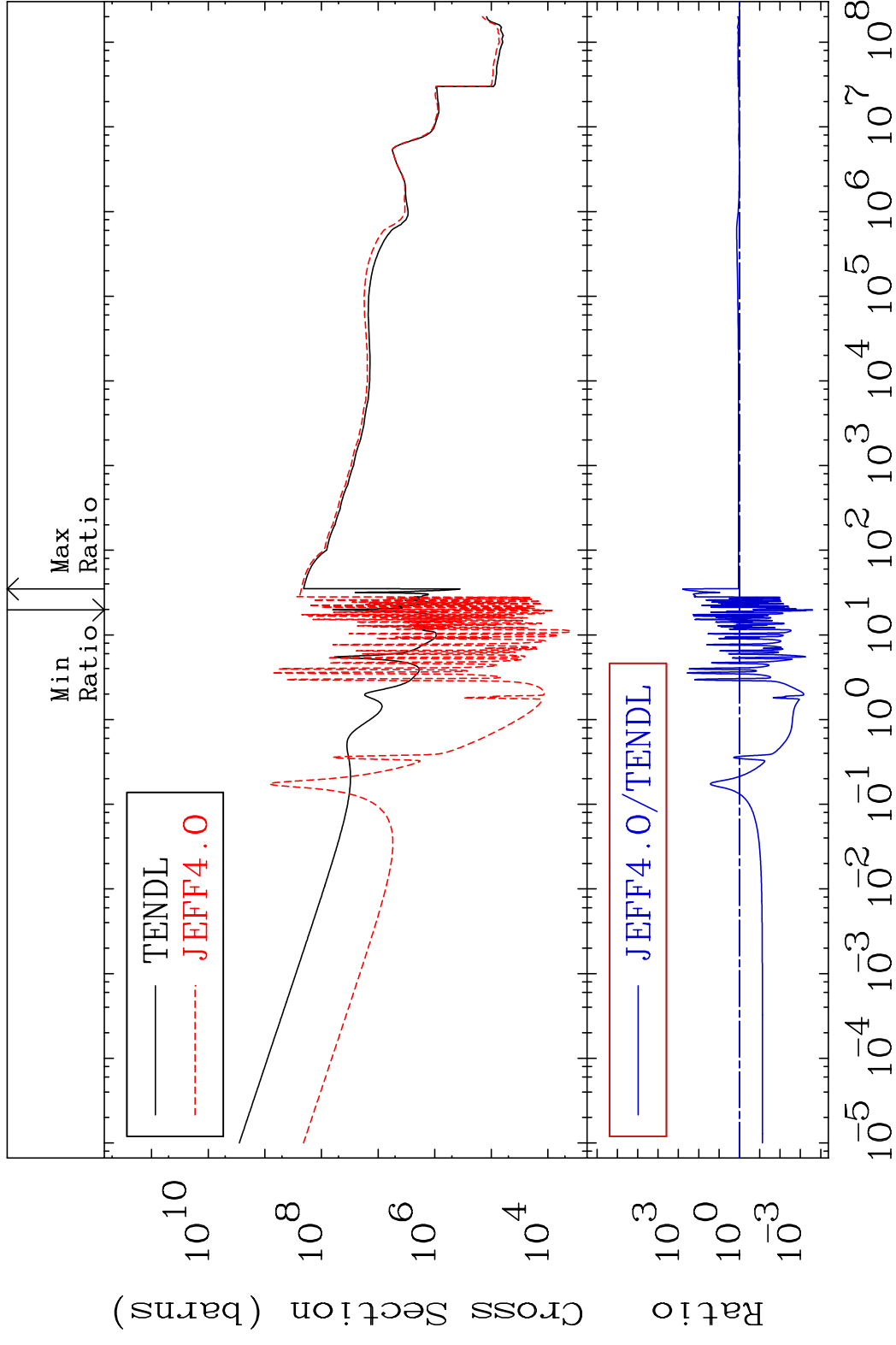


70

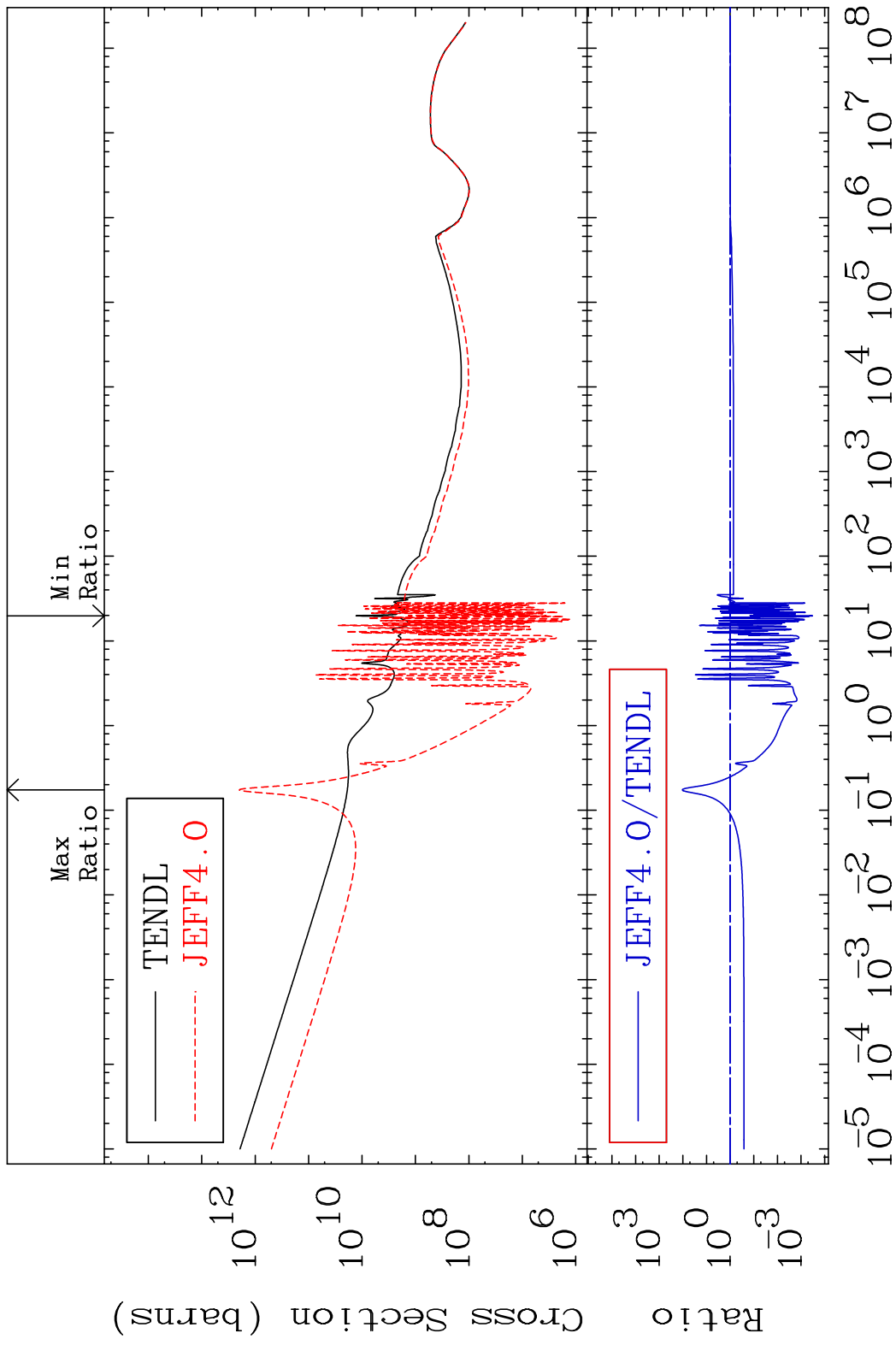
Incident Energy (eV)

99-Es-252

MAT 9912 Total photon (eV-barns) 99-Es-252
 Cross Section -99.97 To 9999. %



MAT 9912 Total kinematic kerma (high limit) 99-Es-252
 Cross Section -99.97 To 9999. %

