

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

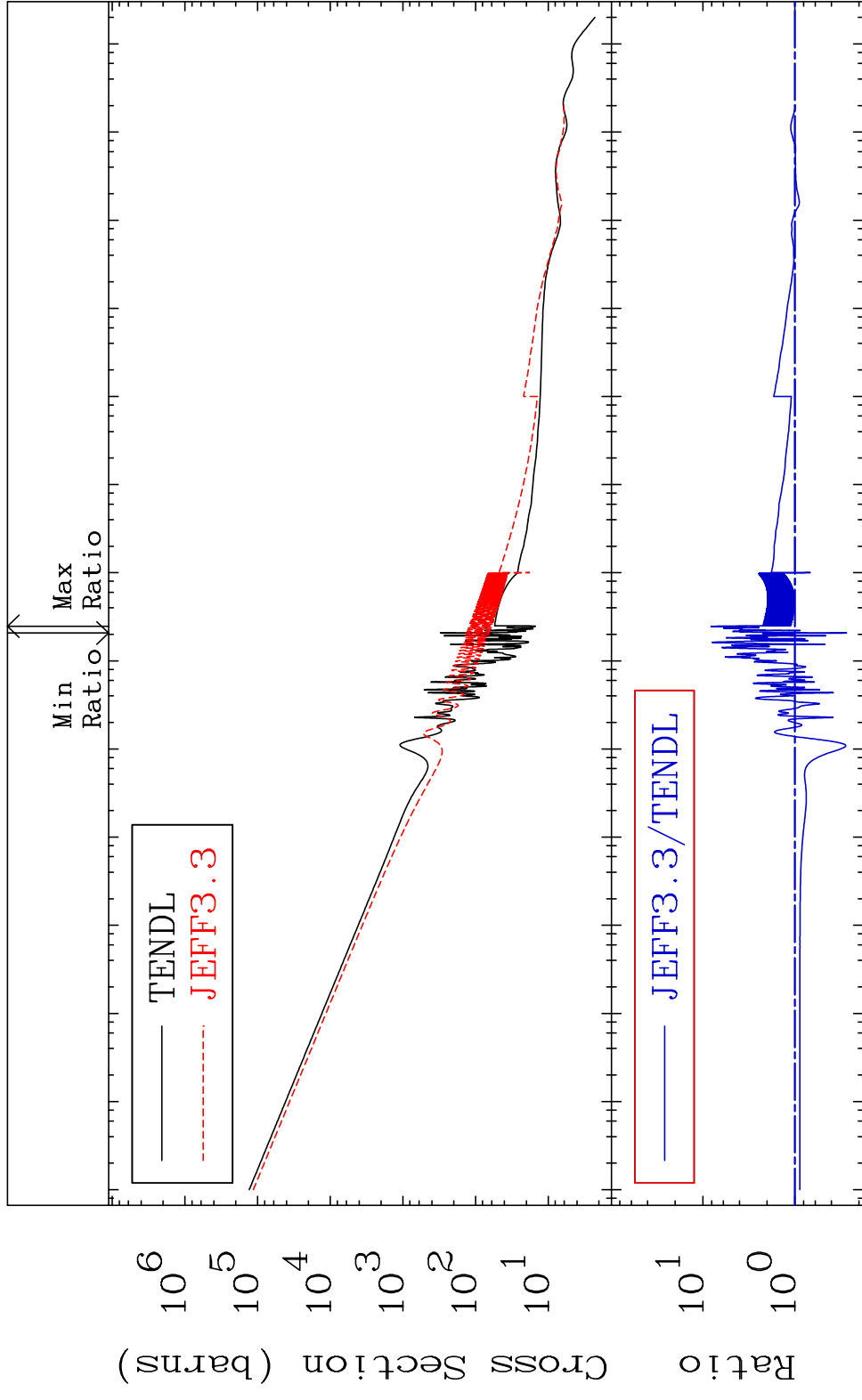
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 9349

Total
Cross Section -72.52 To 720.9 %

93-Np-238



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

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

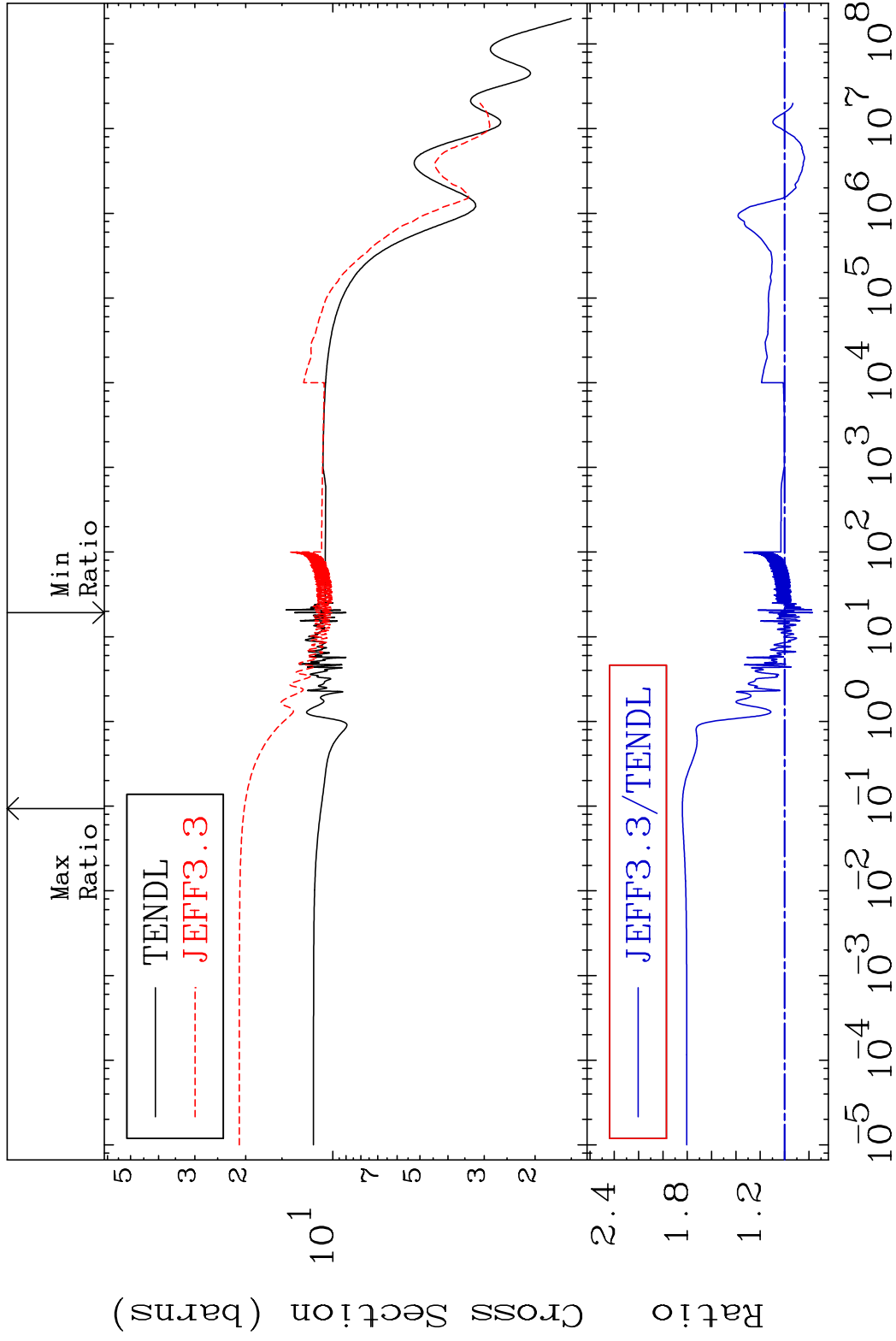
1 Incident Energy (eV) 93-Np-238

MAT 9349

Elastic

⁹³Np-238

Cross Section -22.98 To 84.03 %



2

Incident Energy (eV)

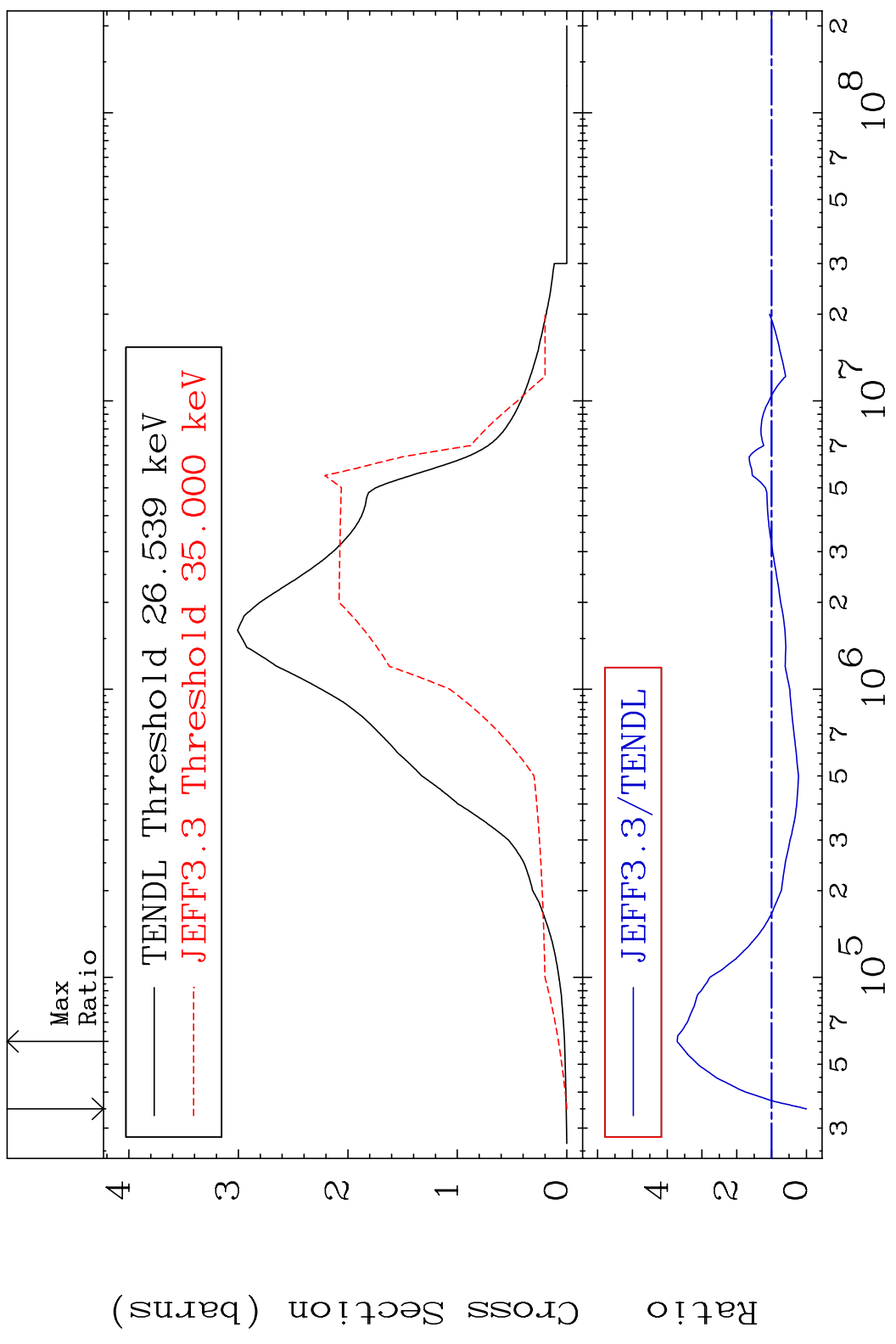
⁹³Np-238

MAT 9349

Inelastic

93-Np-238

Cross Section -100.0 To 271.3 %



3

Incident Energy (eV)

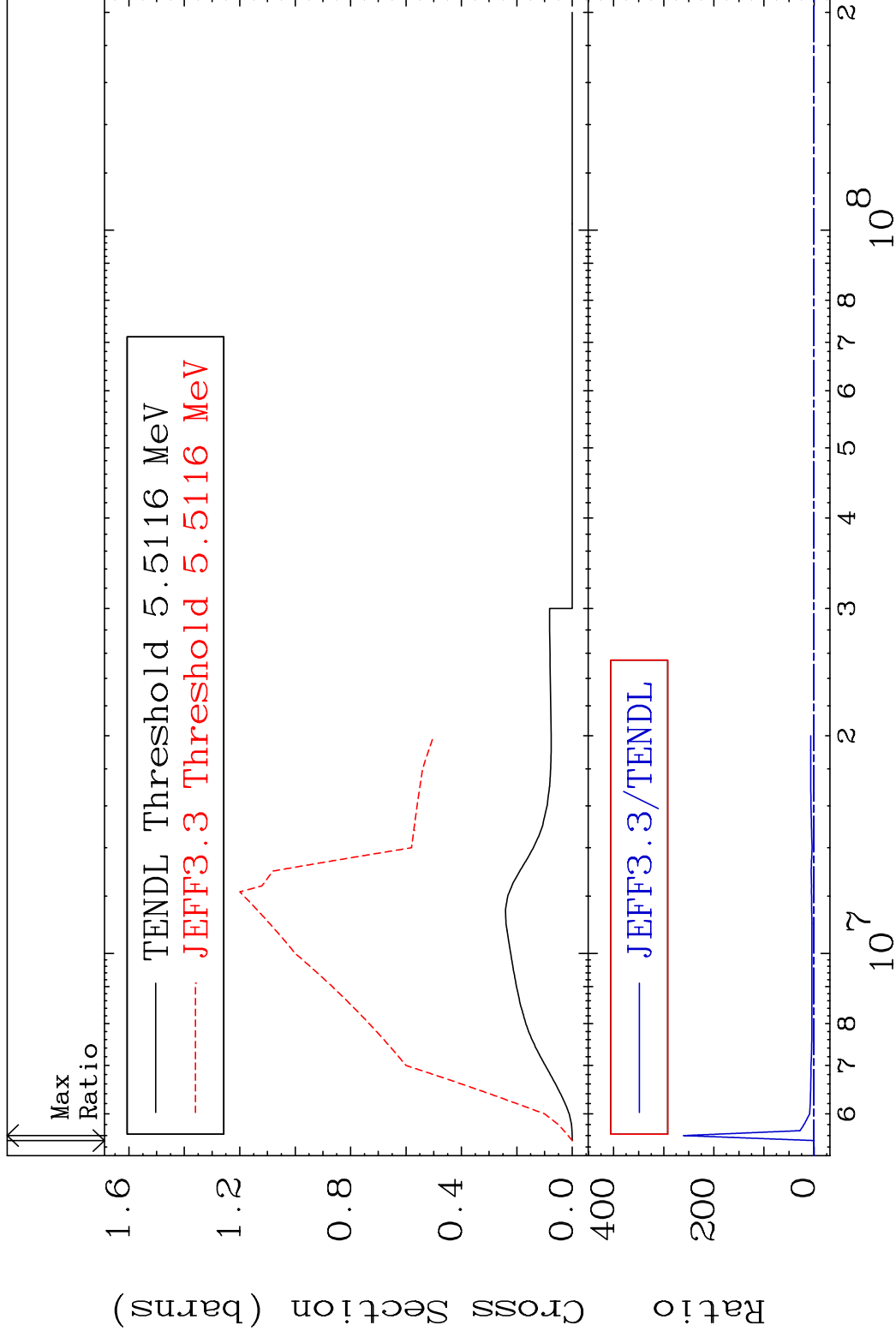
93-Np-238

MAT 9349

(n,2n)

93-Np-238

Cross Section -100.0 To 9999. %



4

Incident Energy (eV)

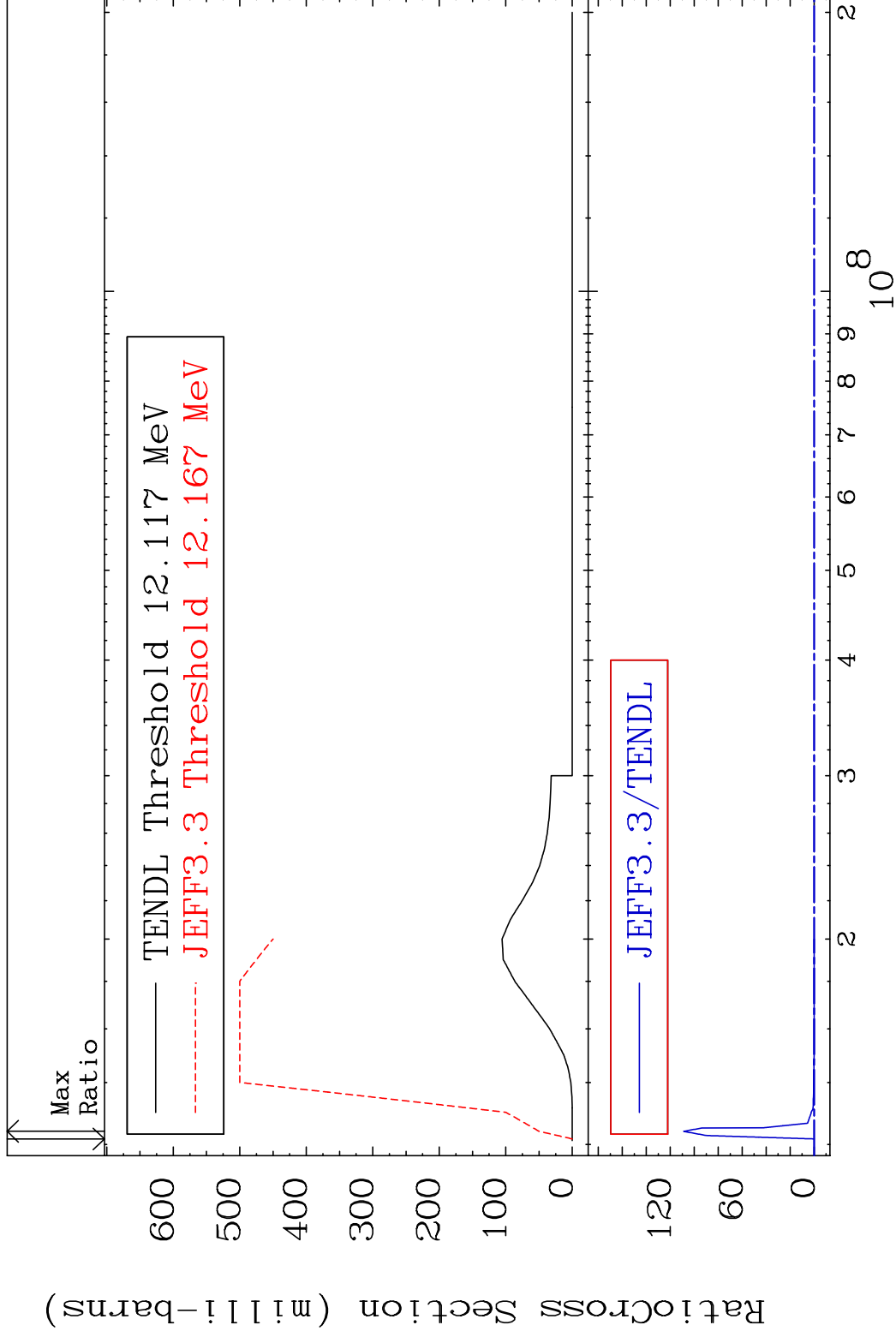
93-Np-238

MAT 9349

(n,3n)

93-Np-238

Cross Section -100.0 To 9999. %



5

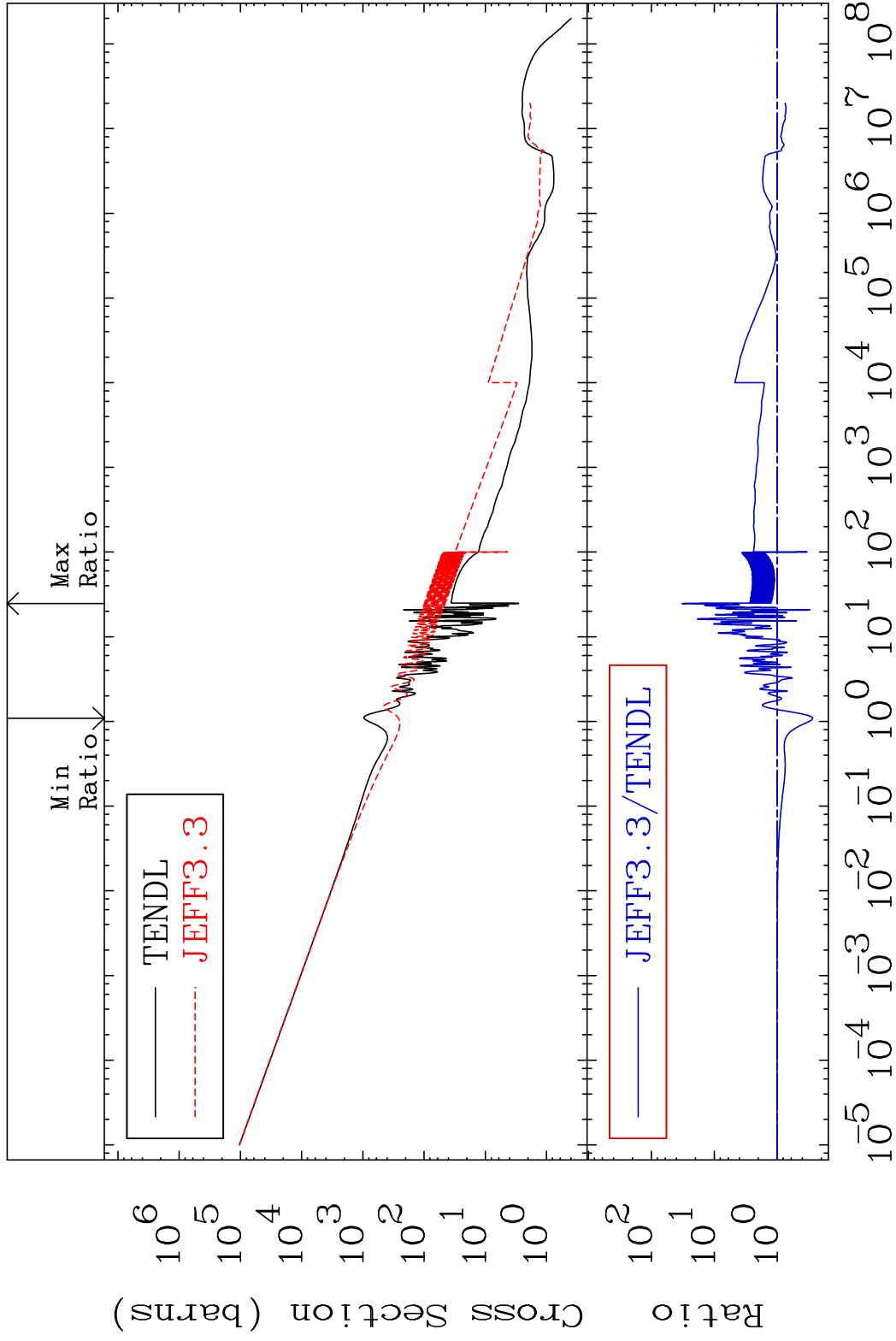
Incident Energy (eV)