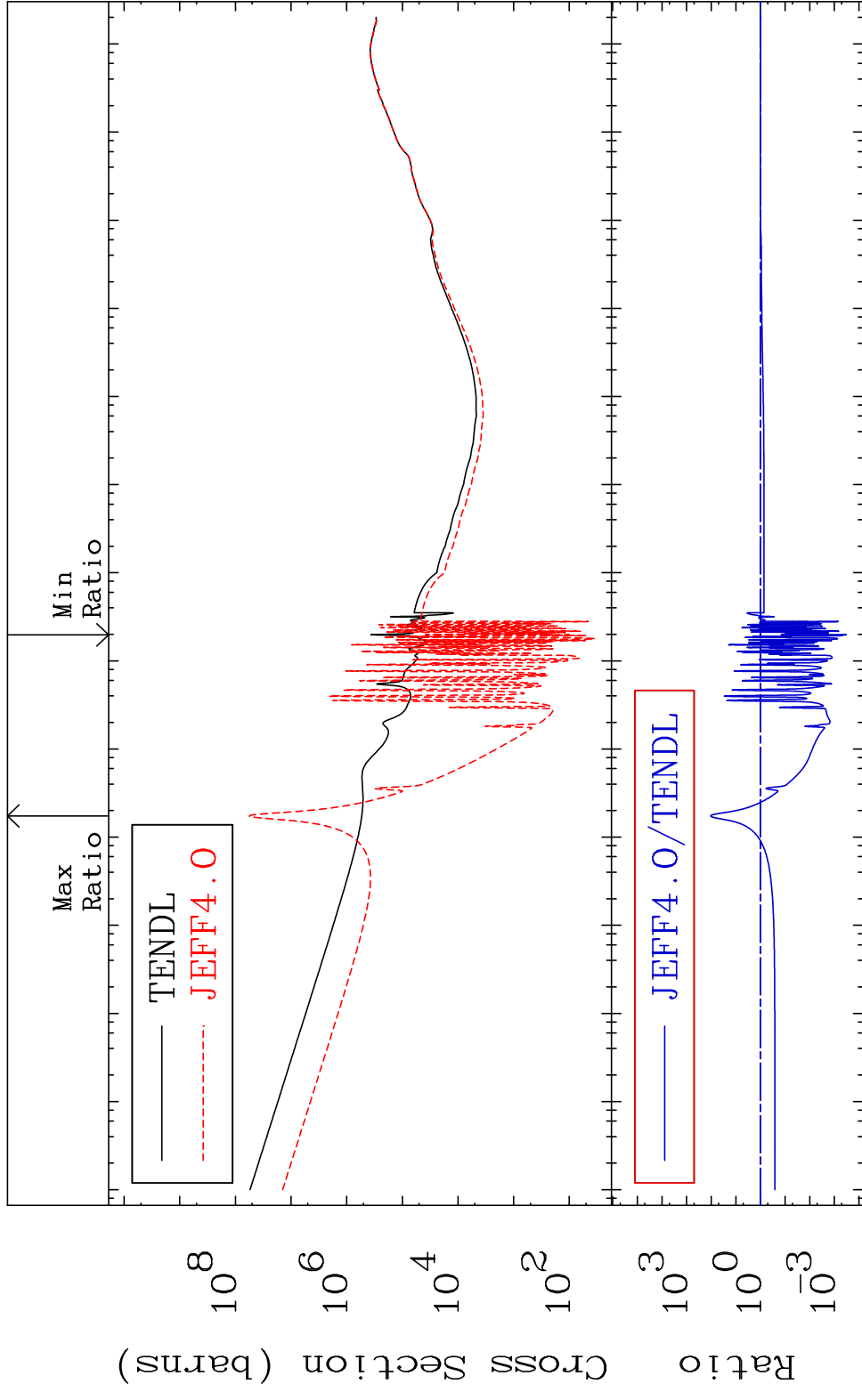


MAT 9912

Dpa total (eV-barns)

99-Es-252

Cross Section -99.97 To 9999. %



73

Incident Energy (eV)

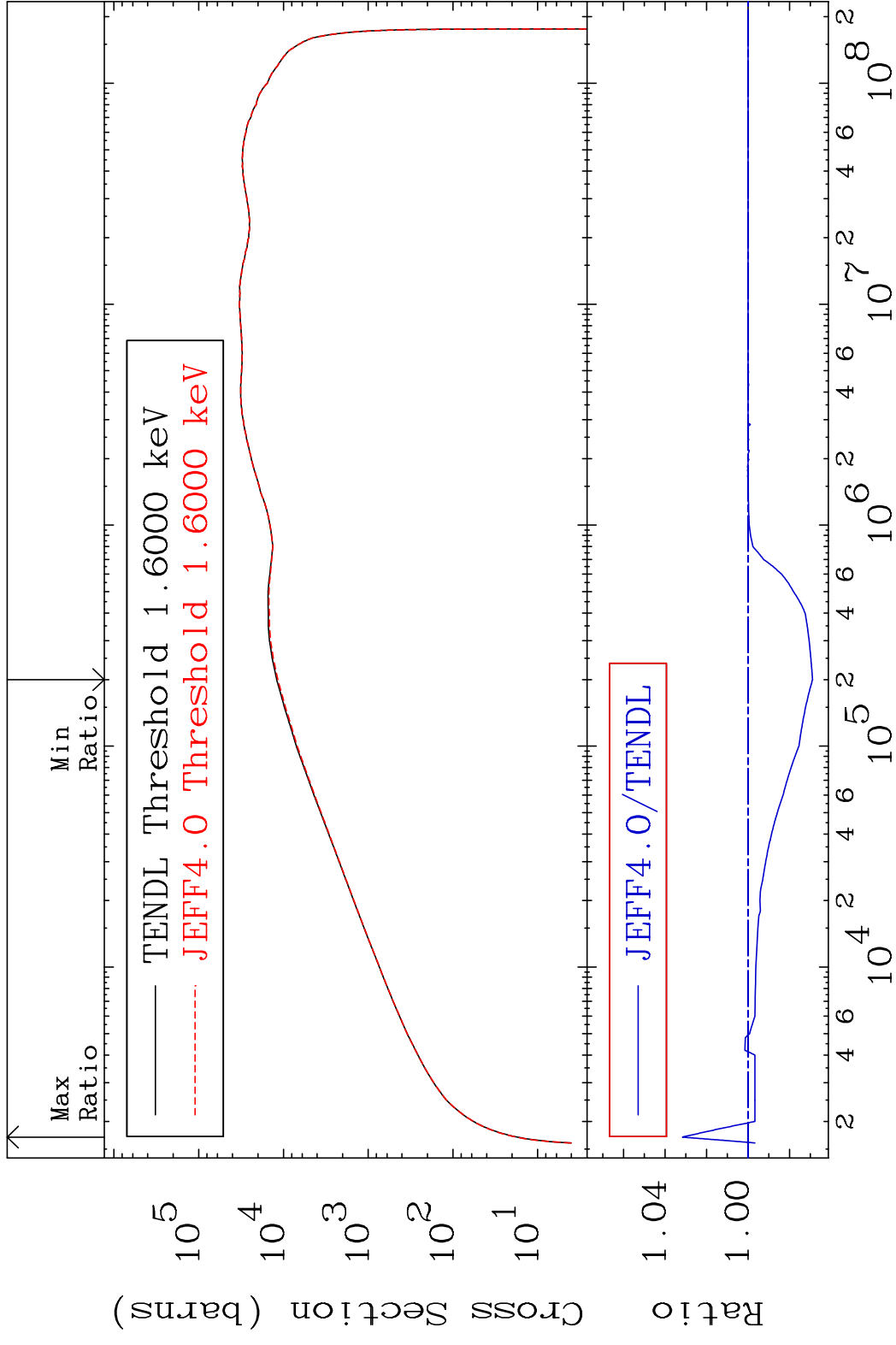
99-Es-252

MAT 9912

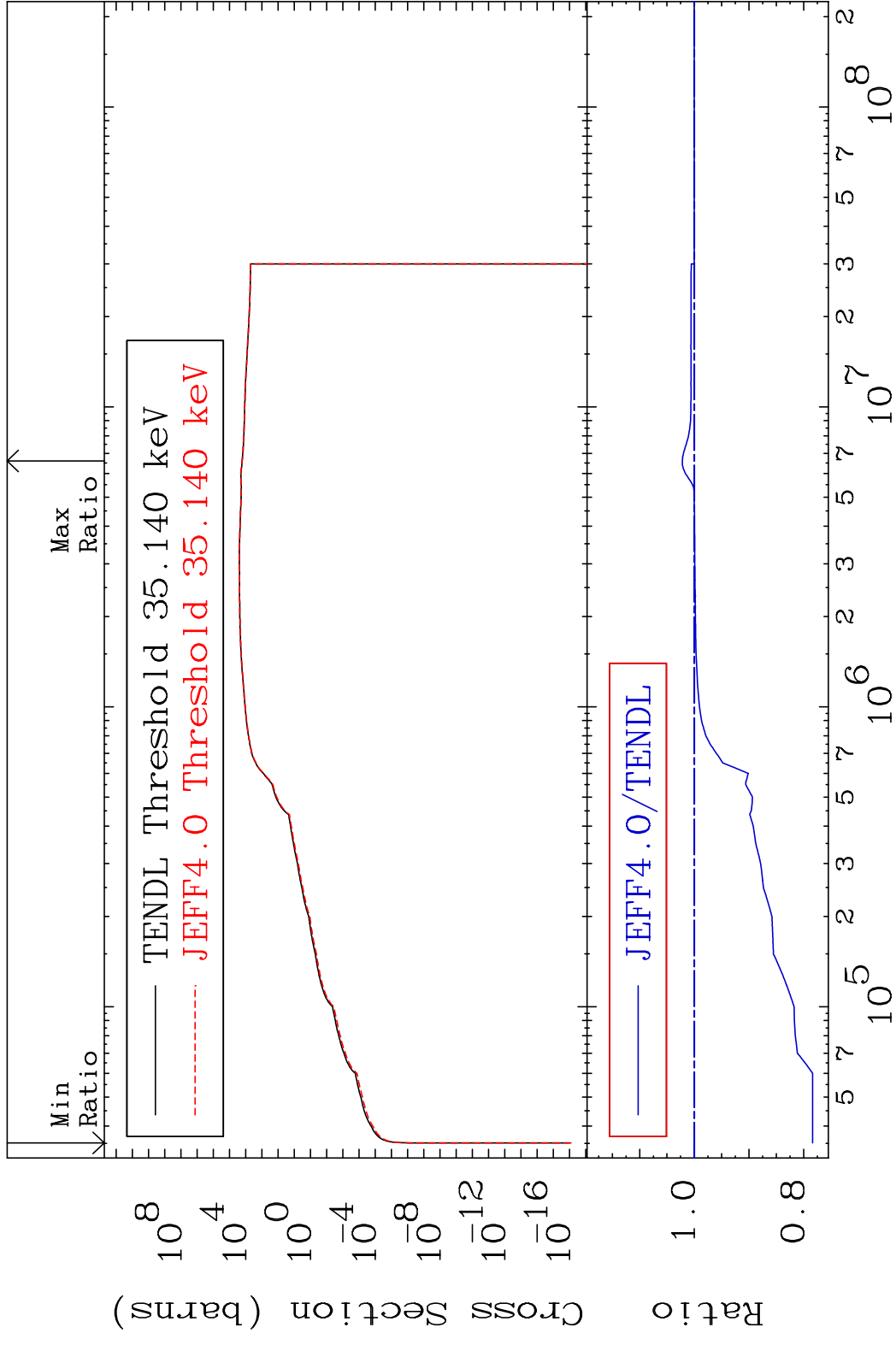
Dpa elastic (mt2)