93-Np-238

MAT 9349

Fission Cross Section -72.56 To 3112. %

93-Np-238

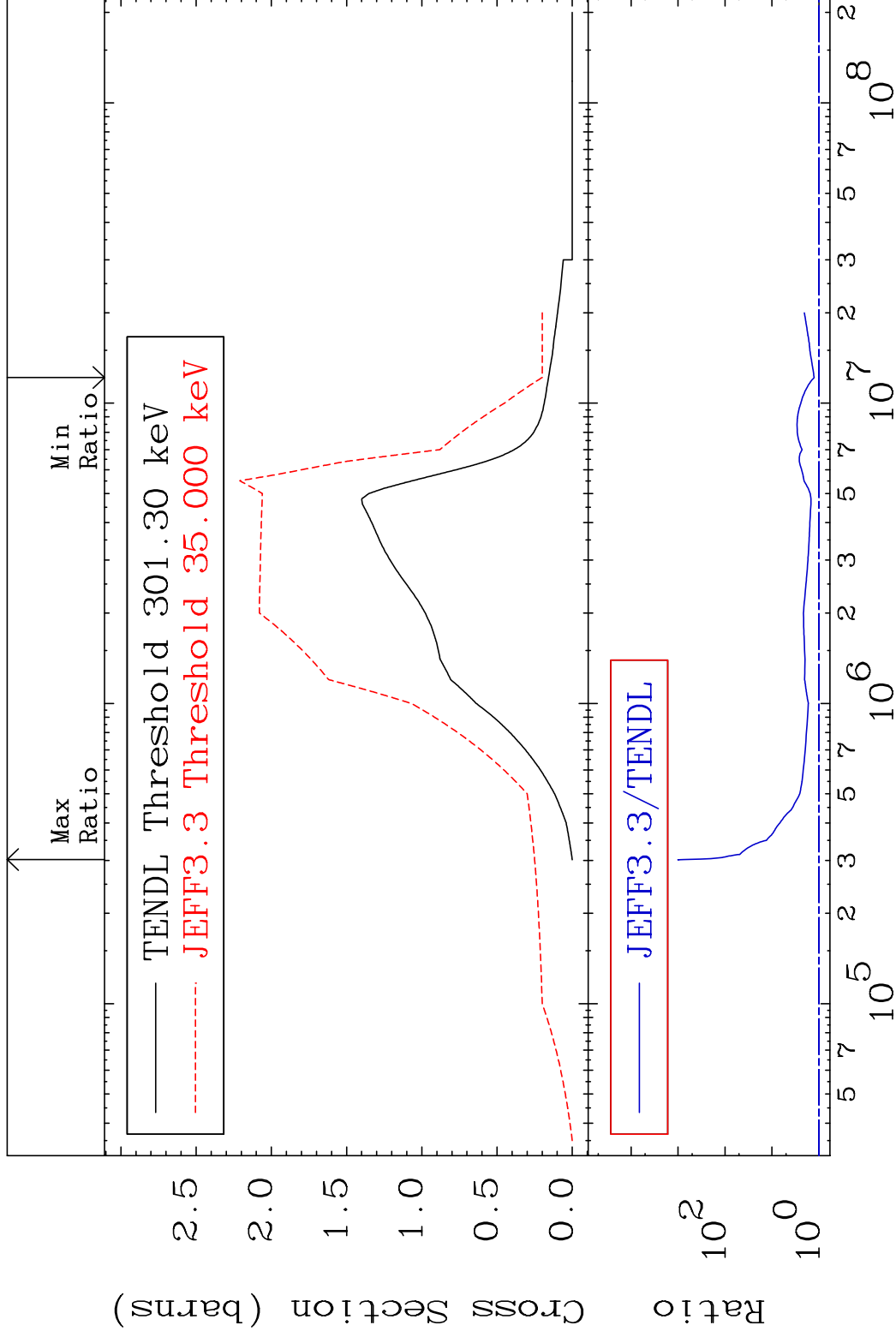


MAT 9349

(n,n') Continuum

93-Np-238

Cross Section 26.24 To 9999. %



7

Incident Energy (eV)

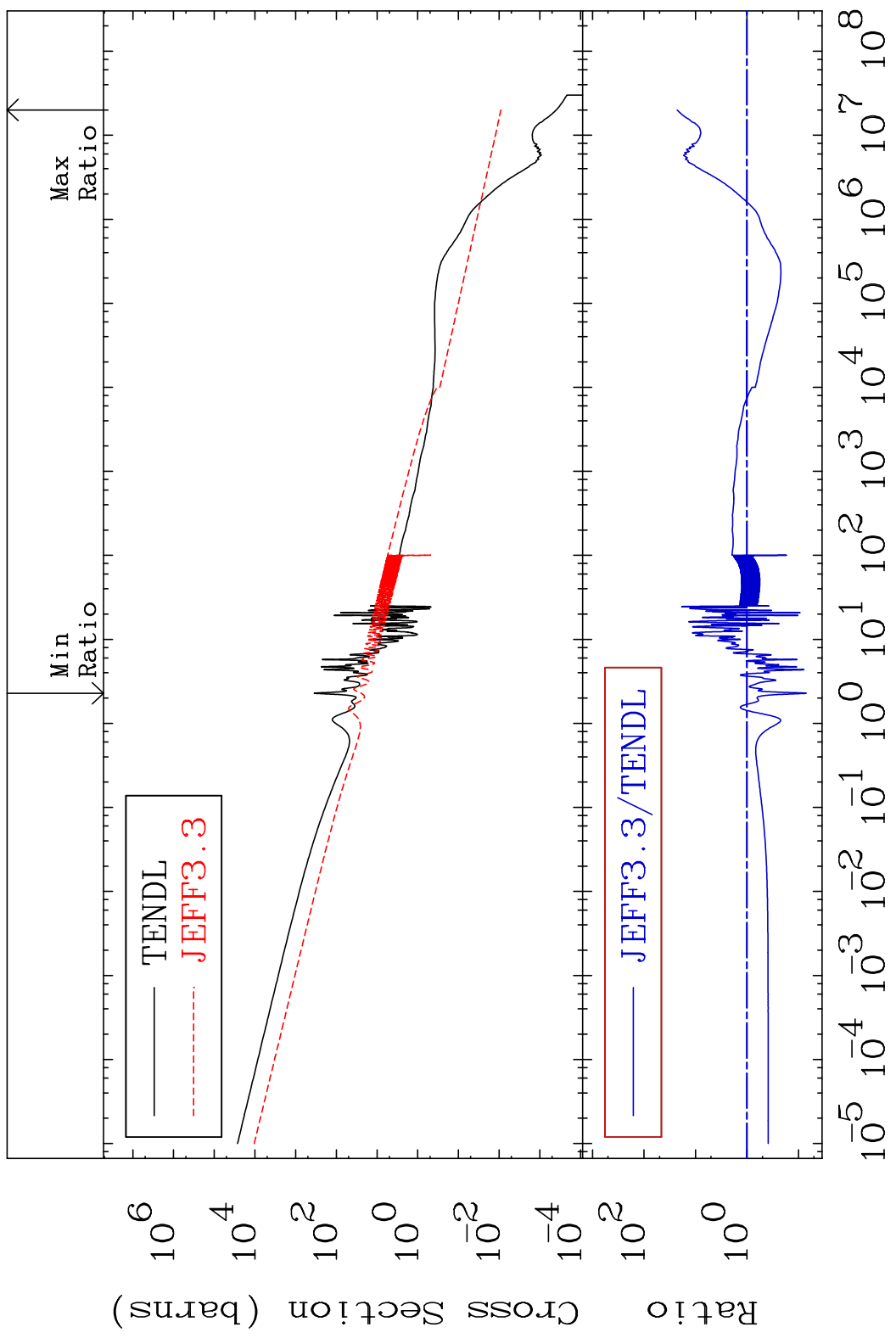
93-Np-238

MAT 9349

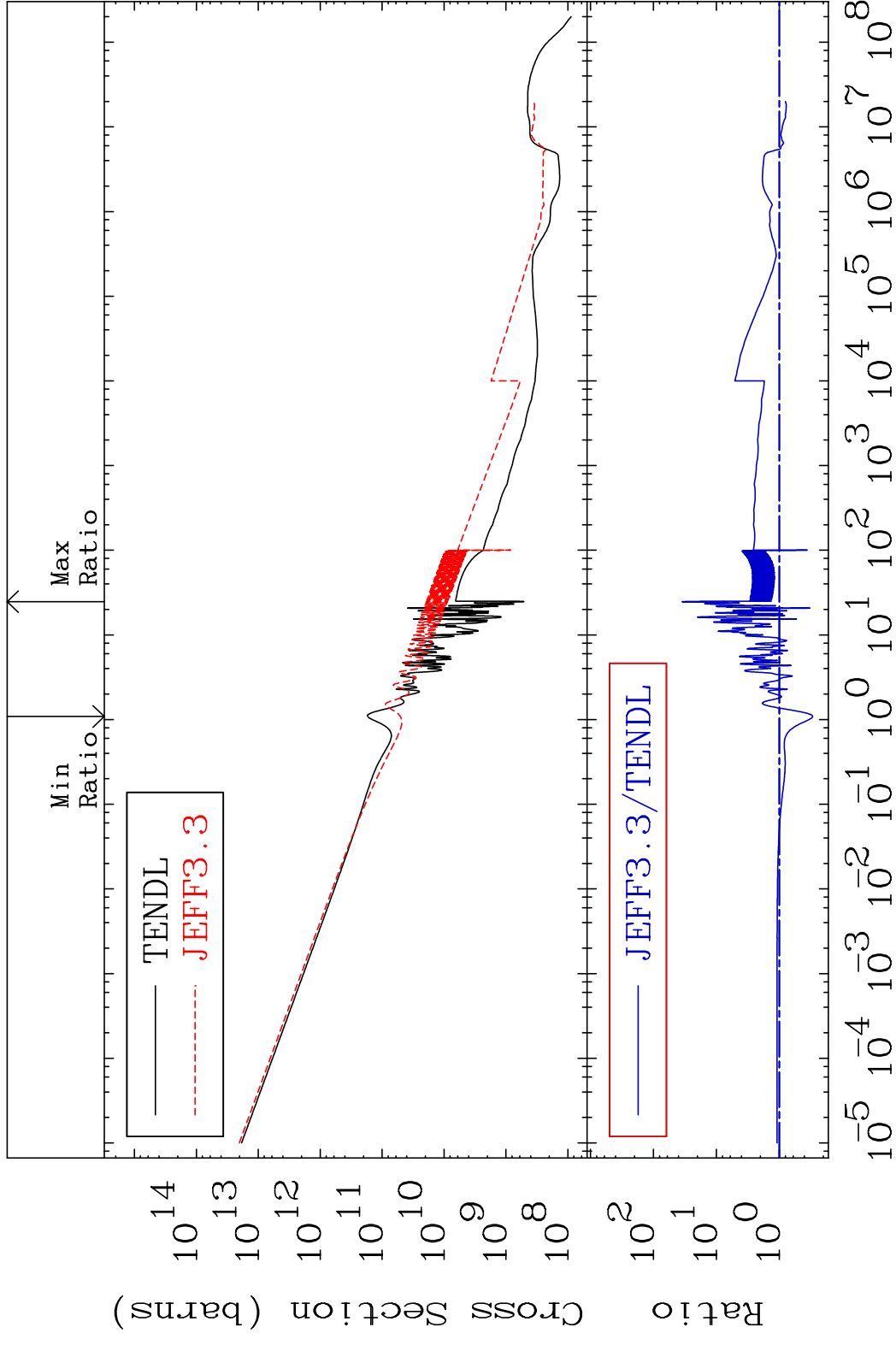
(n, γ)

93-Np-238

Cross Section -92.99 To 2169. %



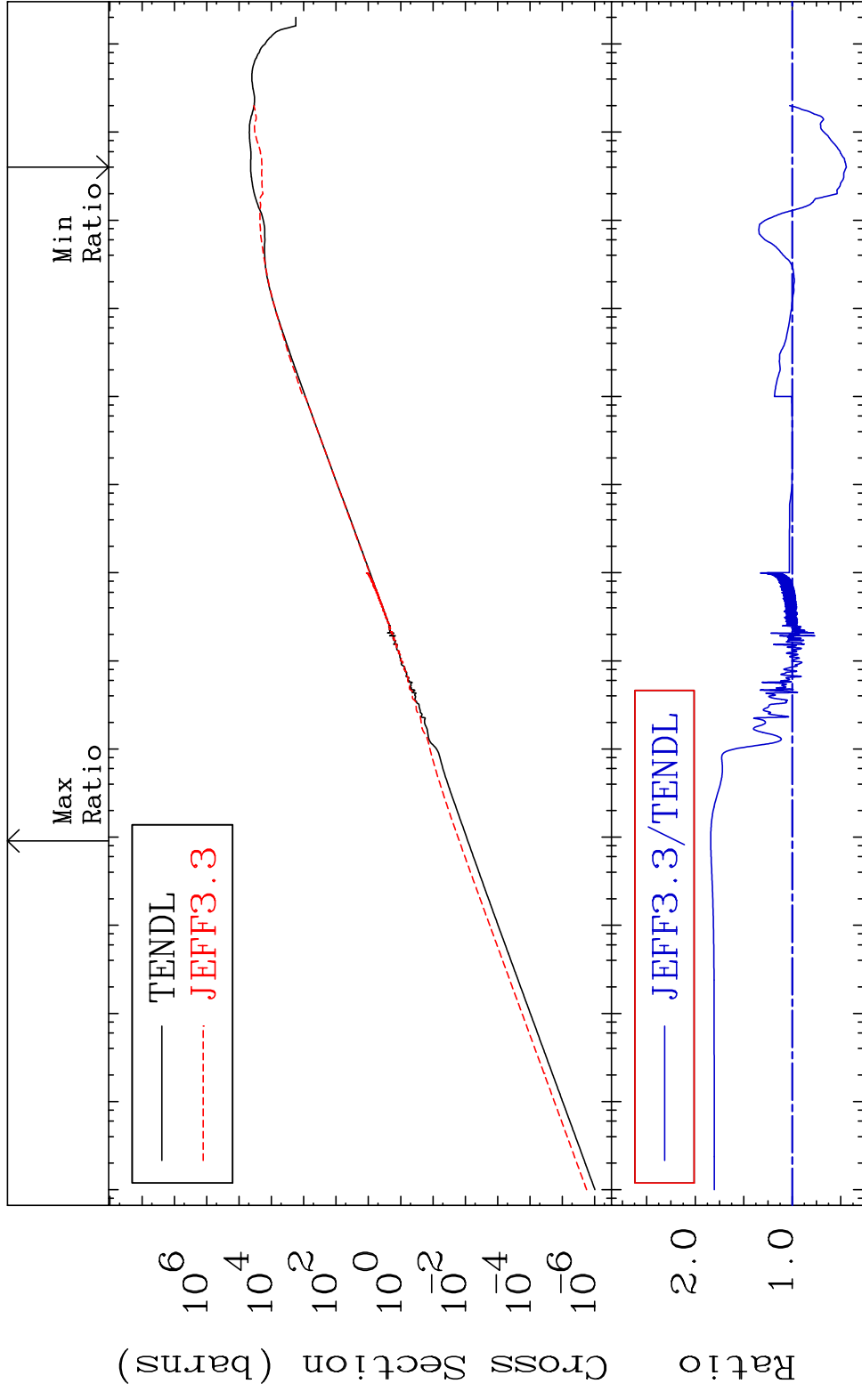
MAT 9349 Kerma total (eV-barns) 93-Np-238
 Cross Section -70.31 To 3376. %



MAT 9349

Kerma elastic Cross Section -55.71 To 84.03 %

93-Np-238



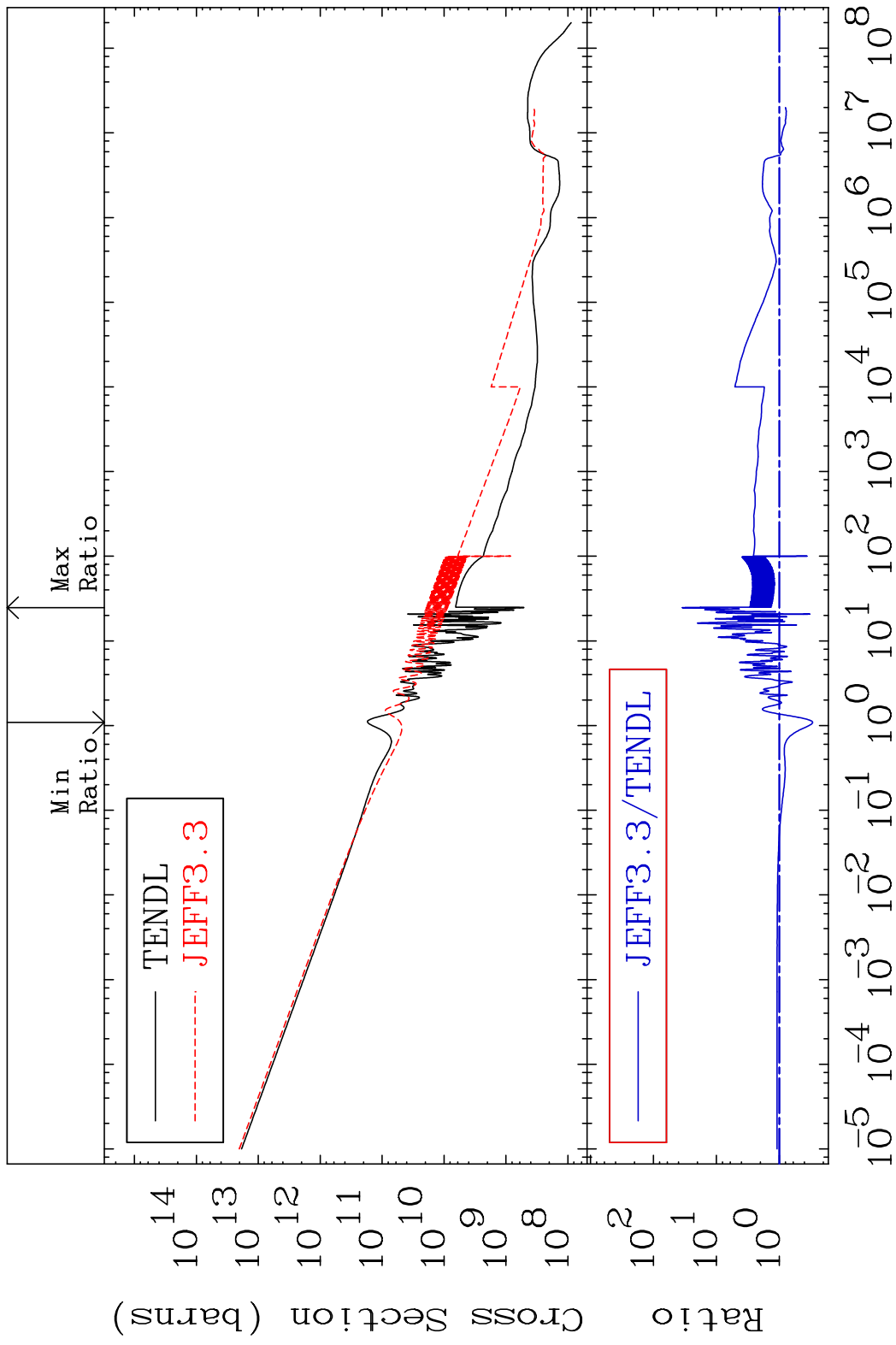
10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

10

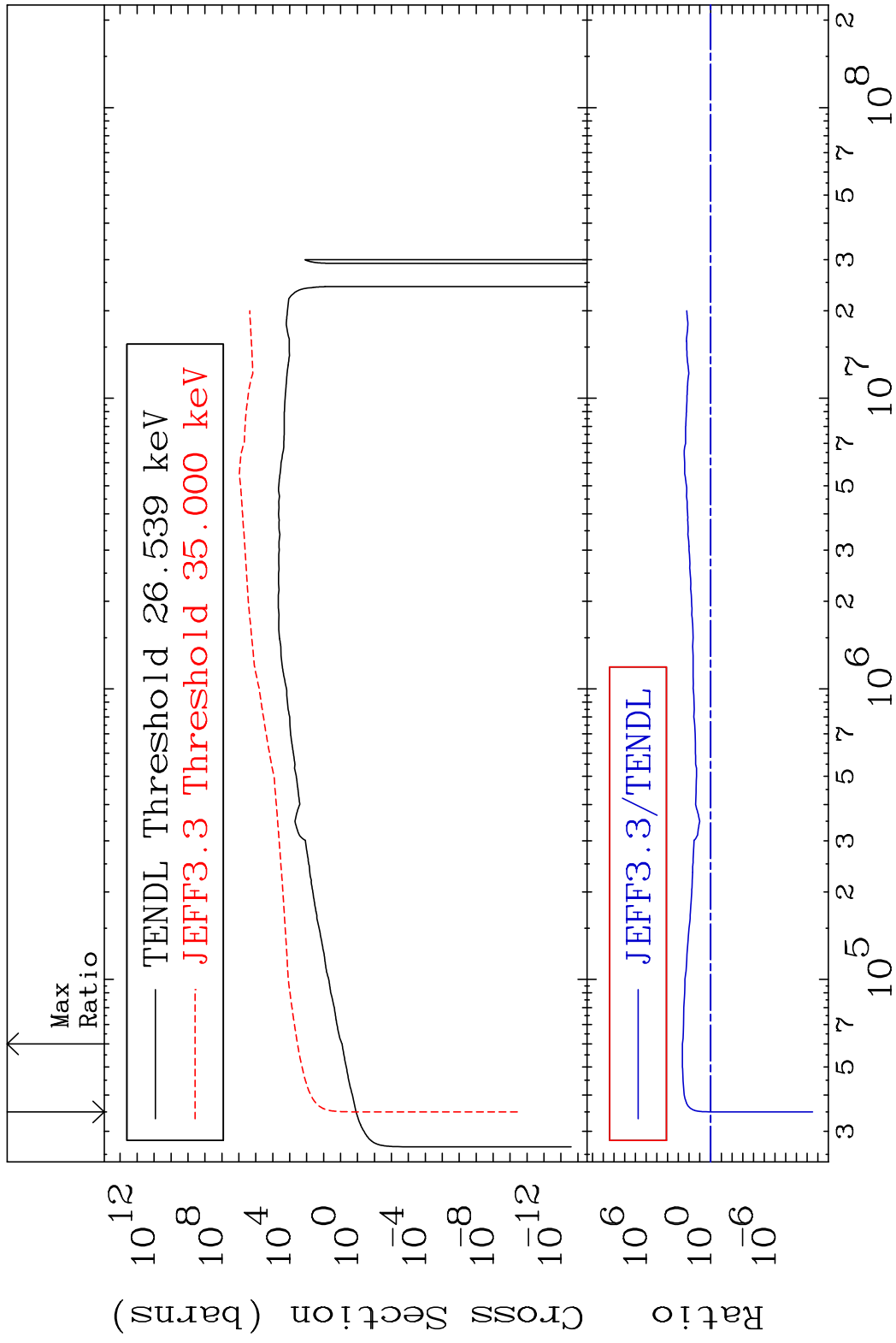
Incident Energy (eV)

93-Np-238

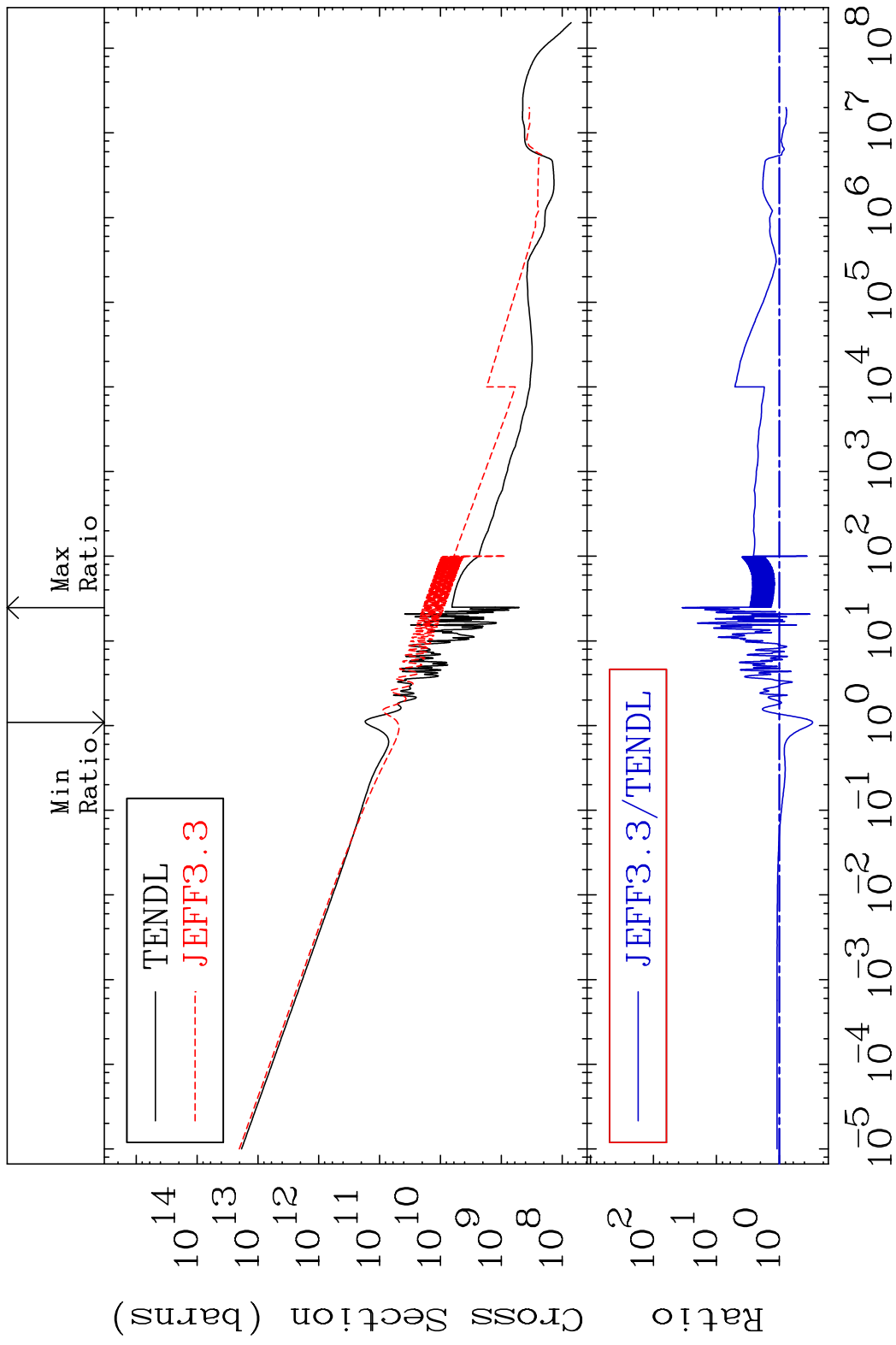
MAT 9349 Kerma non-elastic (all but mt2) 93-Np-238
 Cross Section -70.31 To 3376. %



MAT 9349 Kerma inelastic (mt51-91) 93-Np-238
 Cross Section -100.0 To 9999. %

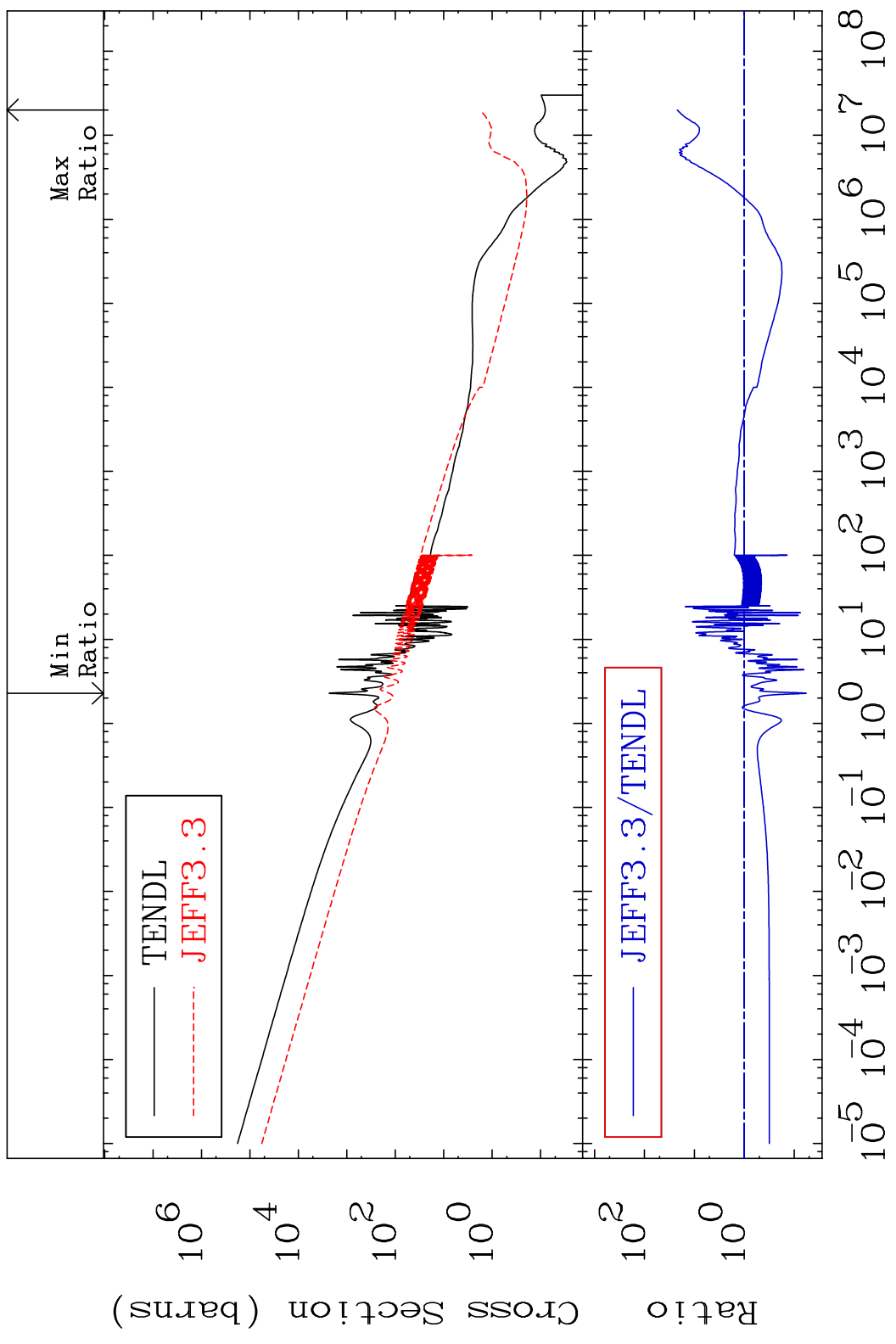


MAT 9349 Kerma fission (mt18 or mt19-20-21-38) 93-Np-238
 Cross Section -70.31 To 3376. %



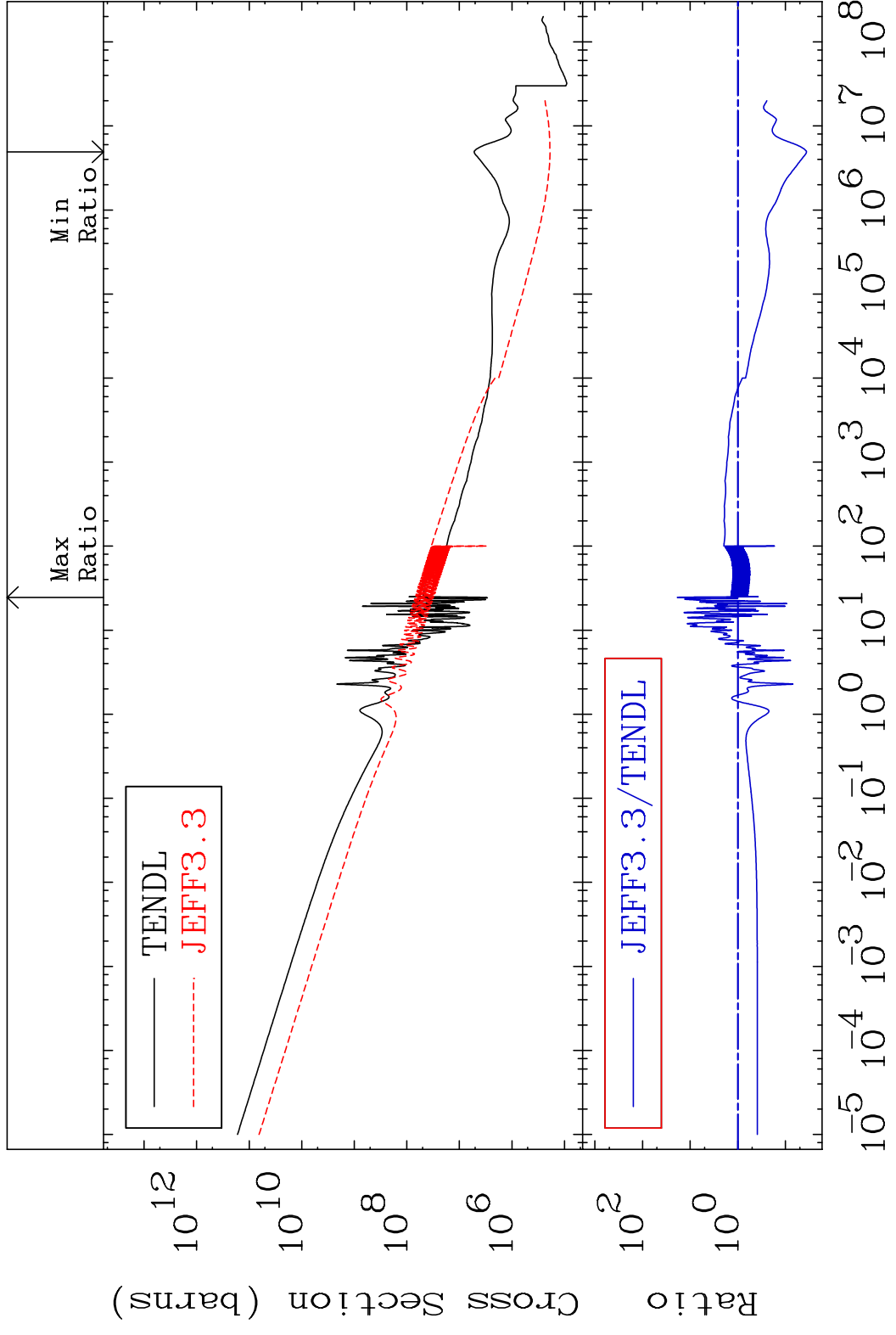
MAT 9349

Kerma capture (mt102) 93-Np-238
Cross Section -94.31 To 2111. %



MAT 9349

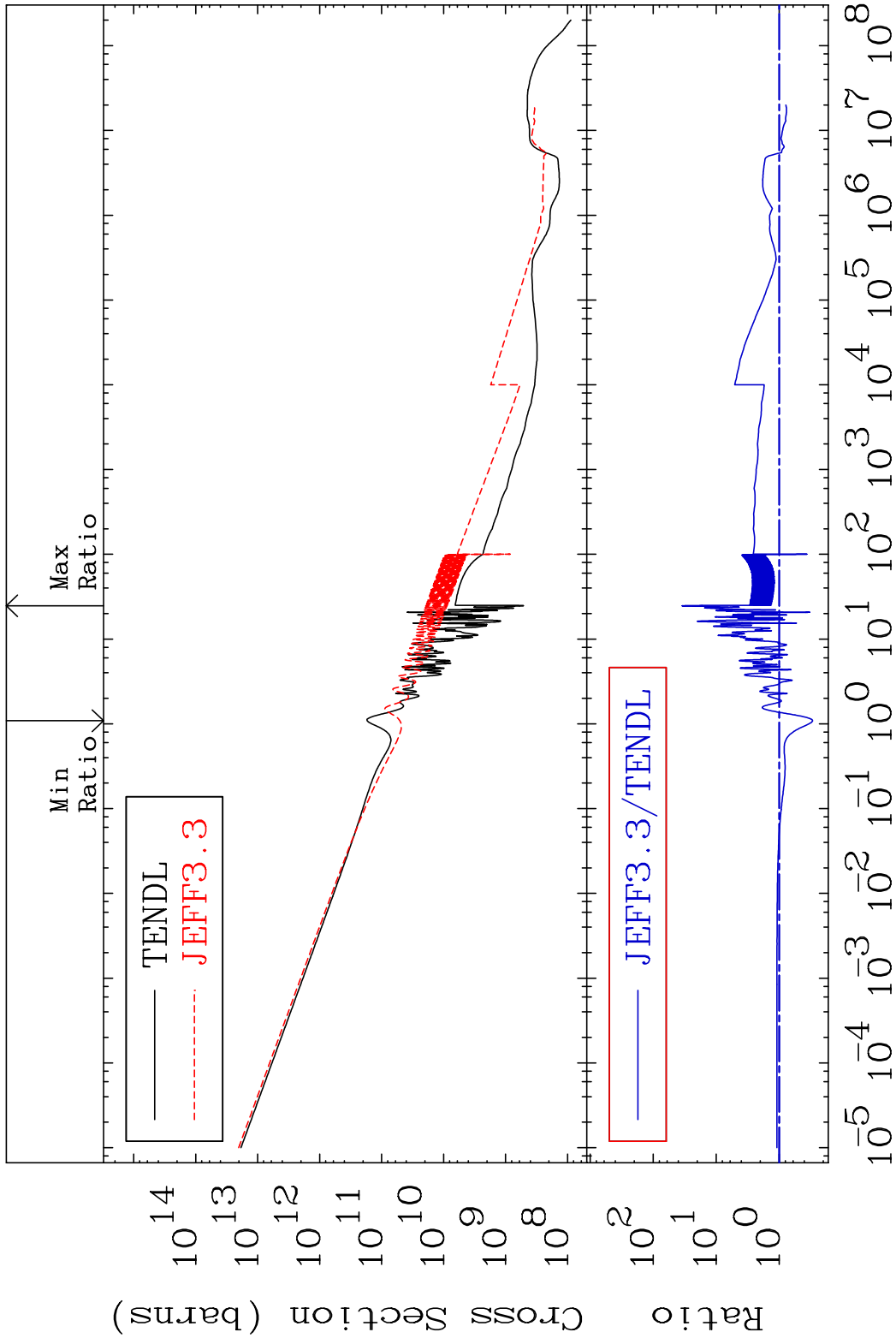
Total photon (eV-barns) 93-Np-238
Cross Section -96.37 To 1775. %



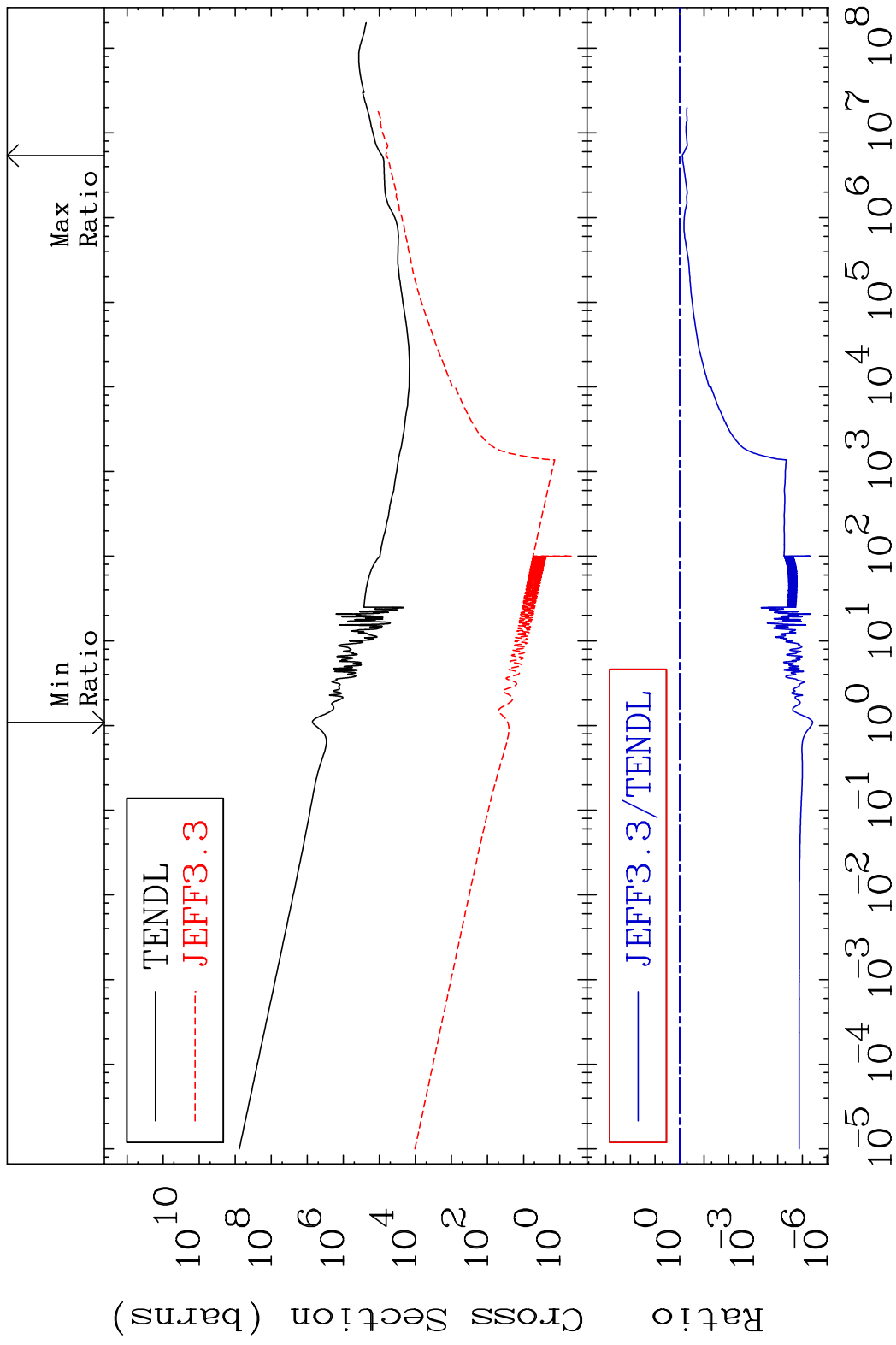
15

Incident Energy (eV) 93-Np-238

MAT 9349 Total kinematic kerma (high limit) 93-Np-238
 Cross Section -70.31 To 3376. %



MAT 9349 Dpa total (eV-barns) 93-Np-238
 Cross Section -100.0 To -23.10%

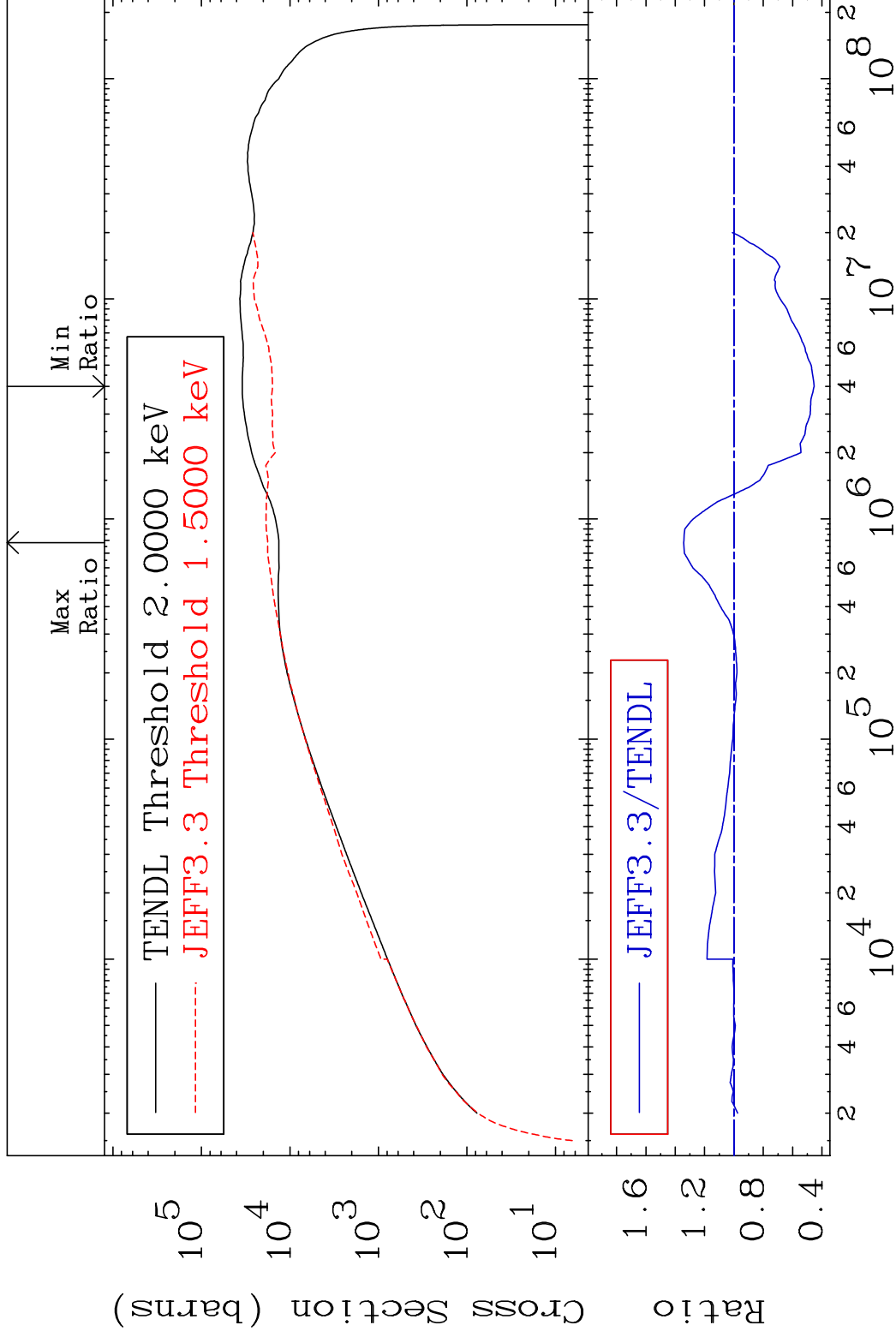


MAT 9349

Dpa elastic (mt2)