99-Es-252

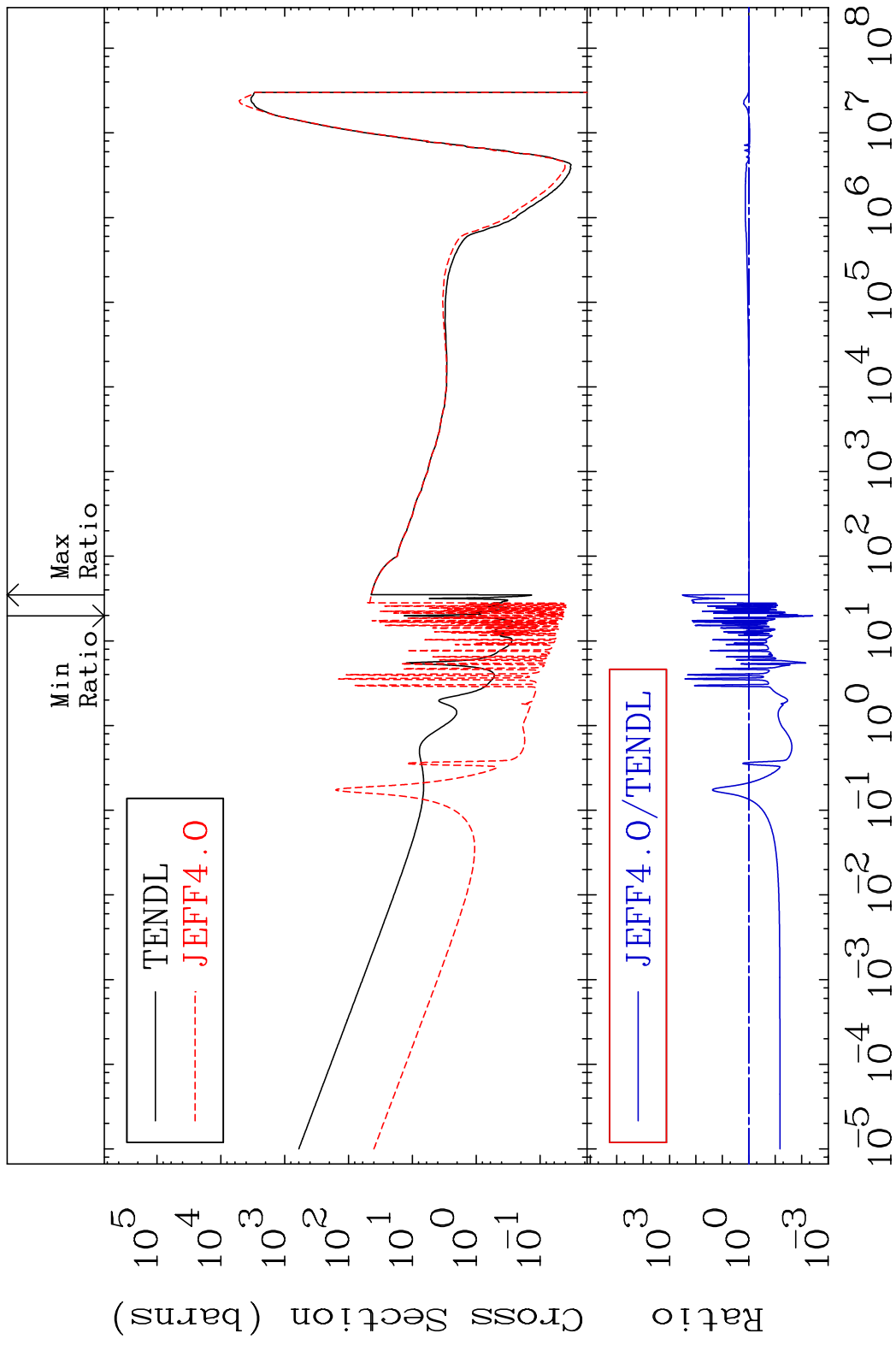
Cross Section -3.109 To 3.168 %



MAT 9912 Dpa inelastic (mt51-91) 99-Es-252
 Cross Section -21.60 To 2.193 %