93-Np-238

Cross Section -54.62 To 34.27 %

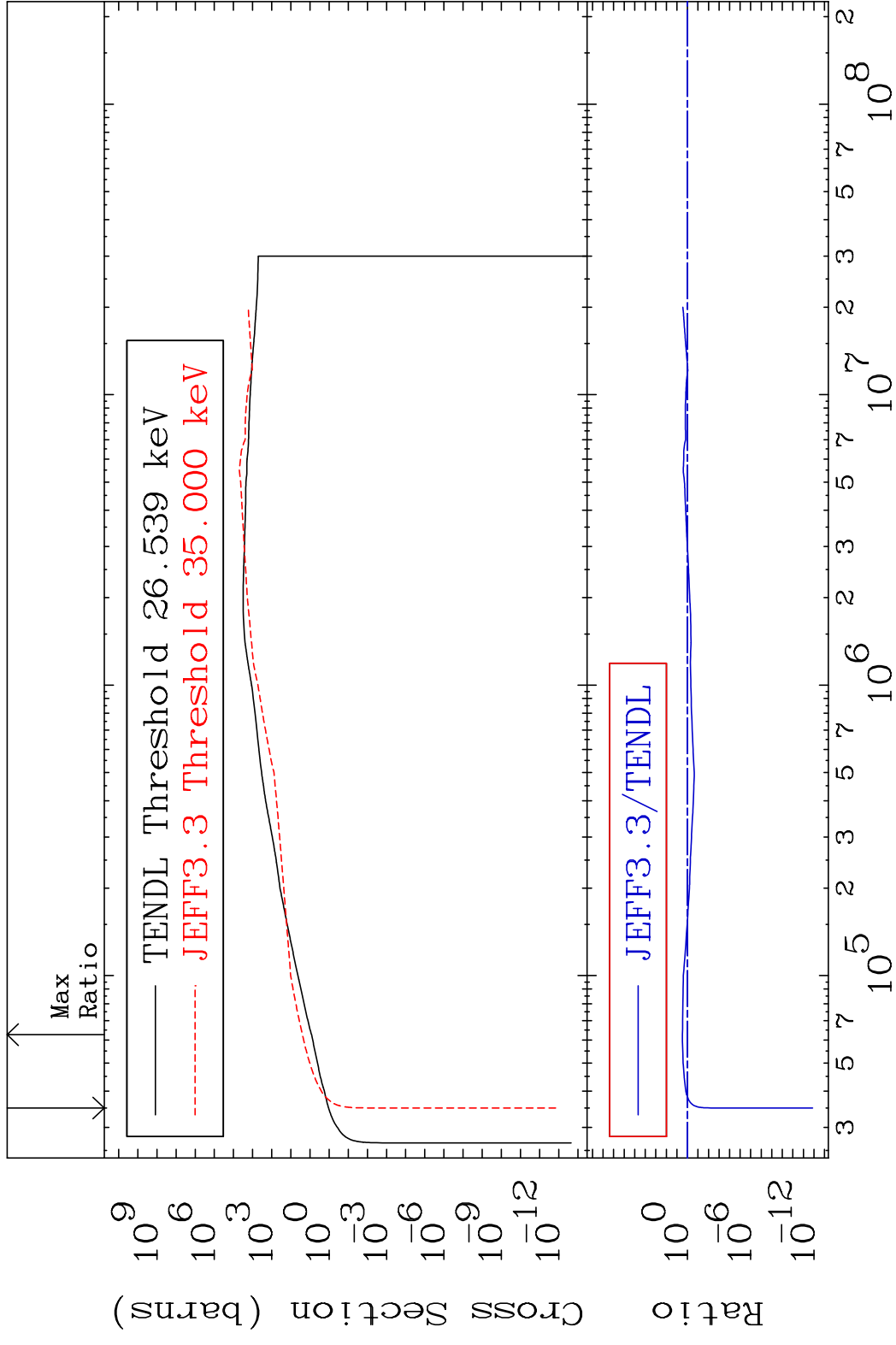


MAT 9349

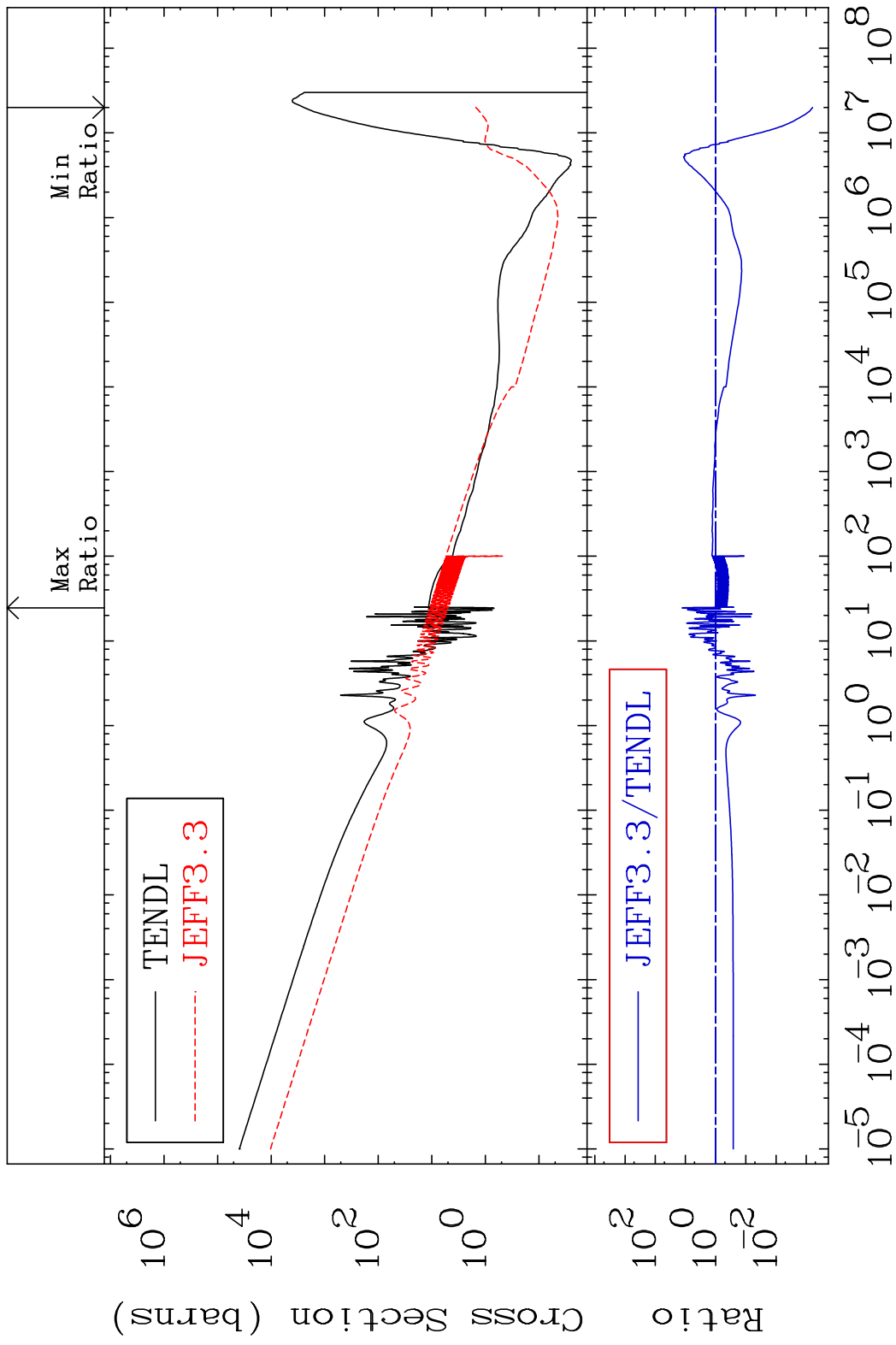
Dpa inelastic (mt51-91)

93-Np-238

Cross Section -100.0 To 202.2 %

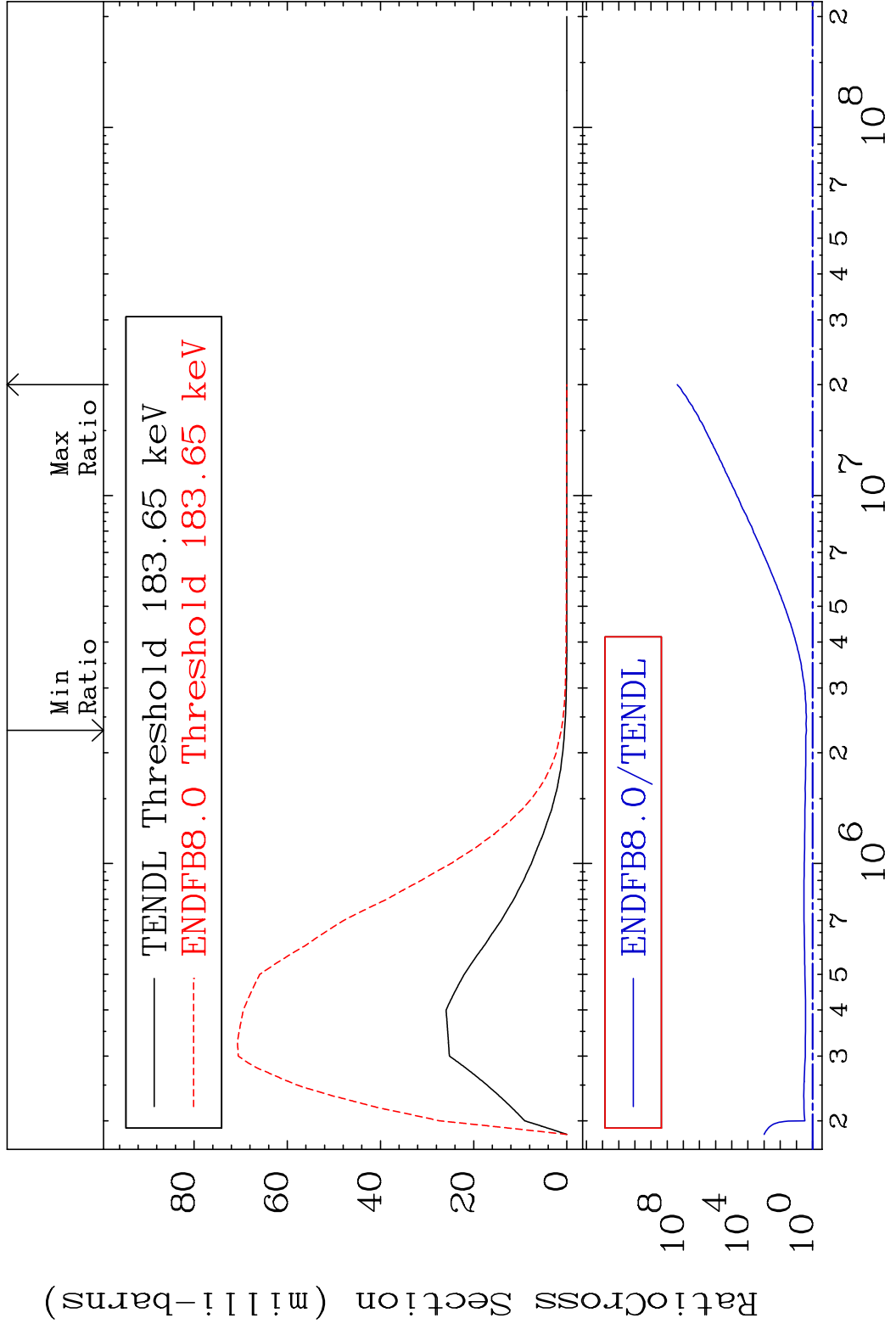


MAT 9349 Dpa disappearance (mt102 -120) 93-Np-238
 Cross Section -99.94 To 1166. %

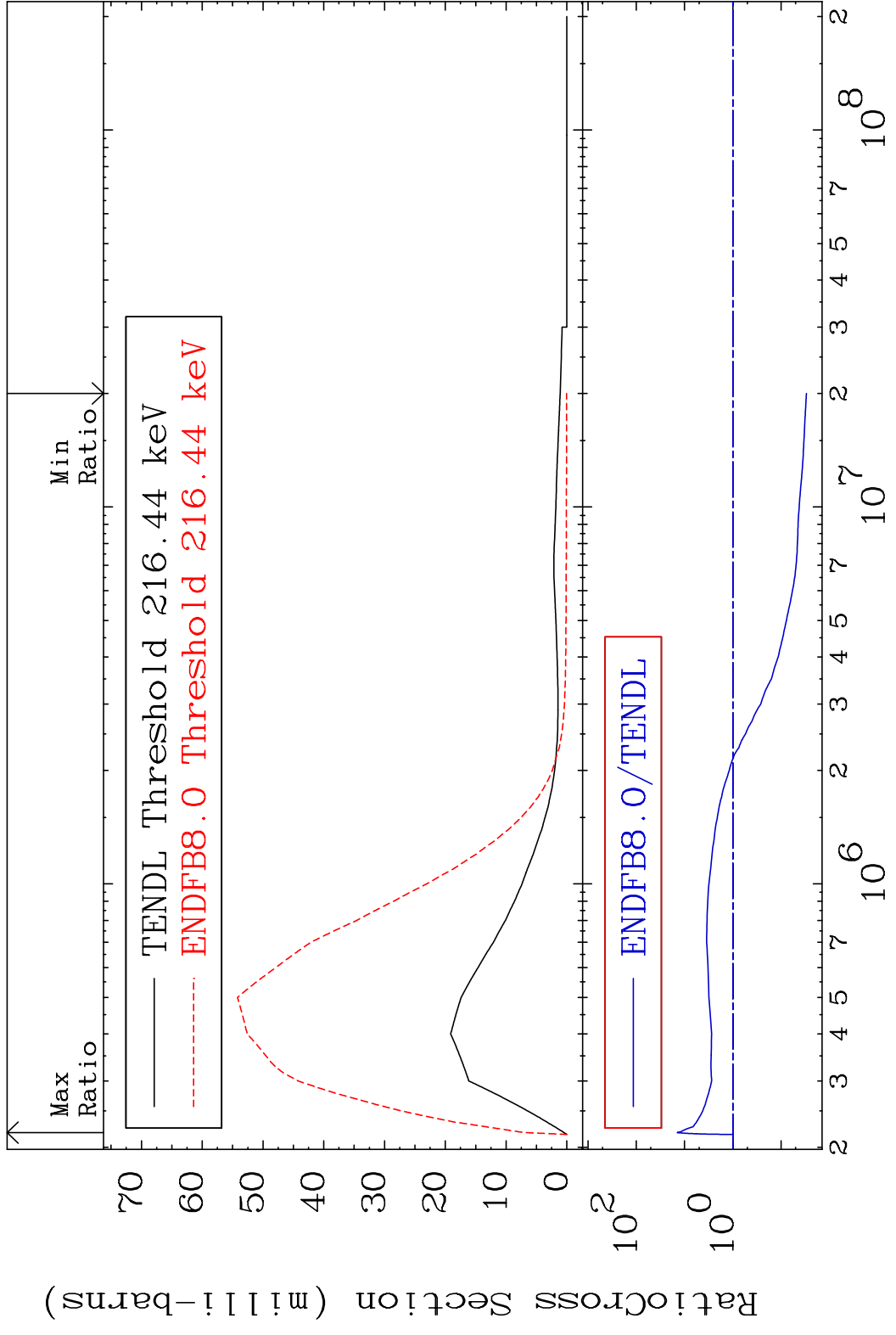


20 Incident Energy (eV) 93-Np-238

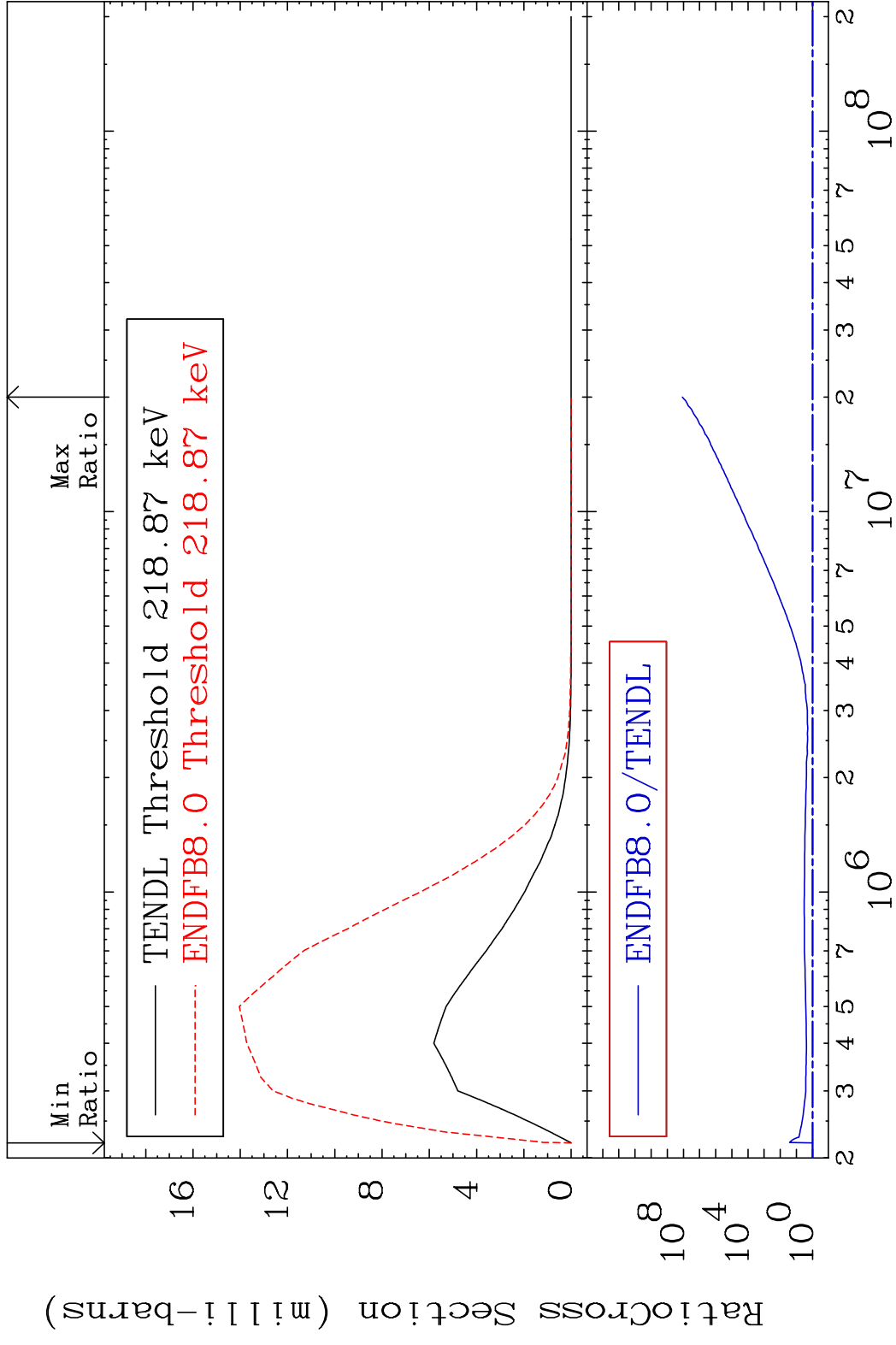
MAT 9349 MT= 60 (n, n') Level 93-Np-238
 Cross Section 140.4 To 9999. %



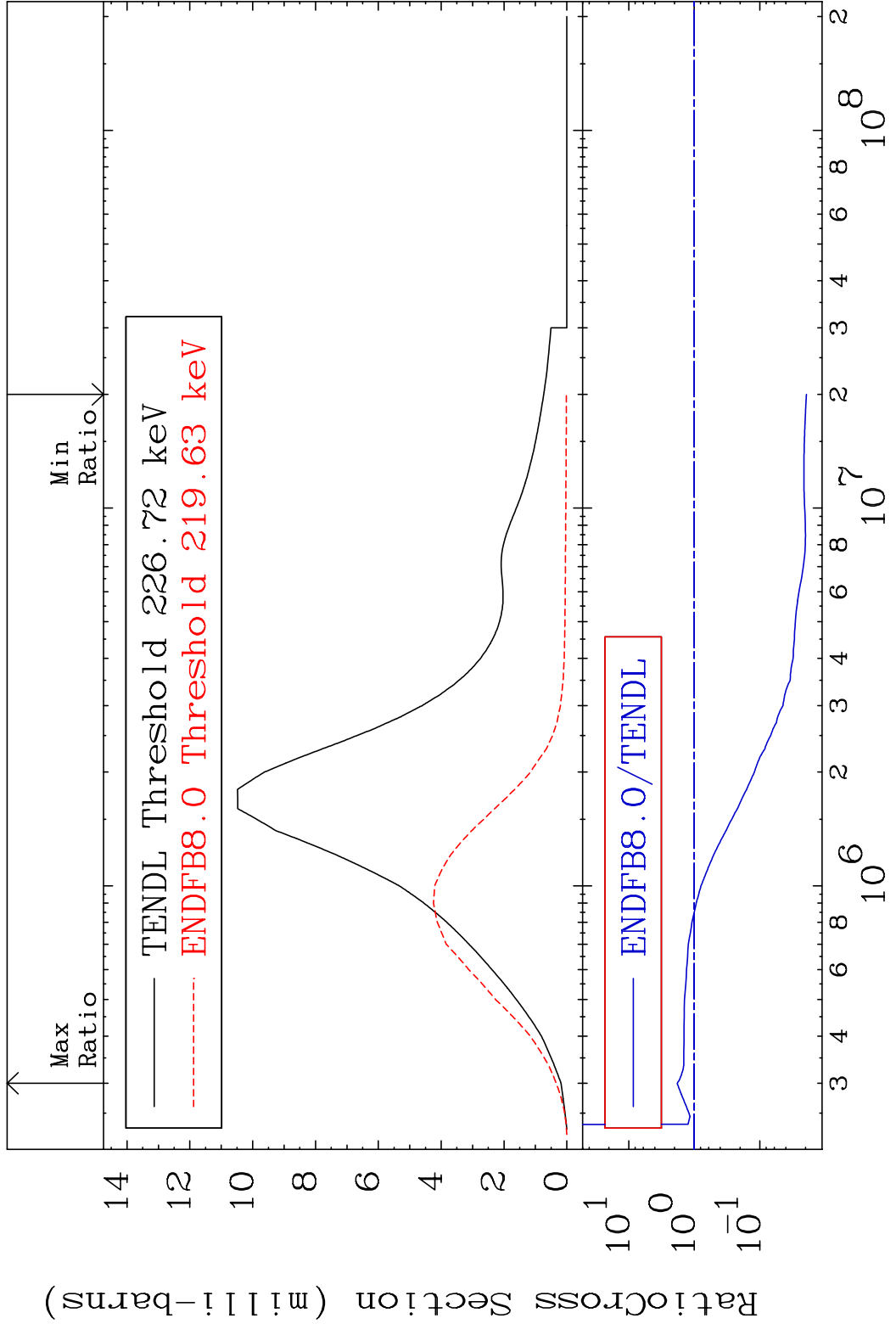
MAT 9349 MT= 61 (n, n') Level 93-Np-238
 Cross Section -97.00 To 1321. %



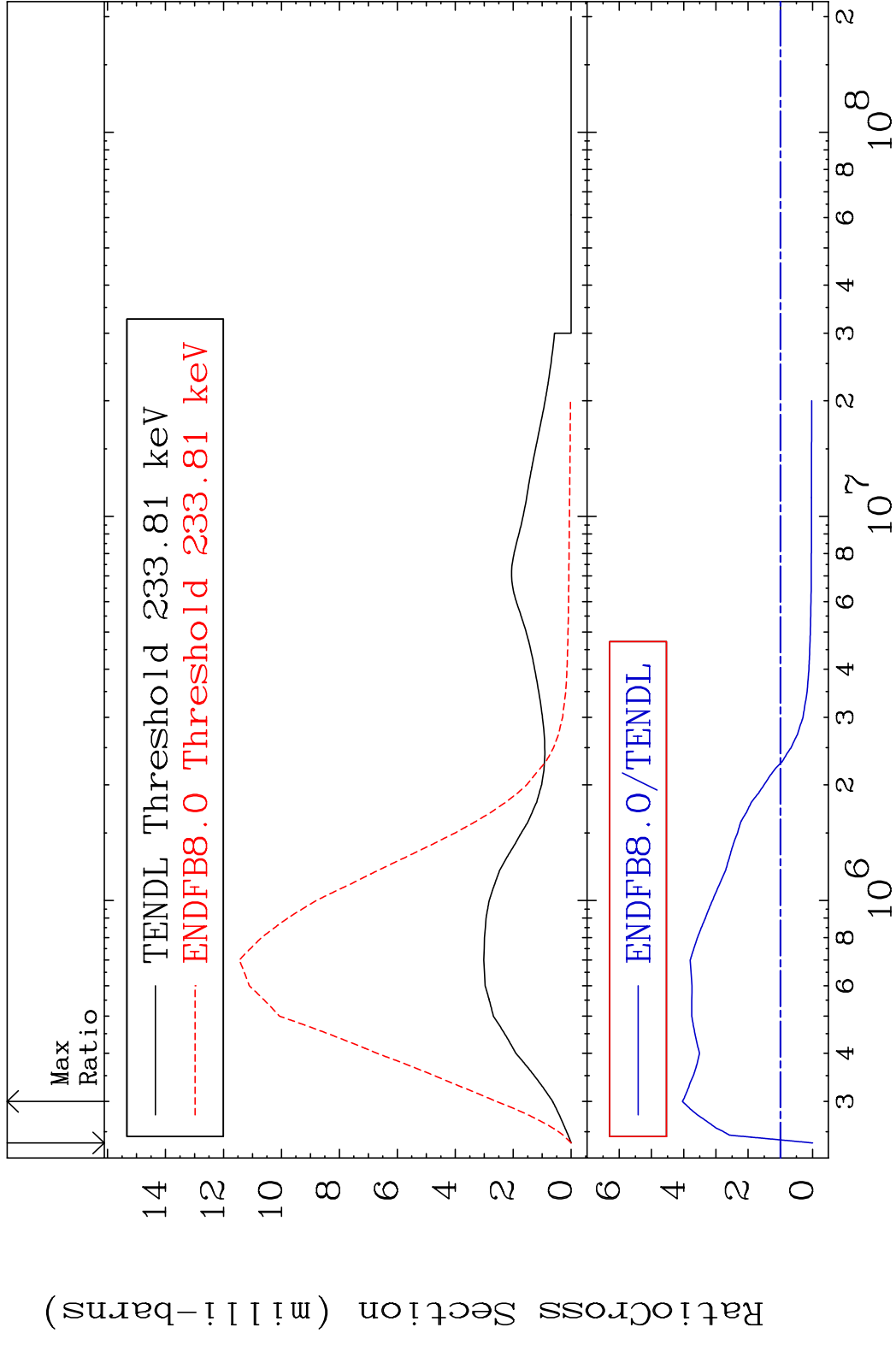
MAT 9349 MT= 62 (n, n') Level 93-Np-238
 Cross Section 0.000 To 9999. %



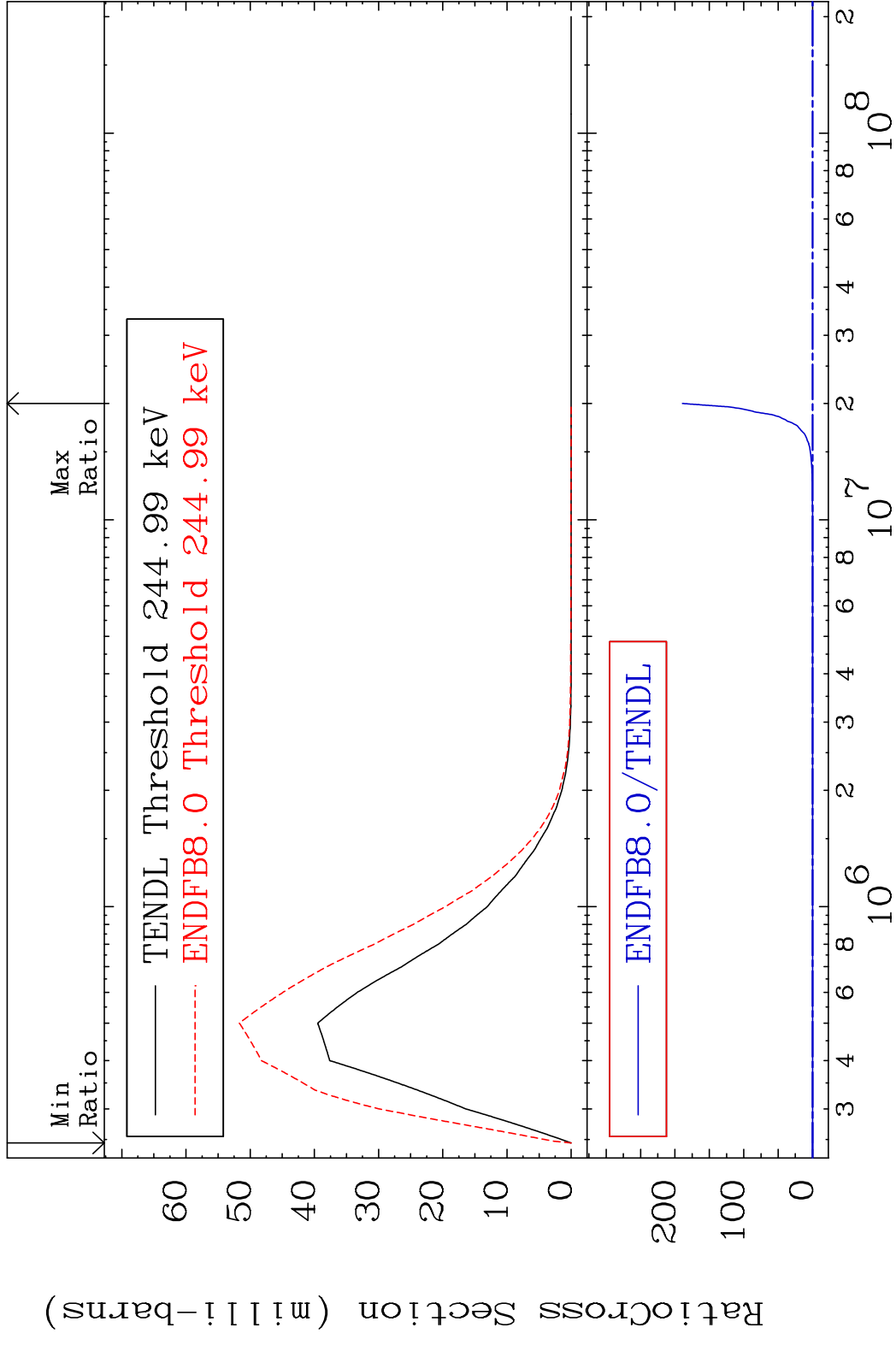
MAT 9349 MT= 63 (n, n') Level 93-Np-238
 Cross Section -98.06 To 82.05 %



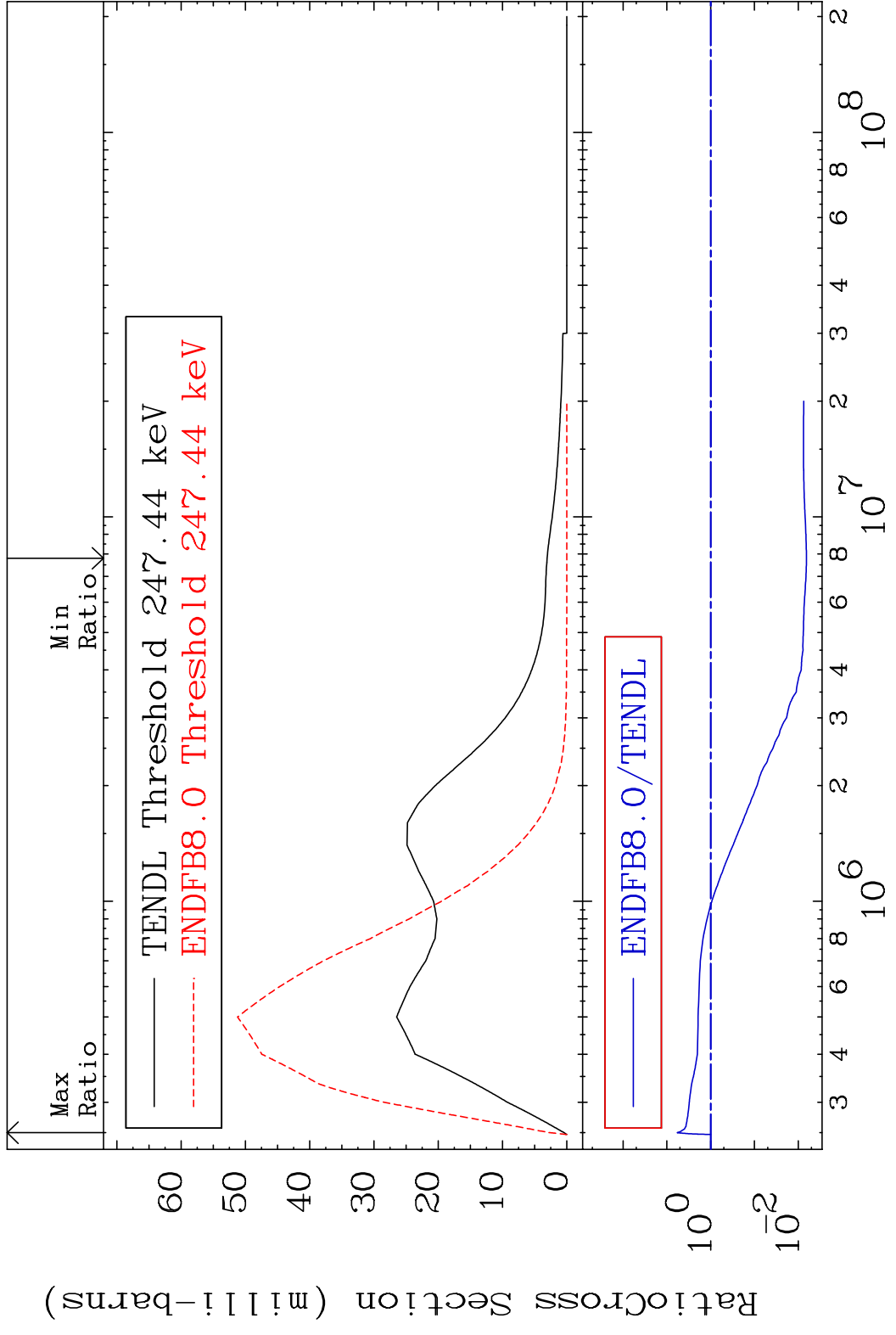
MAT 9349 MT= 64 (n, n') Level 93-Np-238
 Cross Section -100.0 To 304.1 %



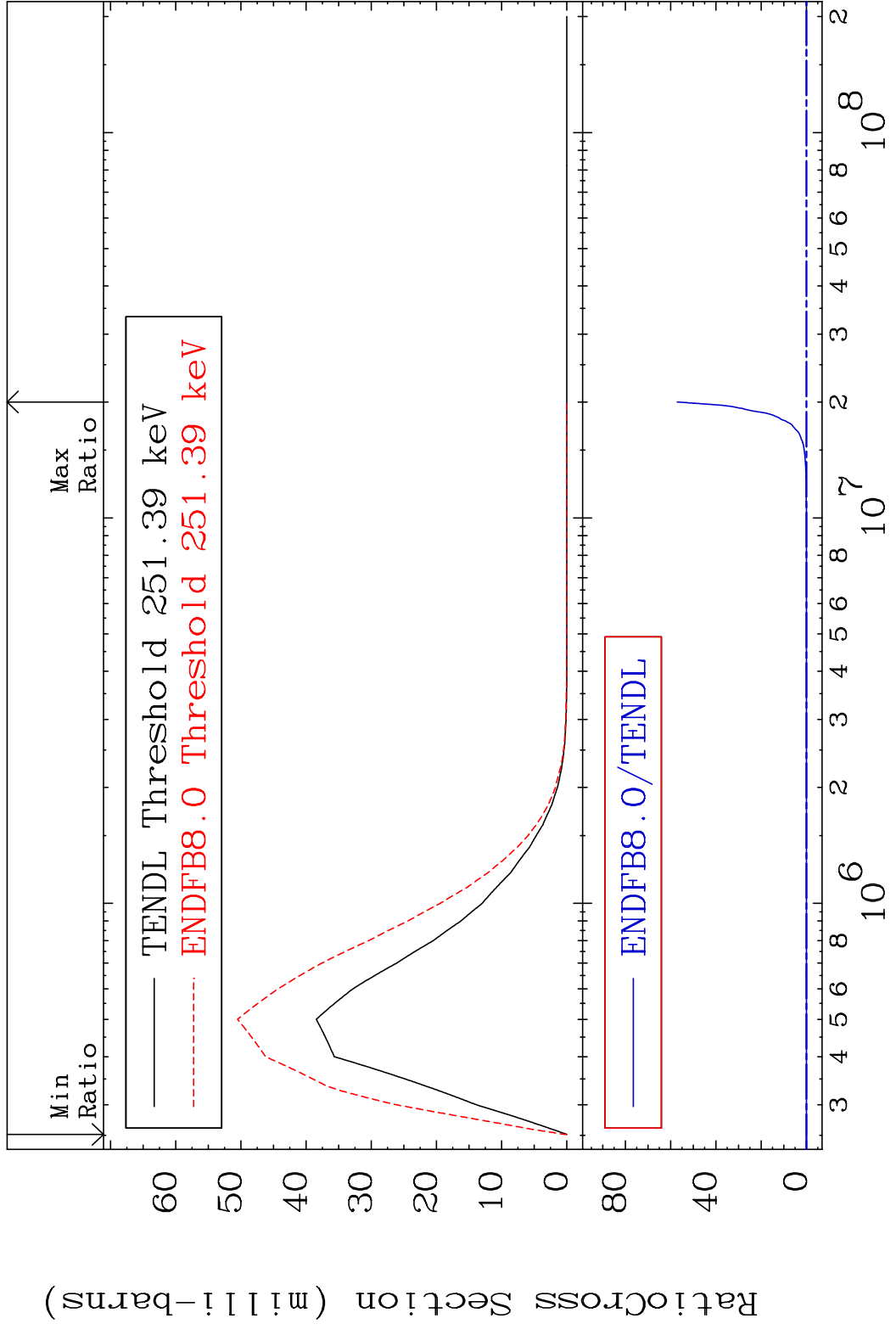
MAT 9349 MT= 65 (n, n') Level 93-Np-238
 Cross Section -100.0 To 9999. %



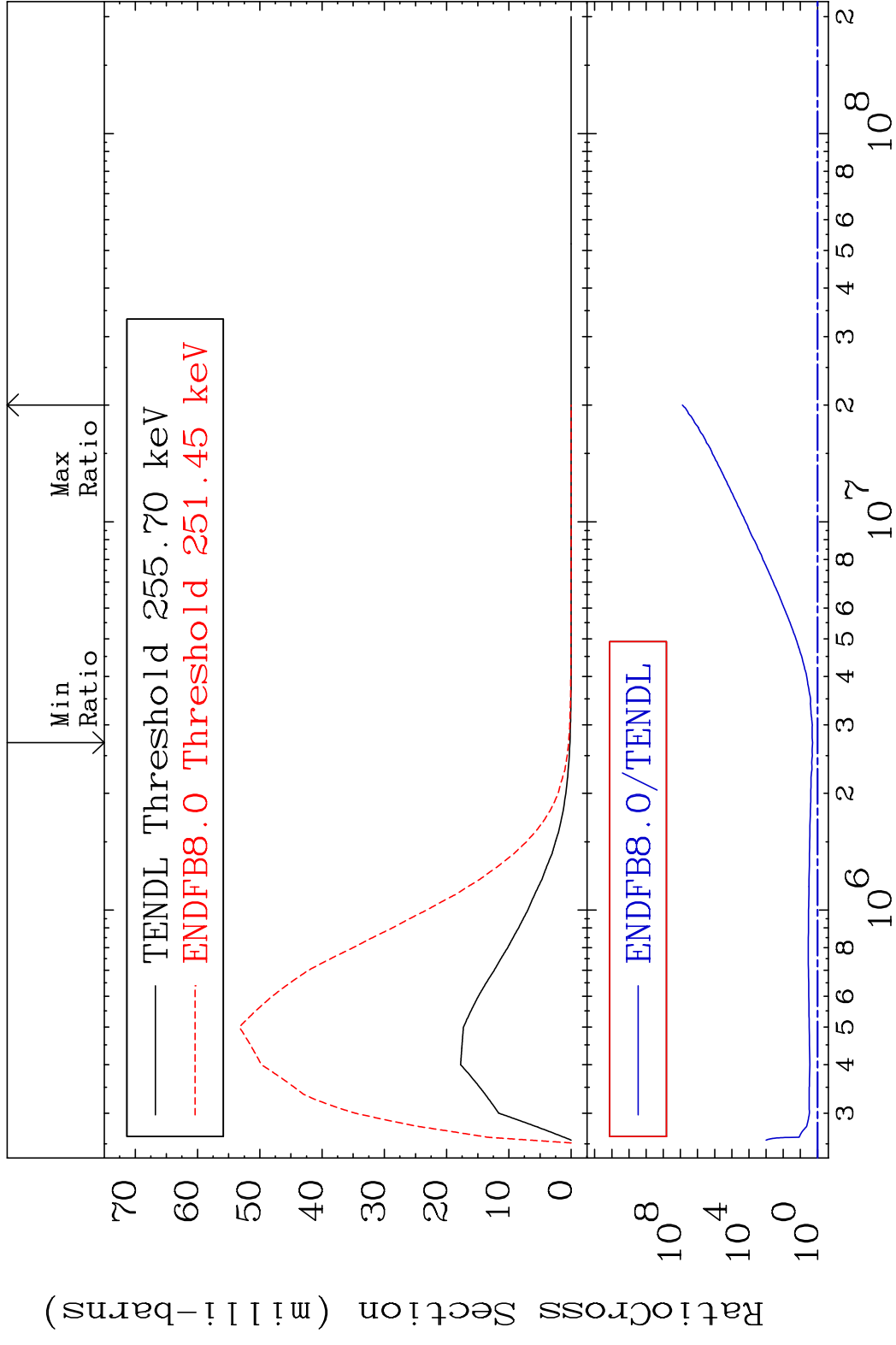
MAT 9349 MT= 66 (n, n') Level 93-Np-238
 Cross Section -99.35 To 481.0 %



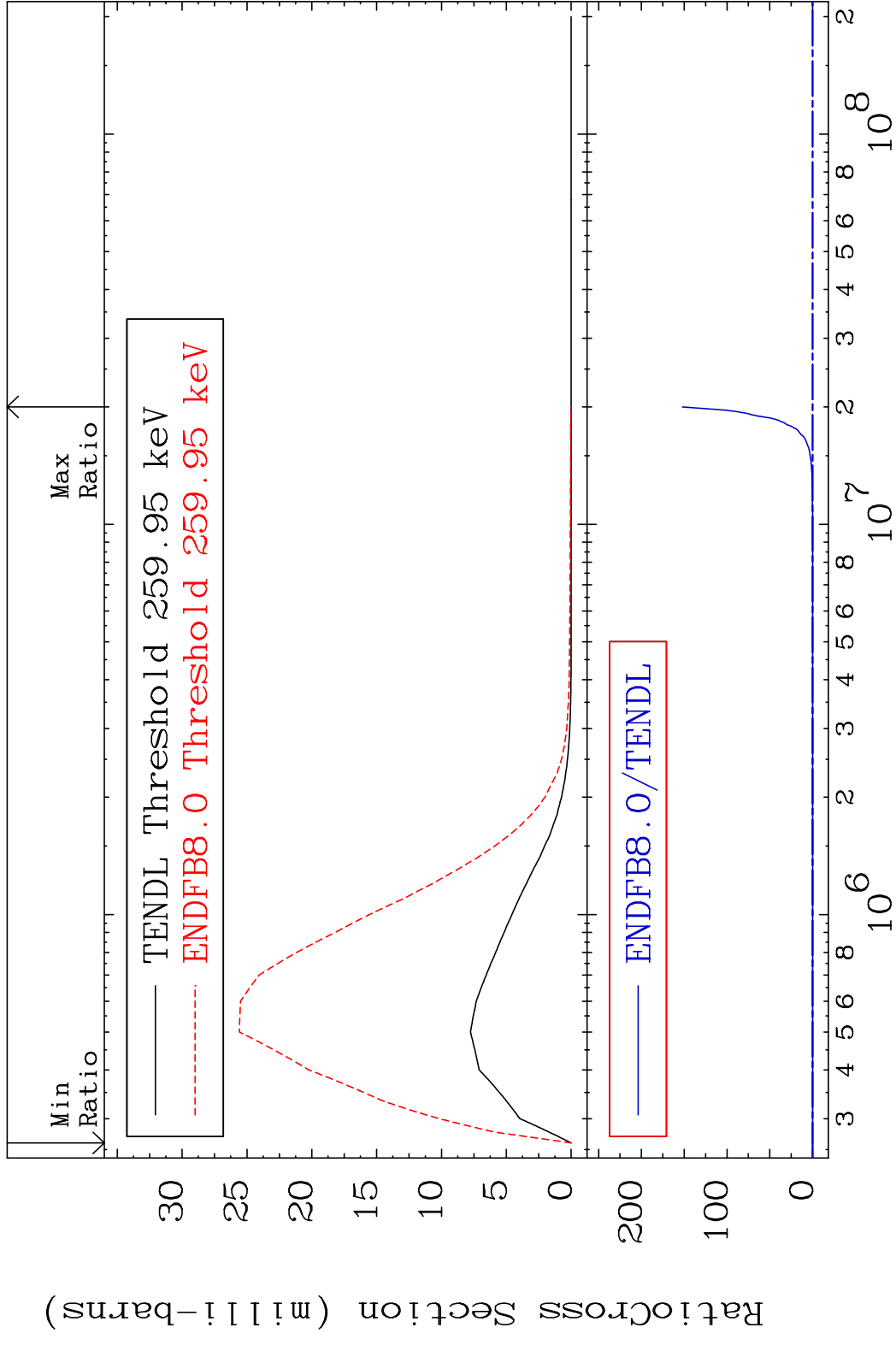
MAT 9349 MT= 67 (n, n') Level 93-Np-238
 Cross Section -100.0 To 9999. %



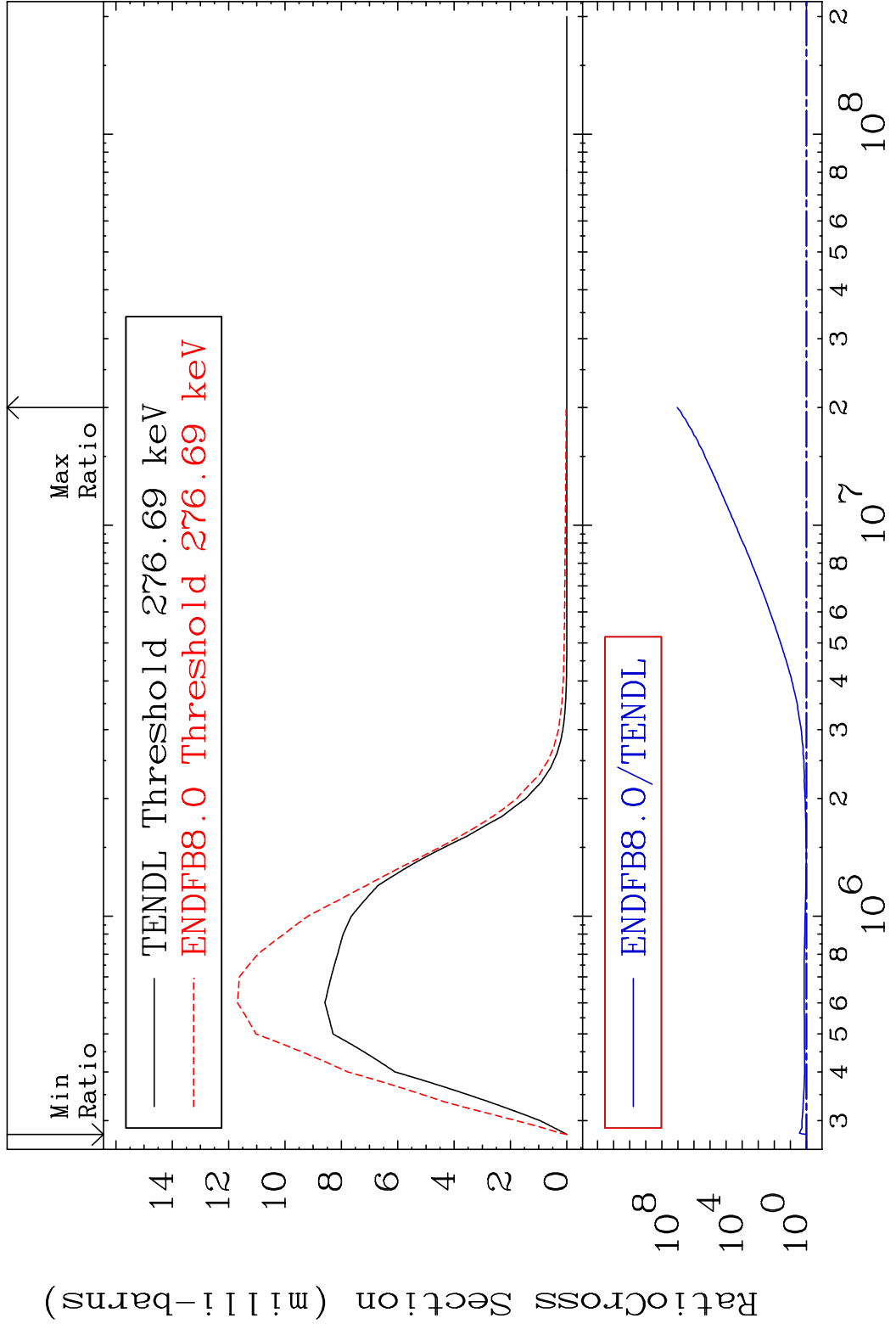
MAT 9349 MT= 68 (n, n') Level 93-Np-238
 Cross Section 95.12 To 9999. %