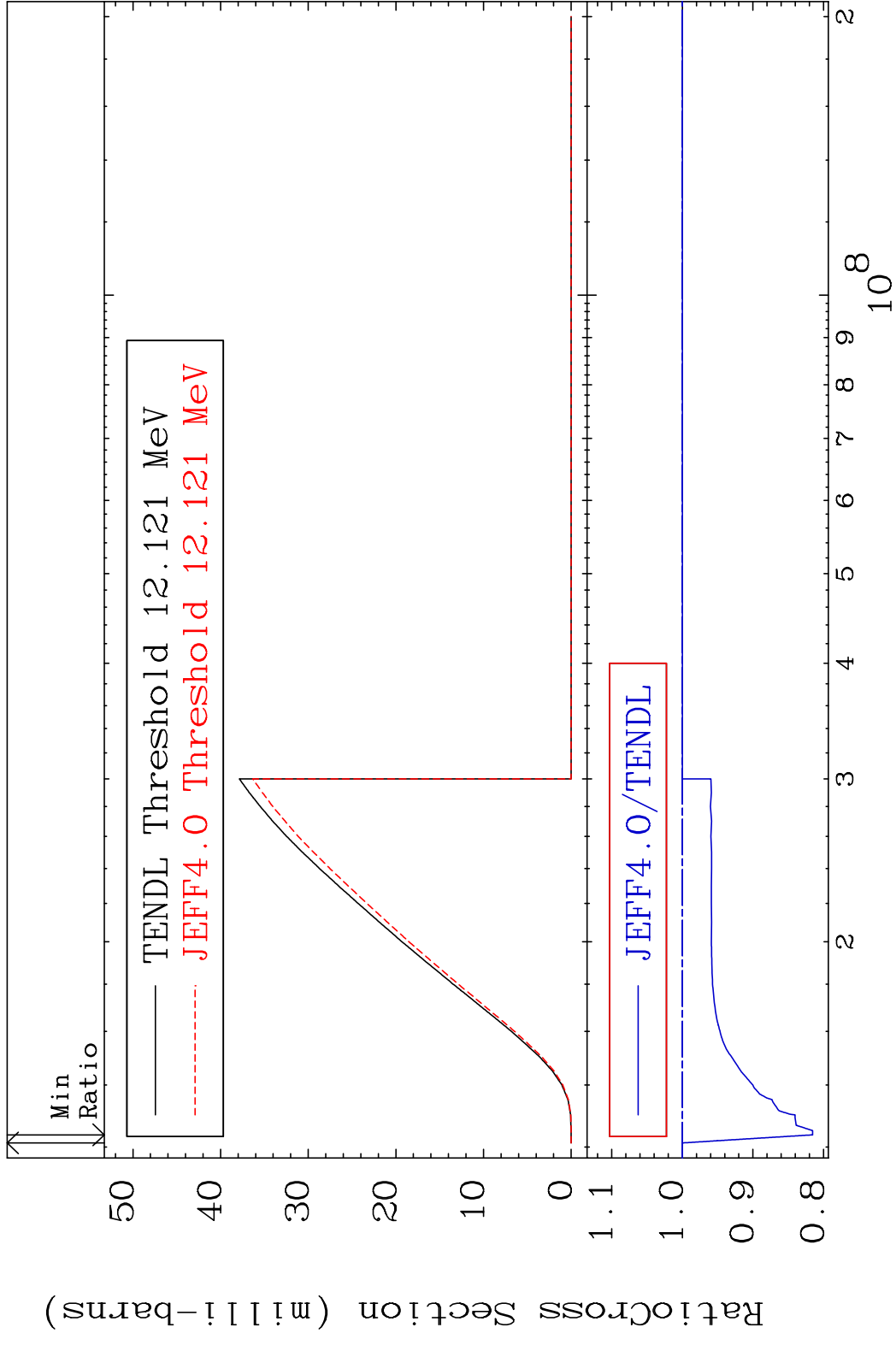


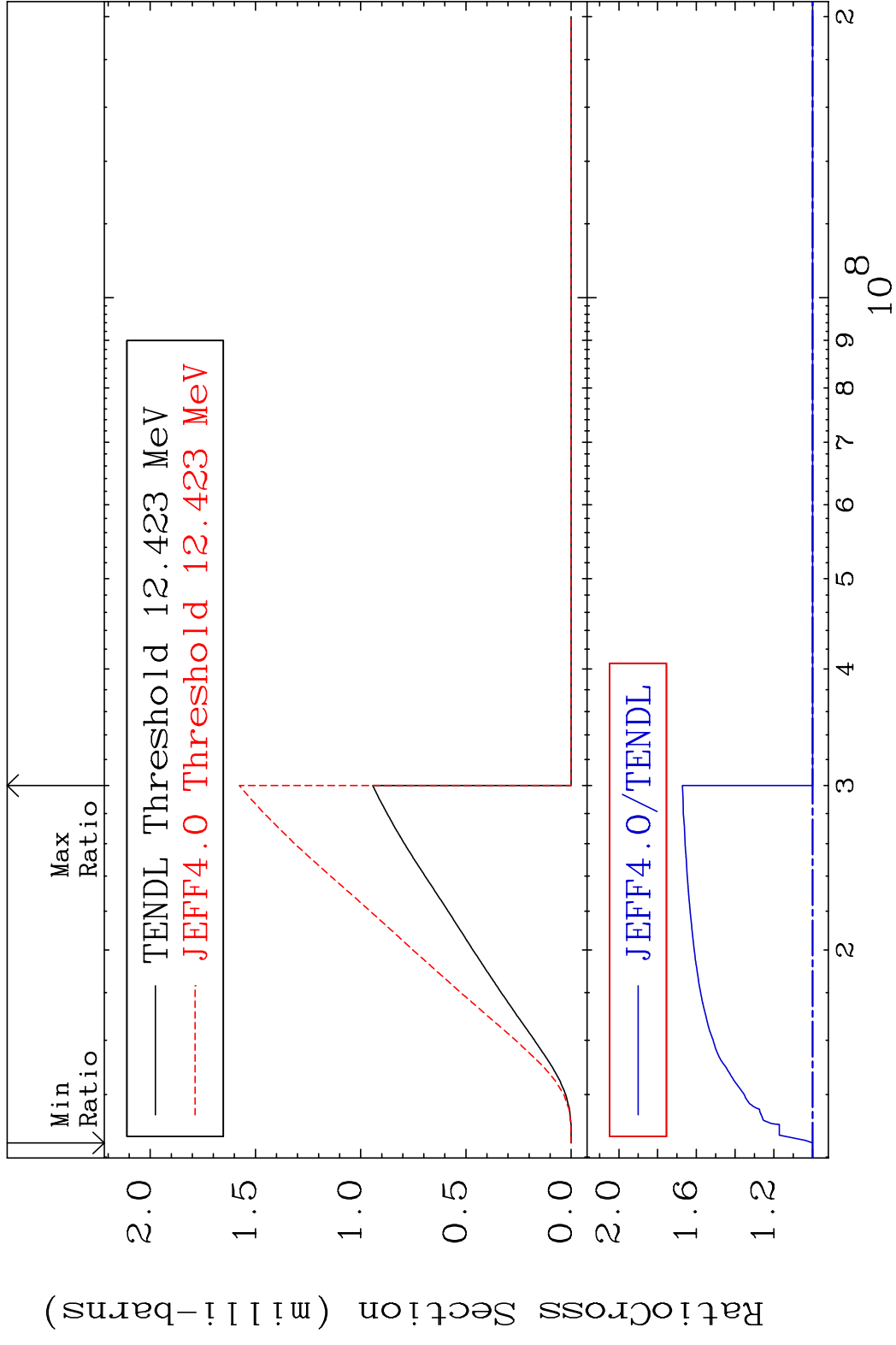
MAT 9912 Dpa disappearance (mt102 -120) 99-Es-252
 Cross Section -99.61 To 9999. %