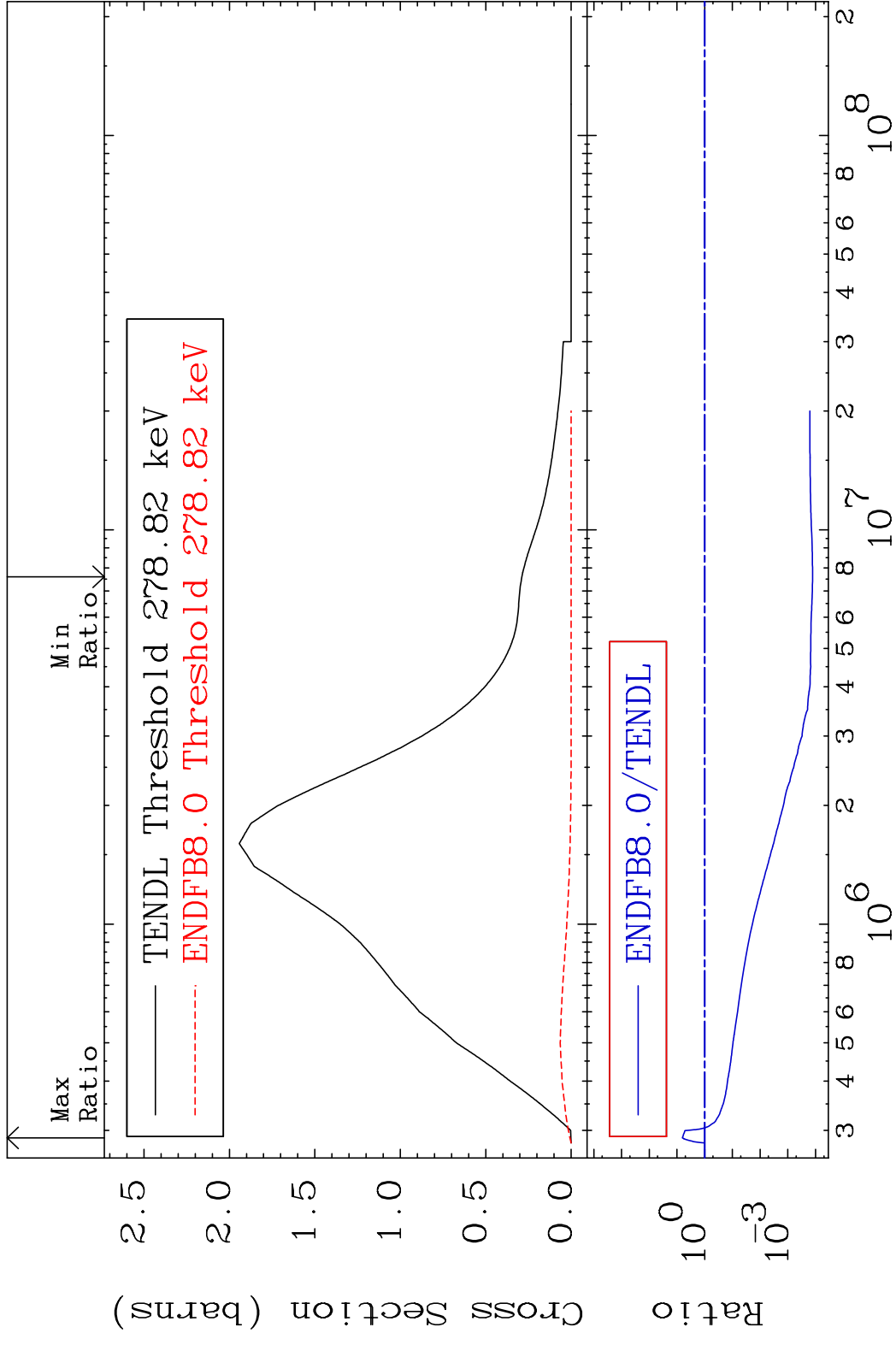
MAT 9349 MT= 69 (n, n') Level 93-Np-238
 Cross Section -100.0 To 9999. %



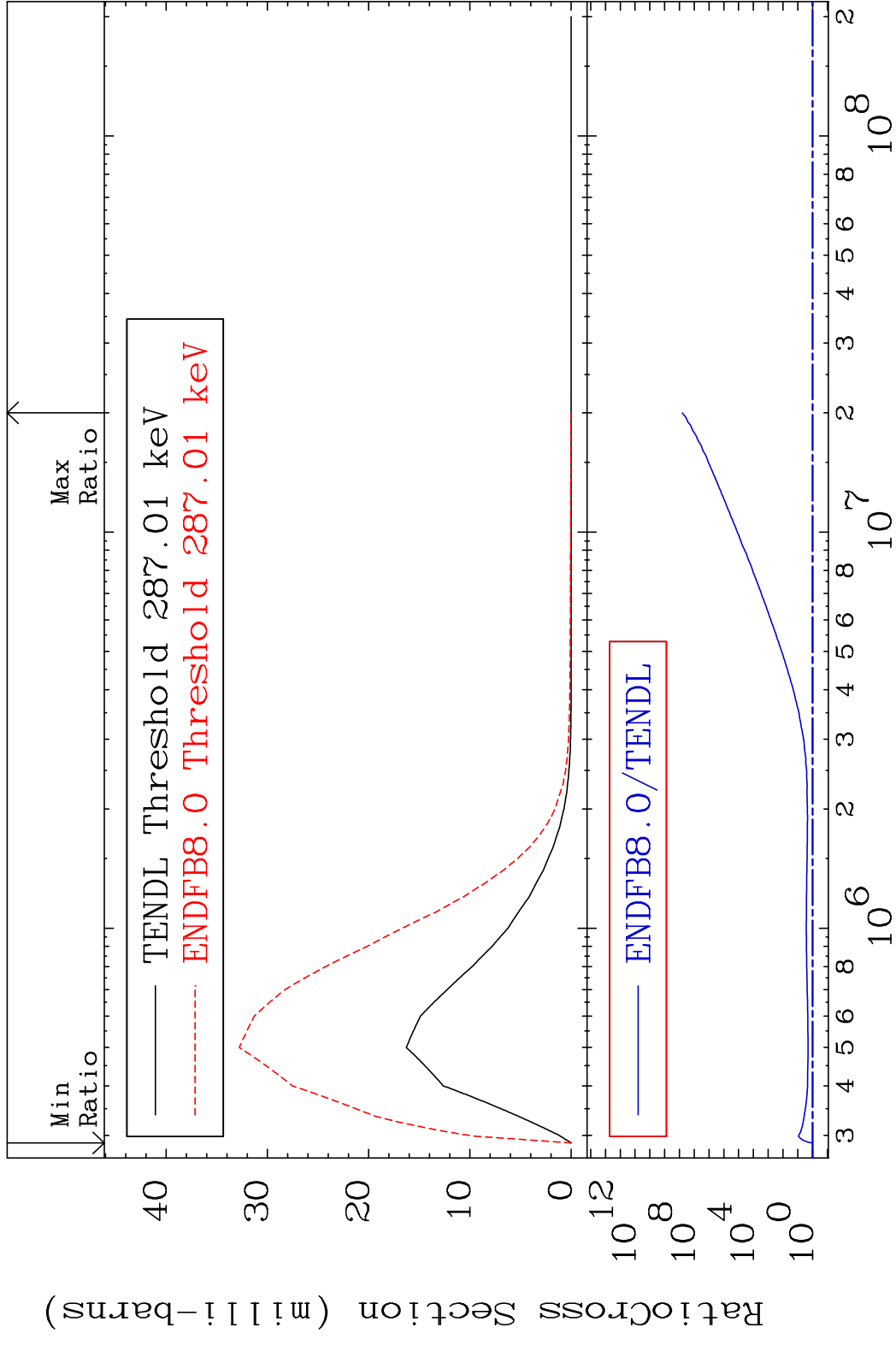
MAT 9349 MT= 70 (n, n') Level 93-Np-238
 Cross Section 0.000 To 9999. %



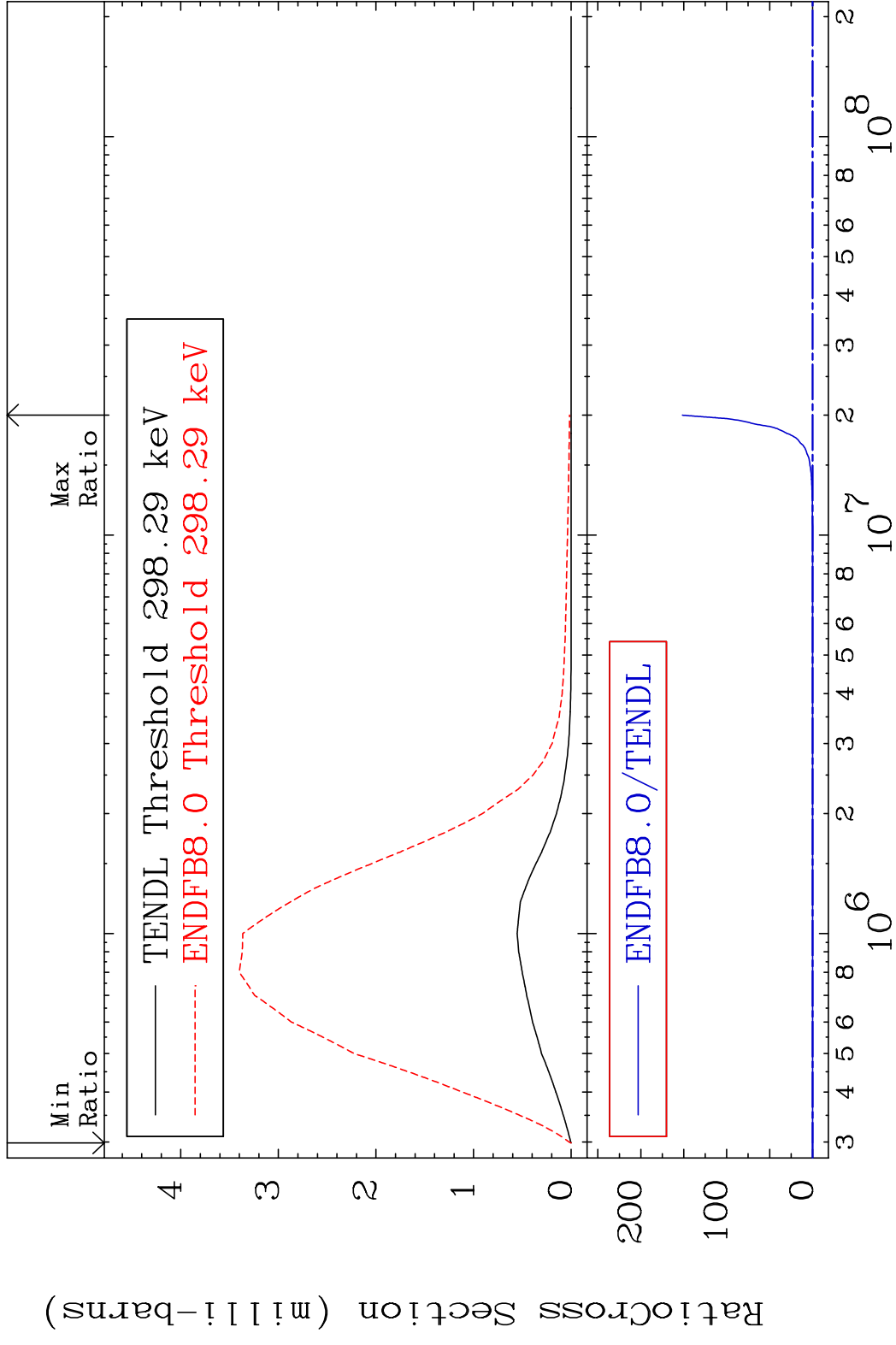
MAT 9349 MT= 71 (n, n') Level 93-Np-238
 Cross Section -99.99 To 540.9 %



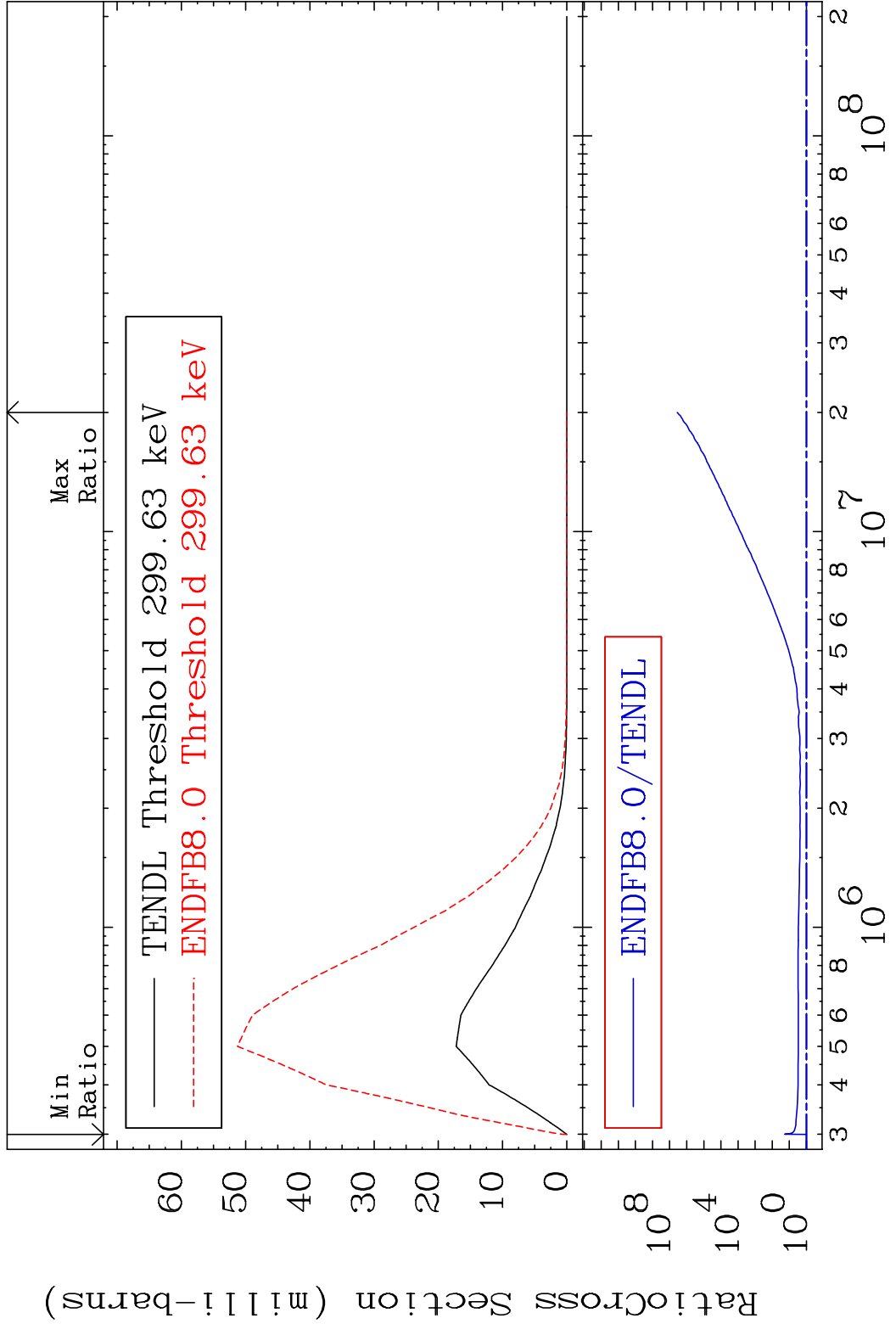
MAT 9349 MT= 72 (n, n') Level 93-Np-238
 Cross Section 0.000 To 9999. %



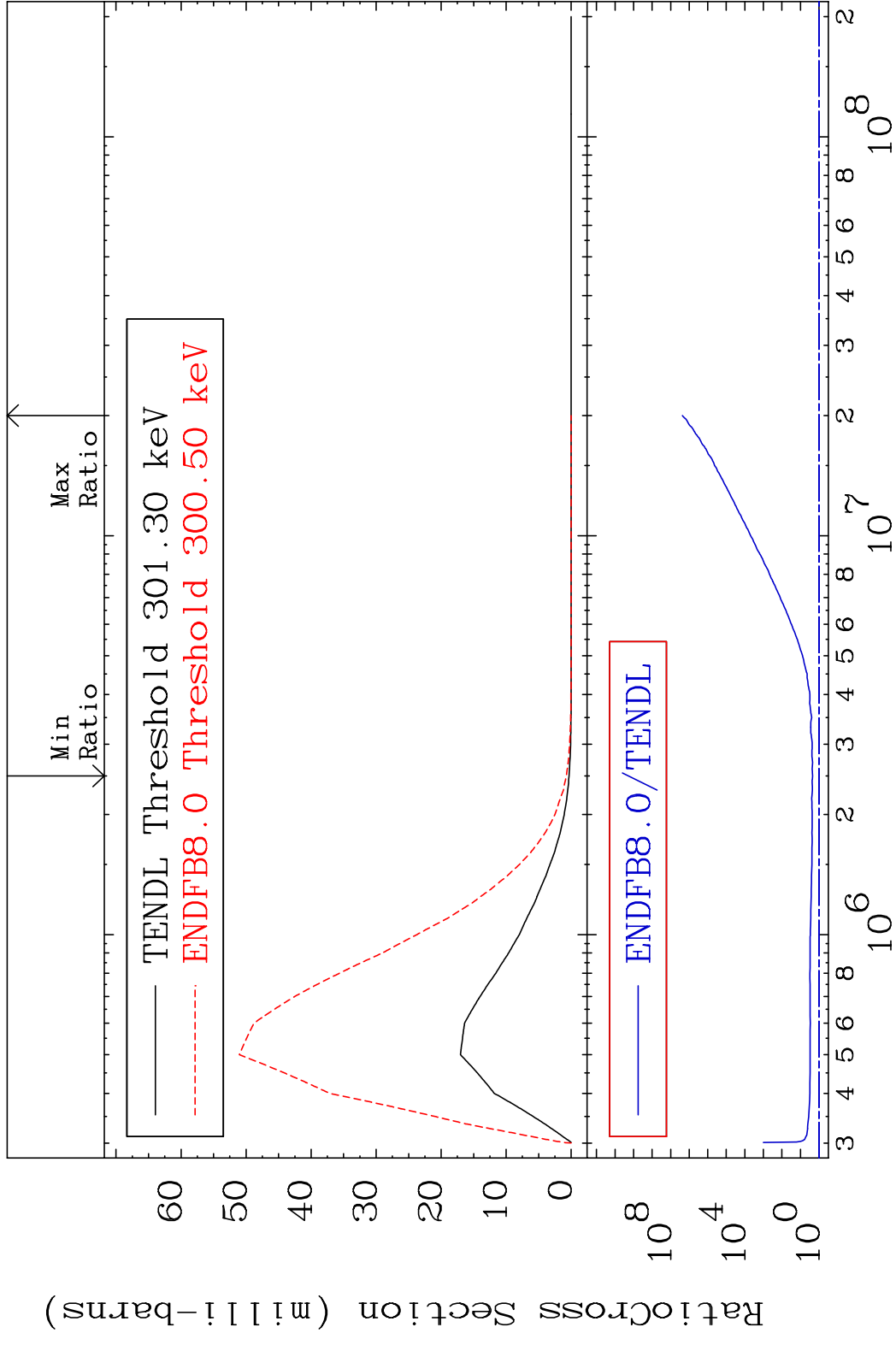
MAT 9349 MT= 73 (n, n') Level 93-Np-238
 Cross Section -100.0 To 9999. %



MAT 9349 MT= 74 (n, n') Level 93-Np-238
 Cross Section 0.000 To 9999. %



MAT 9349 MT= 75 (n, n') Level 93-Np-238
 Cross Section 122.5 To 9999. %



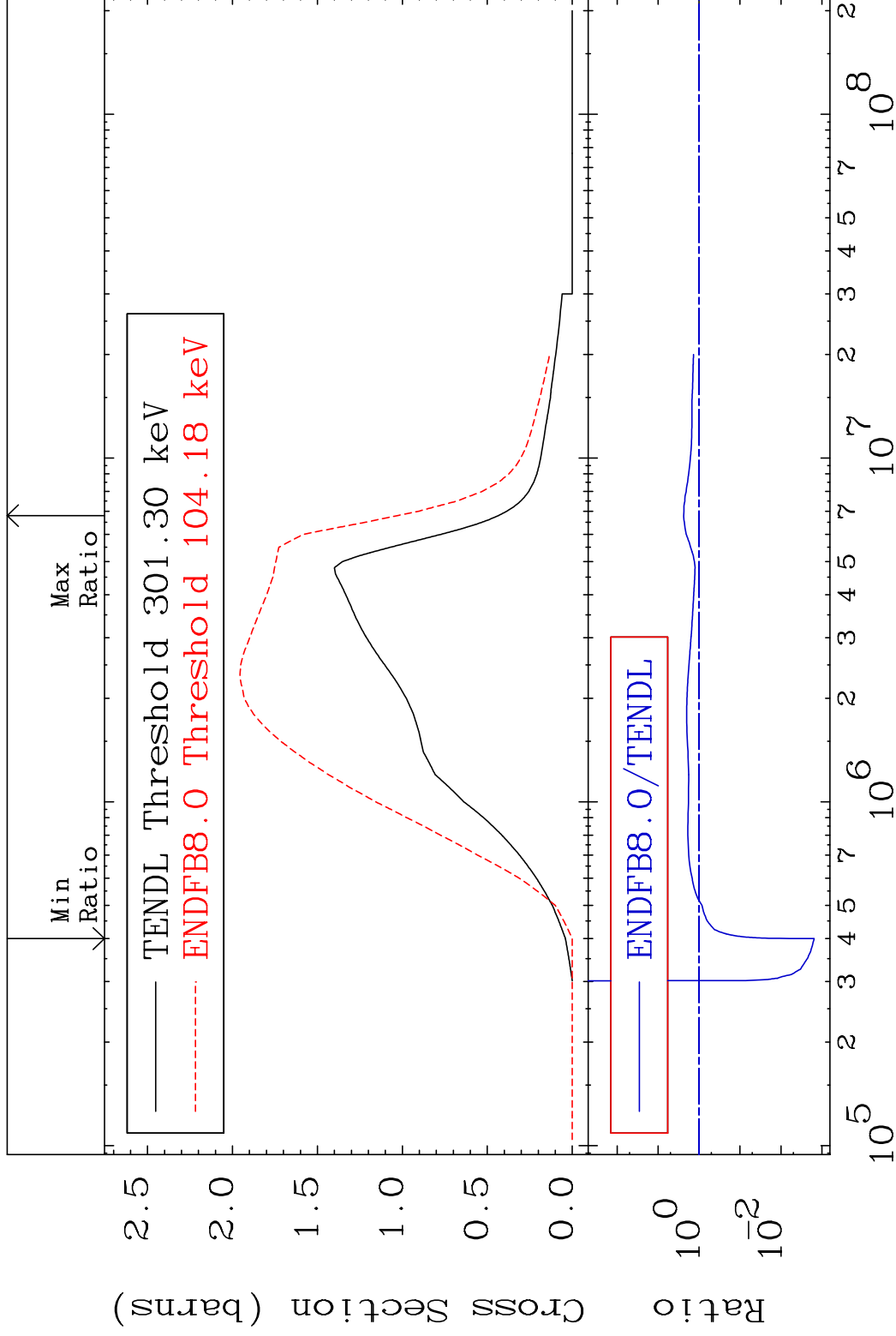
MAT 9349

(n, n') Continuum

93-Np-238

Cross Section

-99.85 To 137.3 %



37

Incident Energy (eV)

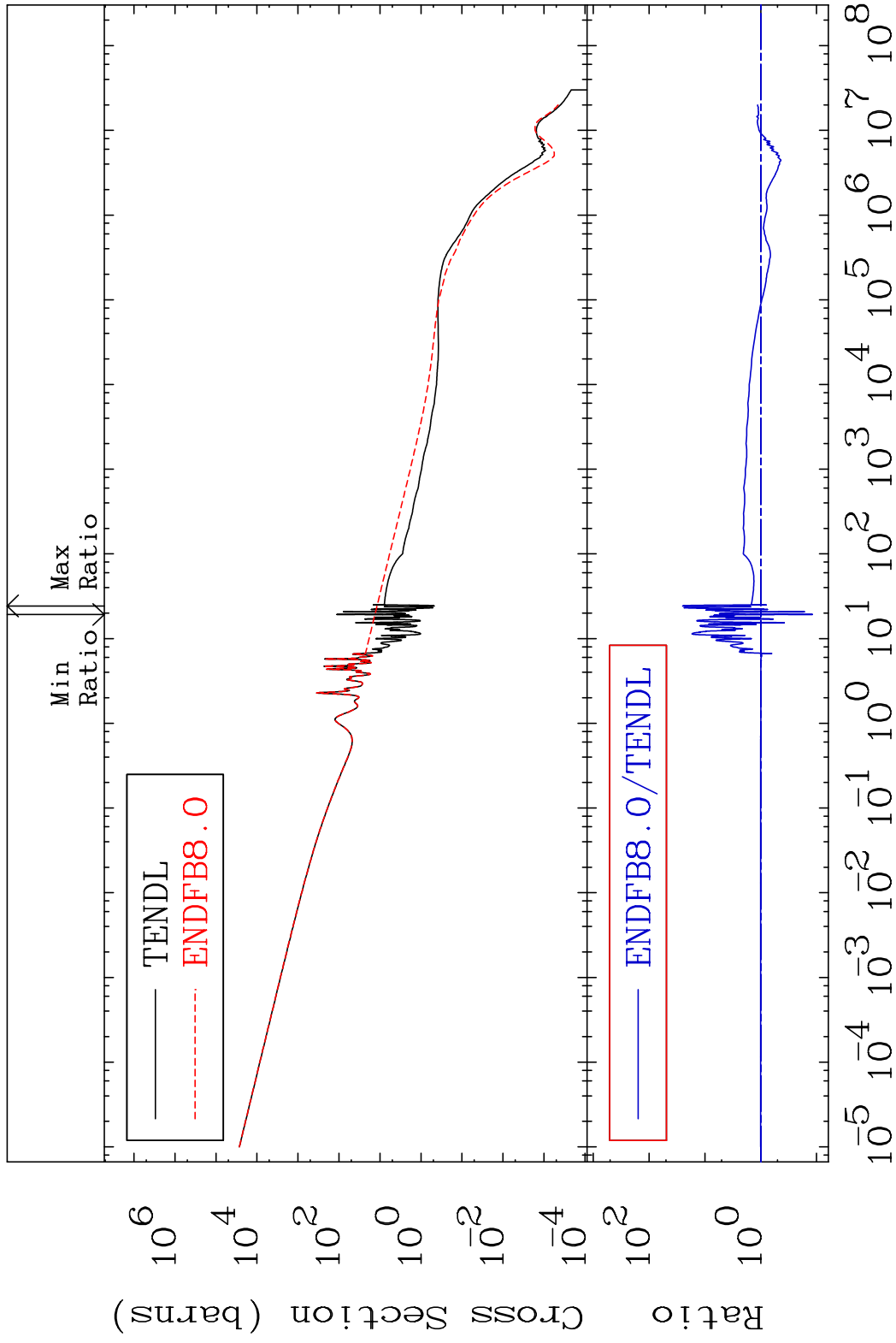
93-Np-238

MAT 9349

(n, γ)

93-Np-238

Cross Section -88.19 To 2436. %



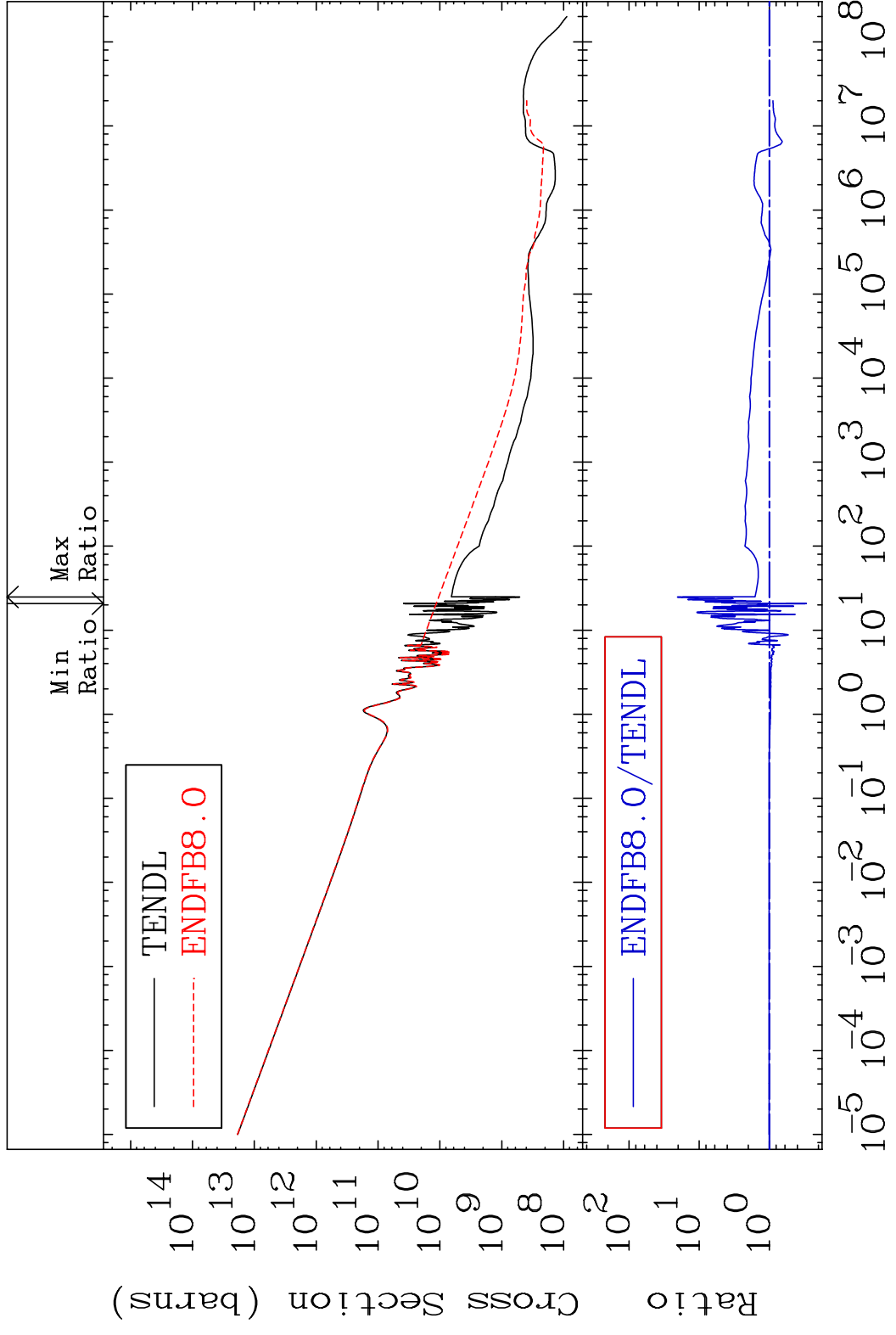
38

Incident Energy (eV)

93-Np-238

MAT 9349

Kerma total (eV-barns) 93-Np-238
Cross Section -70.30 To 1960. %



39

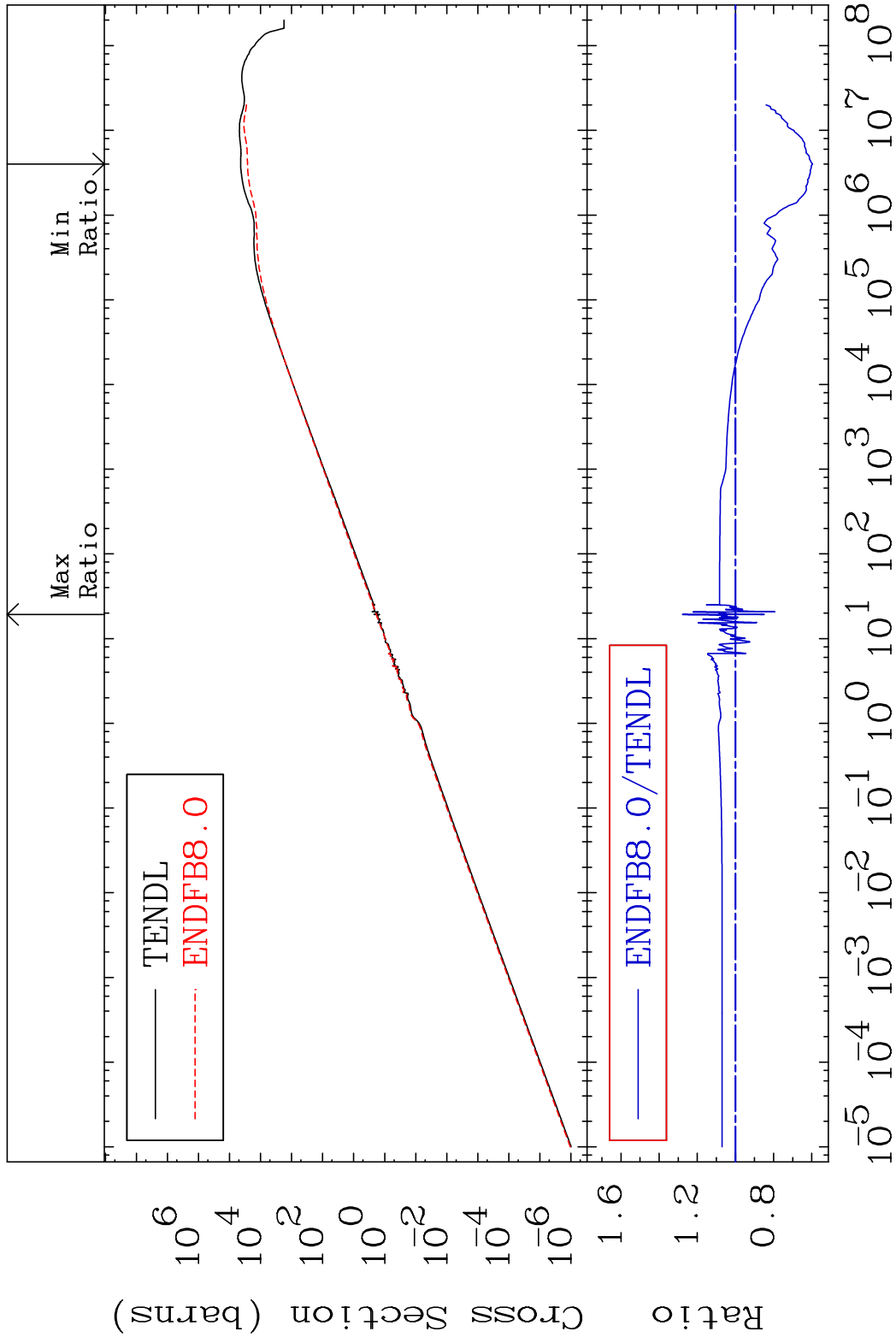
Incident Energy (eV) 93-Np-238

MAT 9349

Kerma elastic

93-Np-238

Cross Section -40.40 To 27.84 %

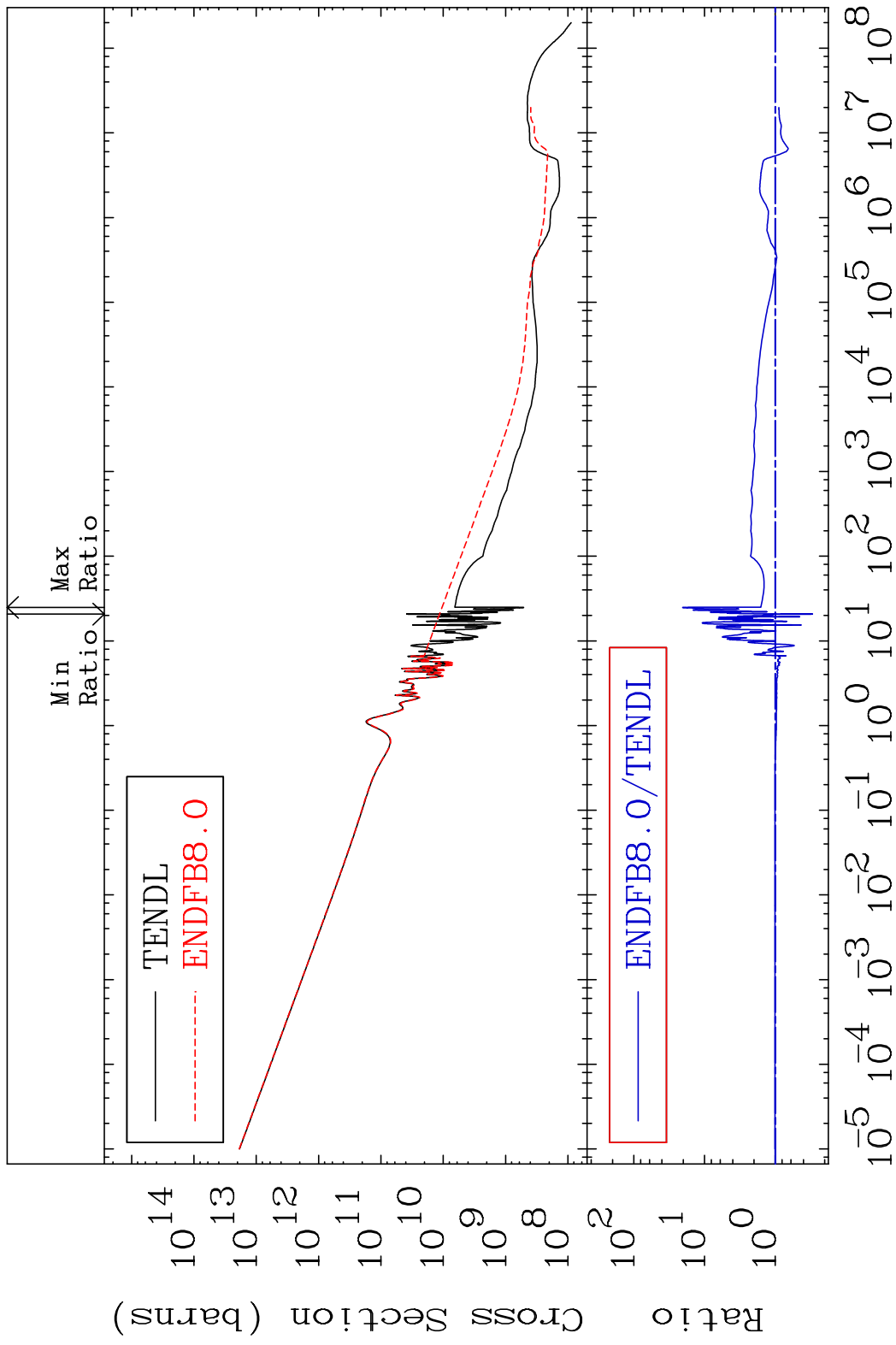


40

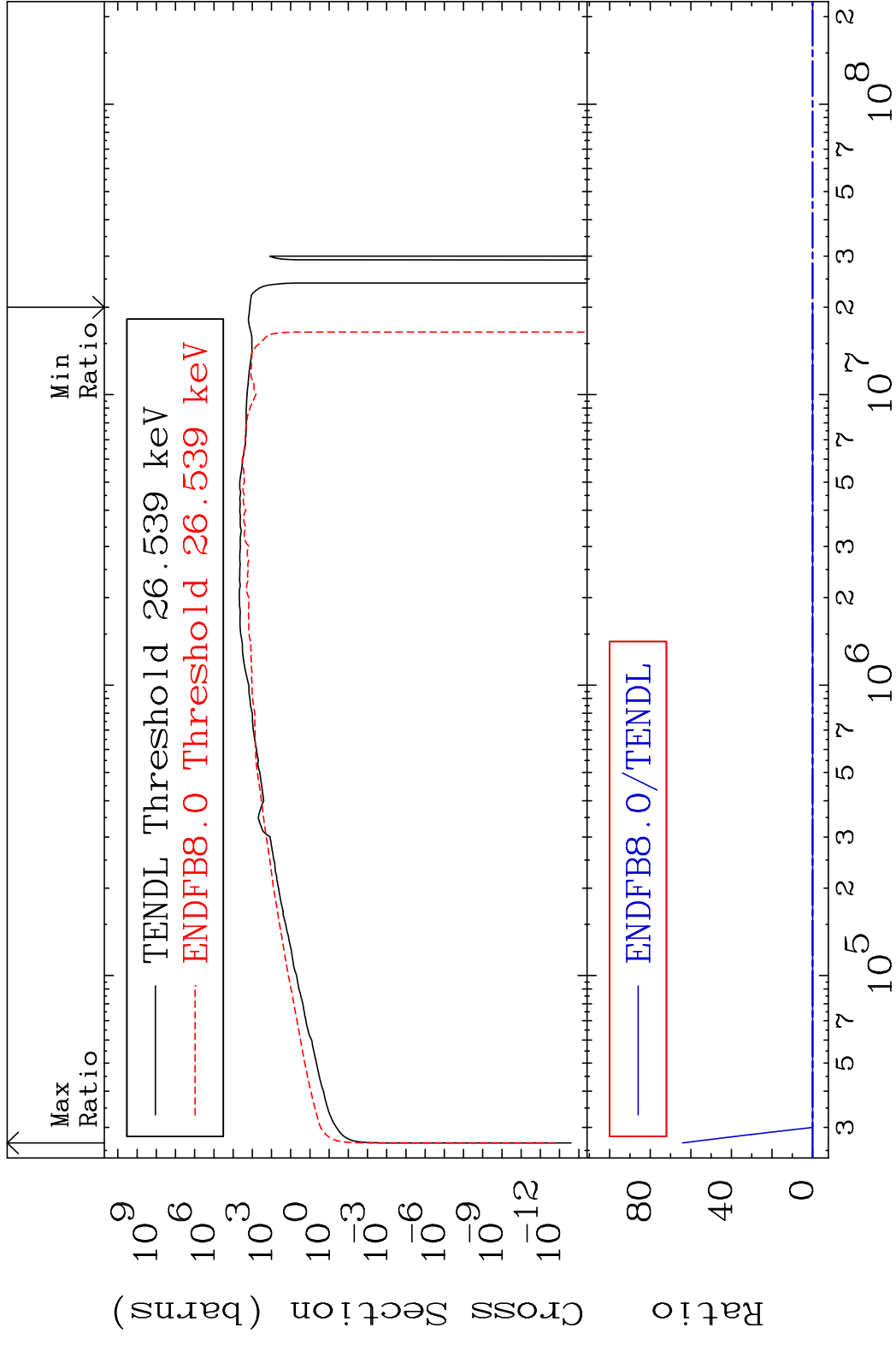
Incident Energy (eV)

93-Np-238

MAT 9349 Kerma non-elastic (all but mt2) 93-Np-238
 Cross Section -70.30 To 1960. %

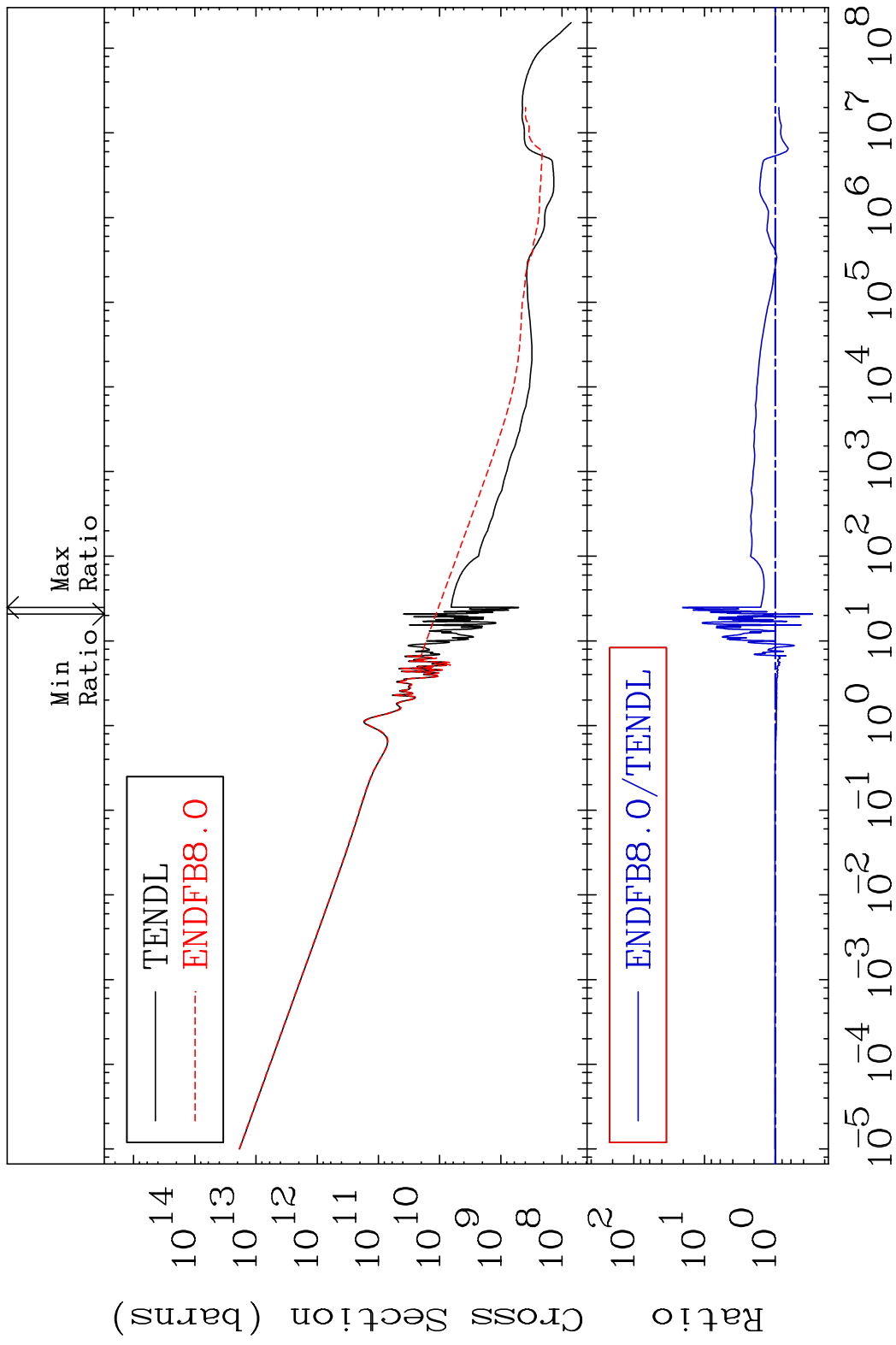


MAT 9349 Kerma inelastic (mt51-91) 93-Np-238
 Cross Section -116.6 To 9999. %



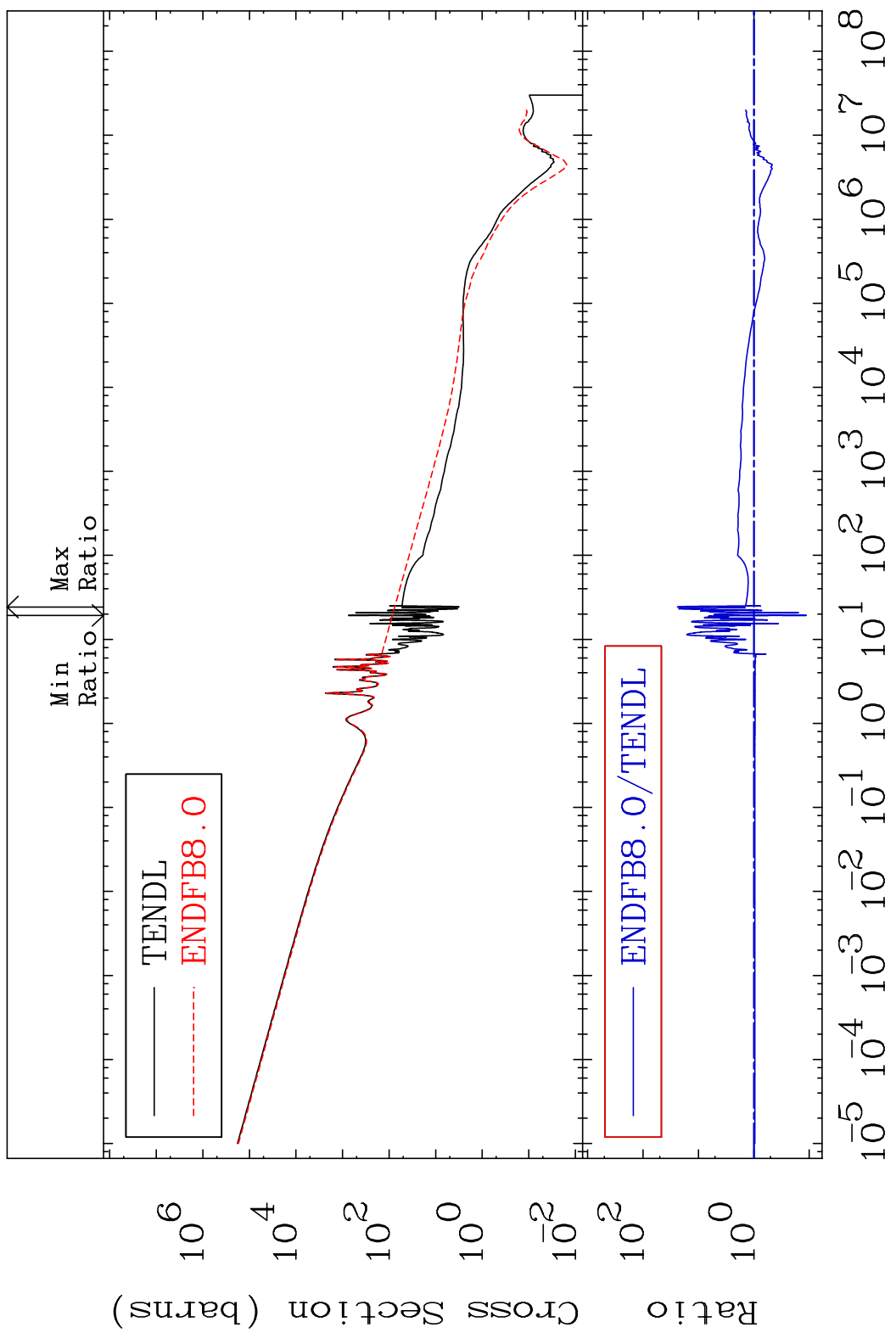
42 Incident Energy (eV) 93-Np-238

MAT 9349 Kerma fission (mt18 or mt19-20-21-38) 93-Np-238
 Cross Section -70.30 To 1960. %