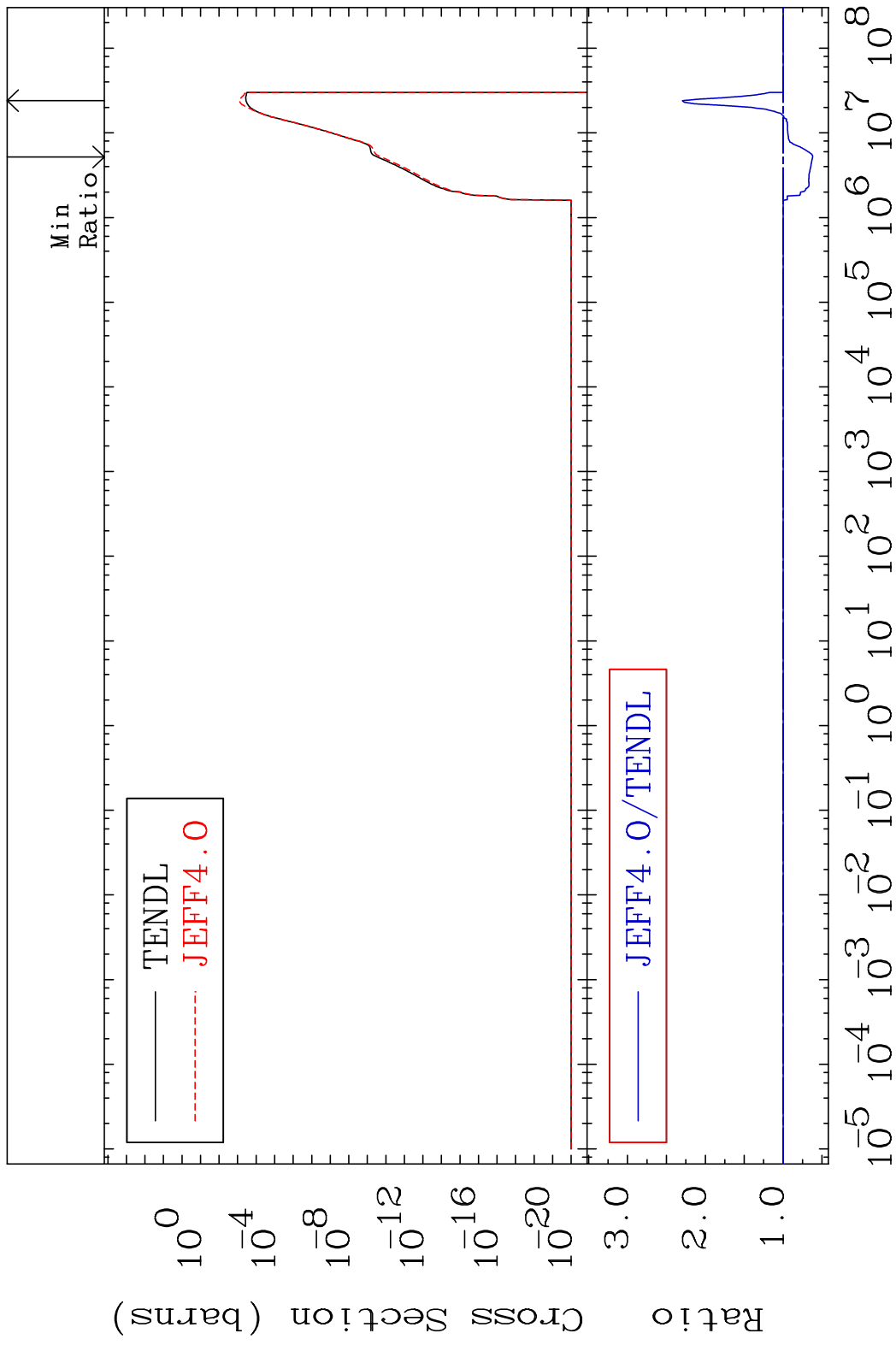
76 Incident Energy (eV) 99-Es-252

MAT 9912 (n,3n):99-Es-250g 99-Es-252
 Radionuclide Production Cross Section 18.45 dth 0.000 %

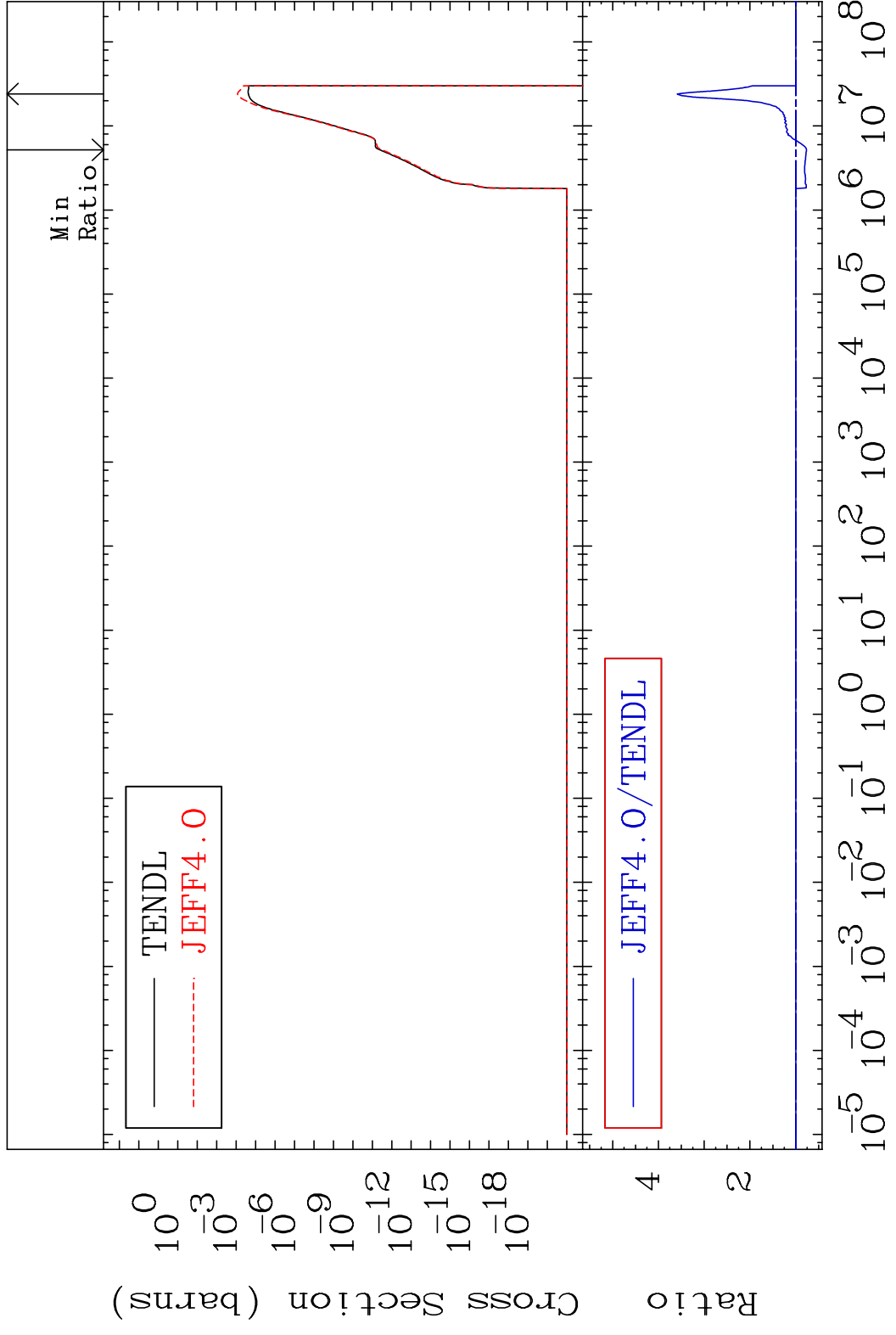




MAT 9912 (n, n') α :97-Bk-248g 99-Es-252
 Radionuclide Production Cross Section 129.5 %



MAT 9912 (n, n') α :97-Bk-248m1 99-Es-252
 Radionuclide Production Cross Section Ratio 259.0 %



80 Incident Energy (eV) 99-Es-252