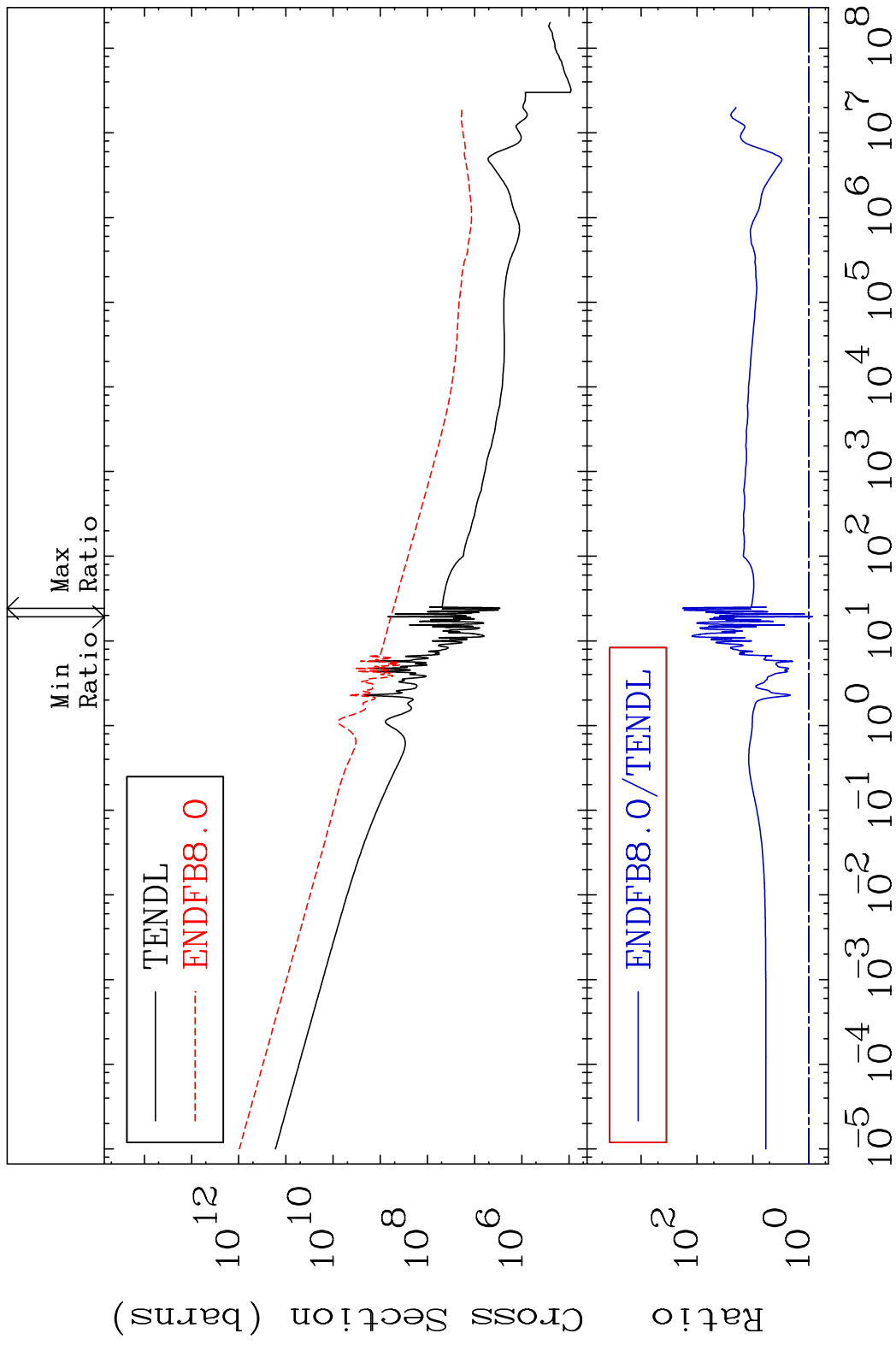


MAT 9349

Kerma capture (mt102) 93-Np-238
Cross Section -88.73 To 2319. %

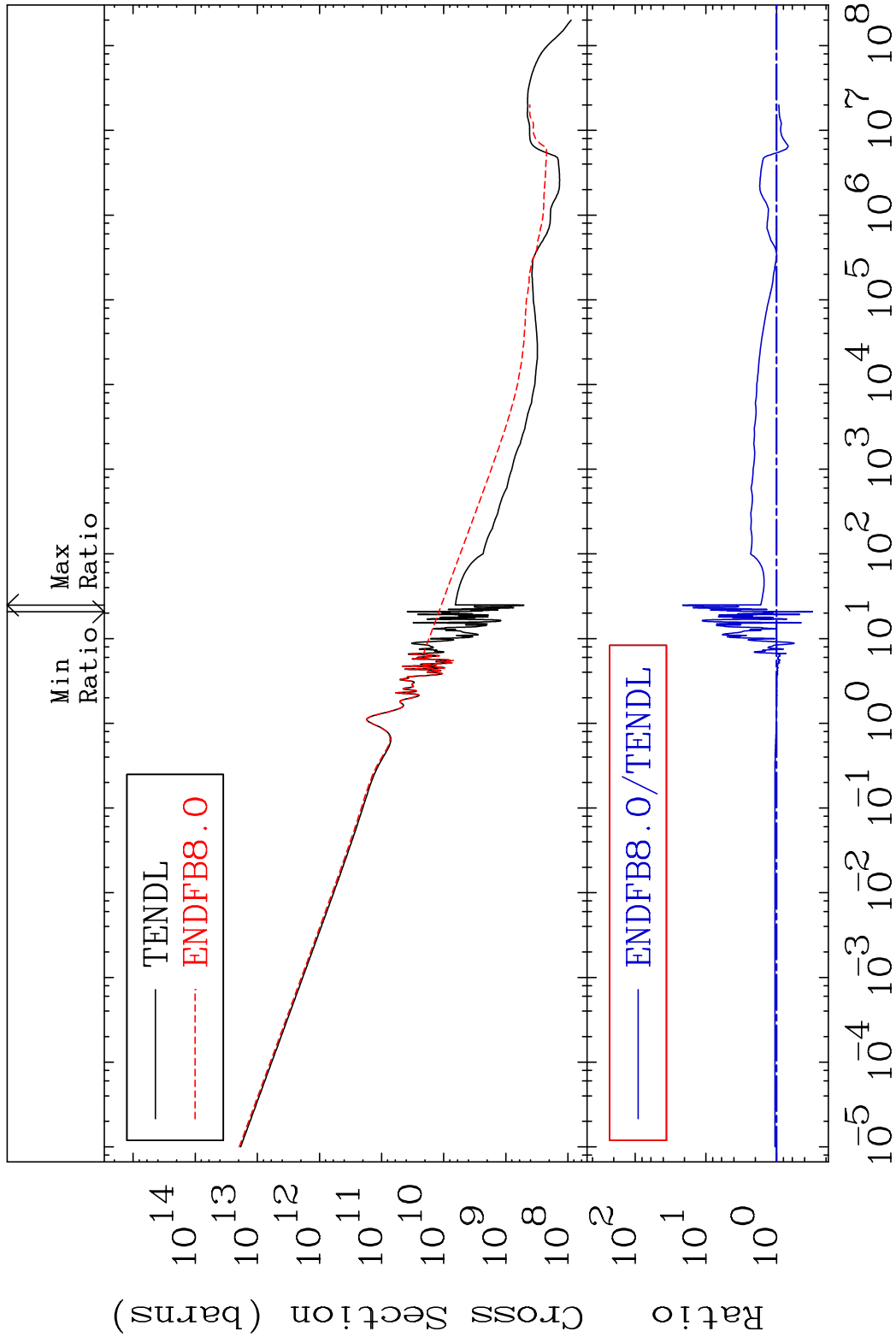


MAT 9349 Total photon (eV-barns) 93-Np-238
Cross Section -14.91 To 9999. %



45 Incident Energy (eV) 93-Np-238

MAT 9349 Total kinematic kerma (high limit) 93-Np-238
 Cross Section -69.02 To 2048. %

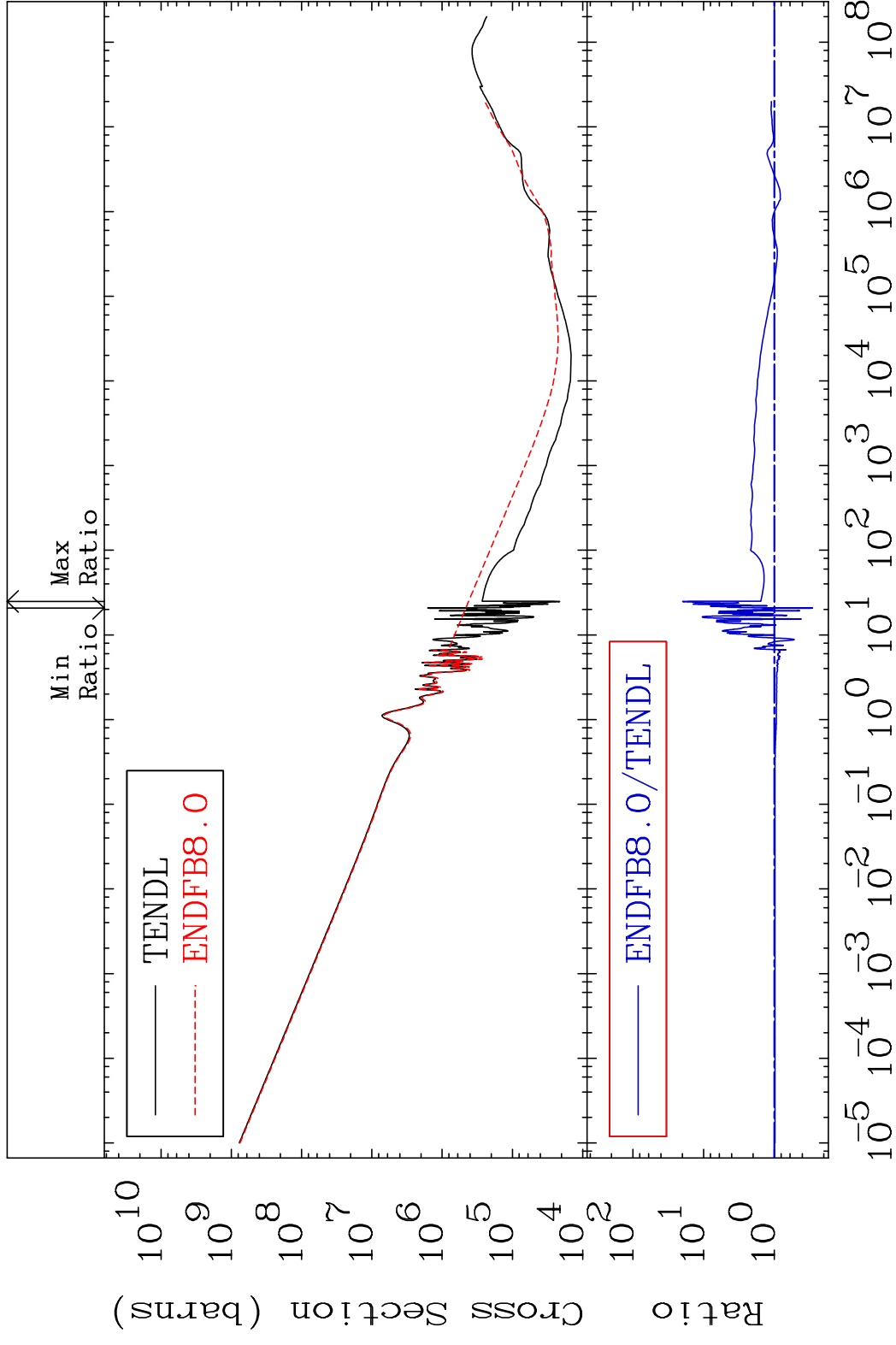


MAT 9349

Dpa total (eV-barns)

93-Np-238

Cross Section -71.21 To 1896. %

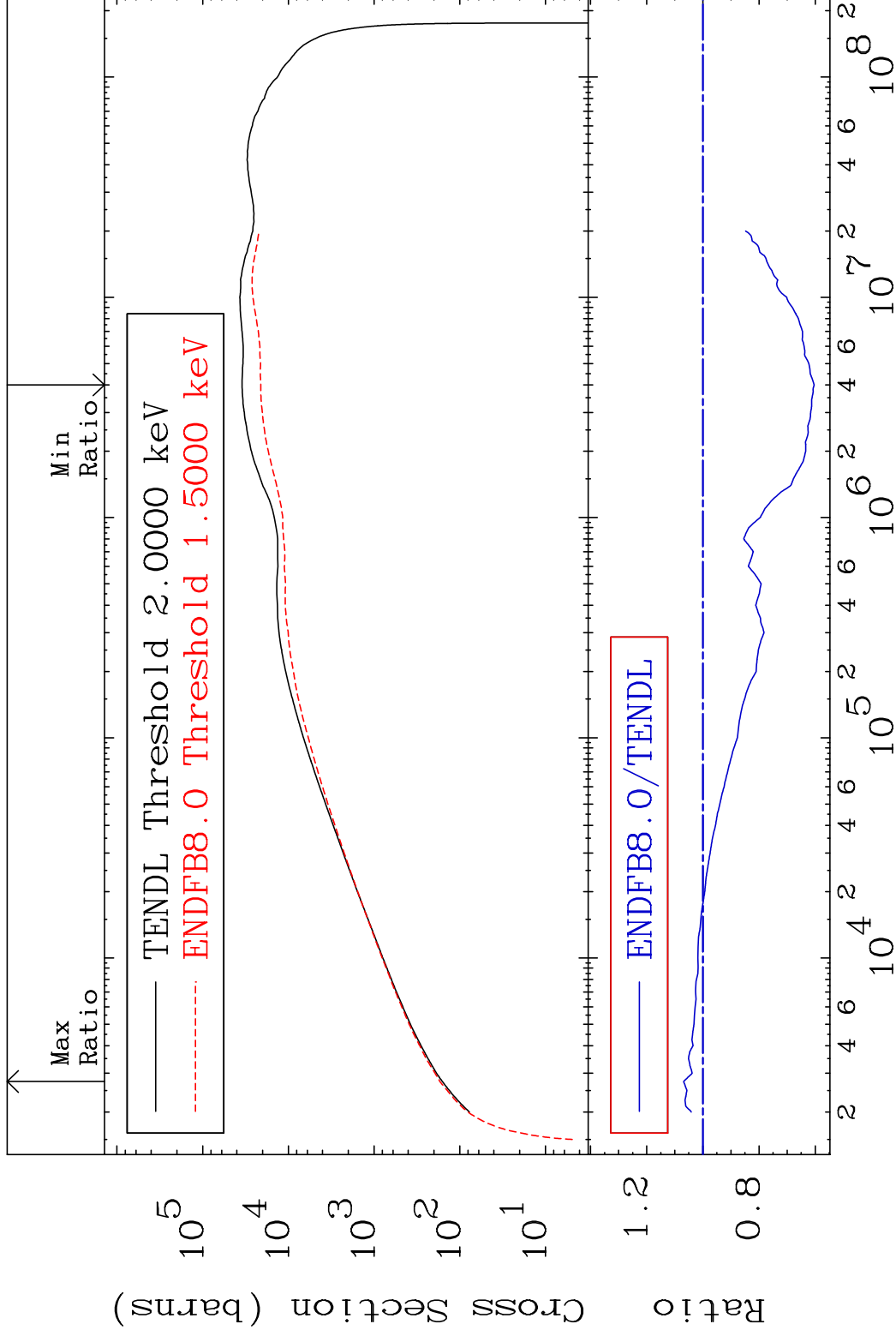


MAT 9349

Dpa elastic (mt2)

93-Np-238

Cross Section -39.61 To 6.839 %

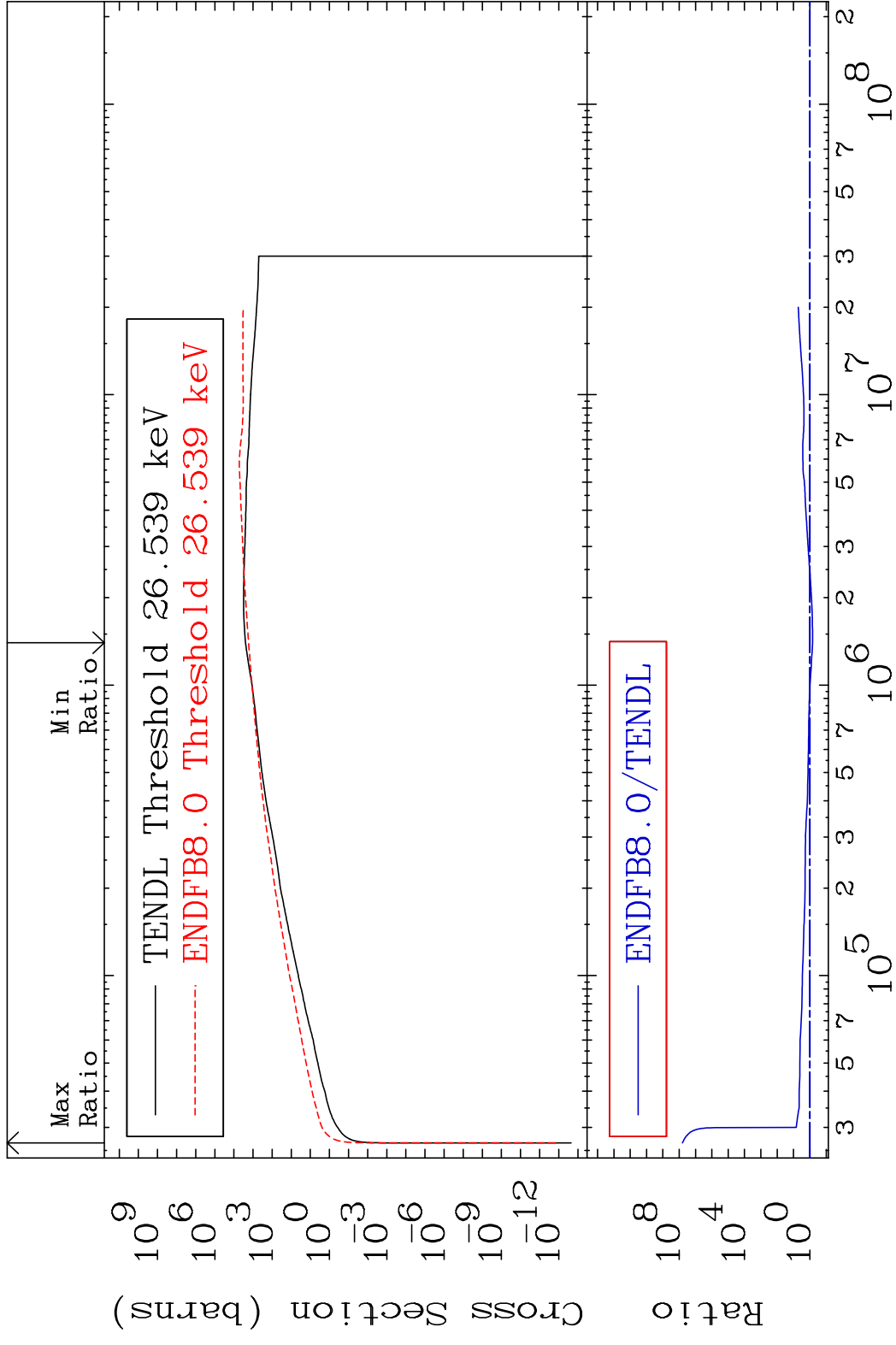


48

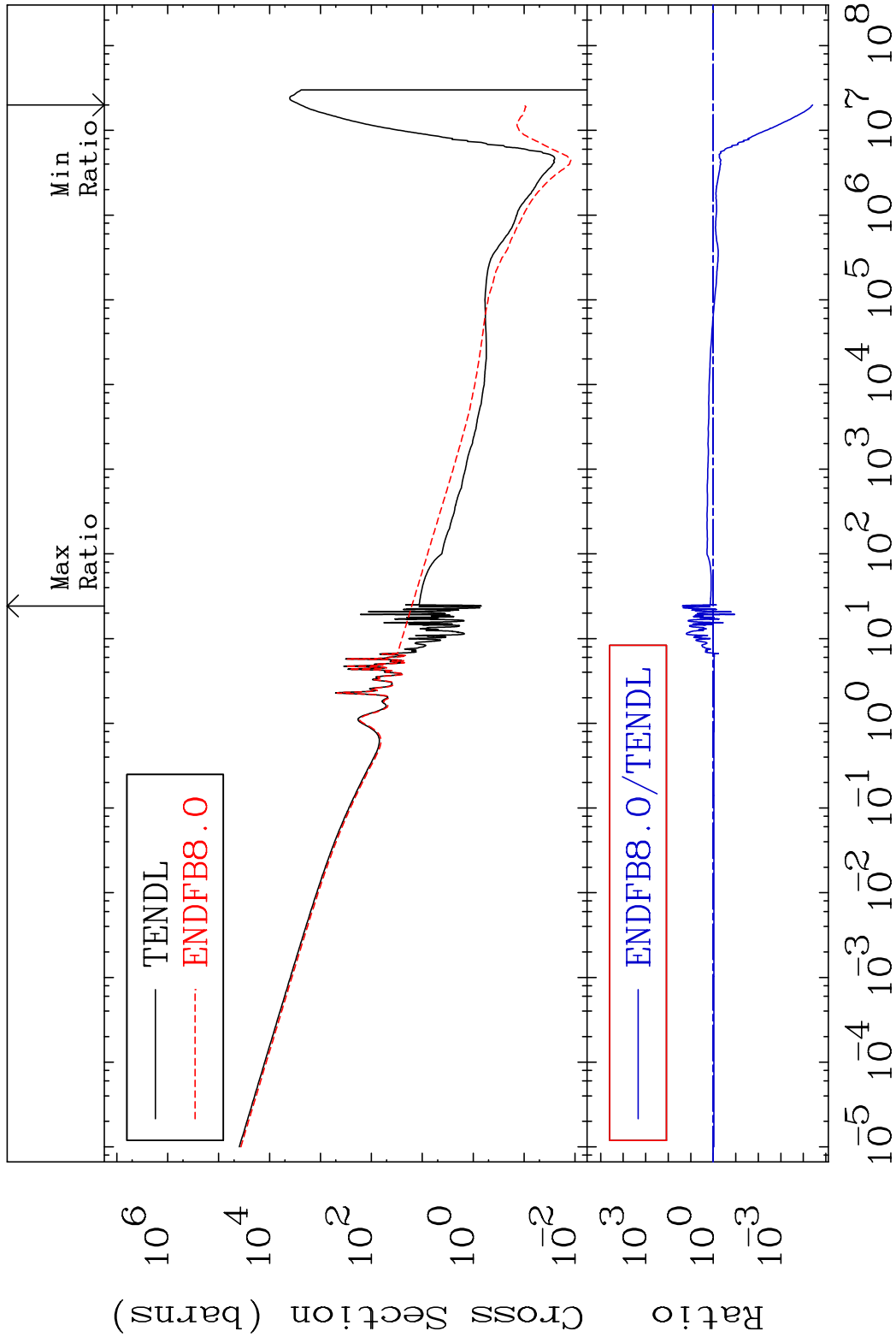
Incident Energy (eV)

93-Np-238

MAT 9349 Dpa inelastic (mt51-91) 93-Np-238
 Cross Section -31.74 To 9999. %



MAT 9349 Dpa disappearance (mt102 -120) 93-Np-238
 Cross Section -100.0 To 2256. %



50 Incident Energy (eV) 93-Np-238