

Program Complot
(Version 2021-1)

by

Dermott E. Cullen
(Present Contact Information)

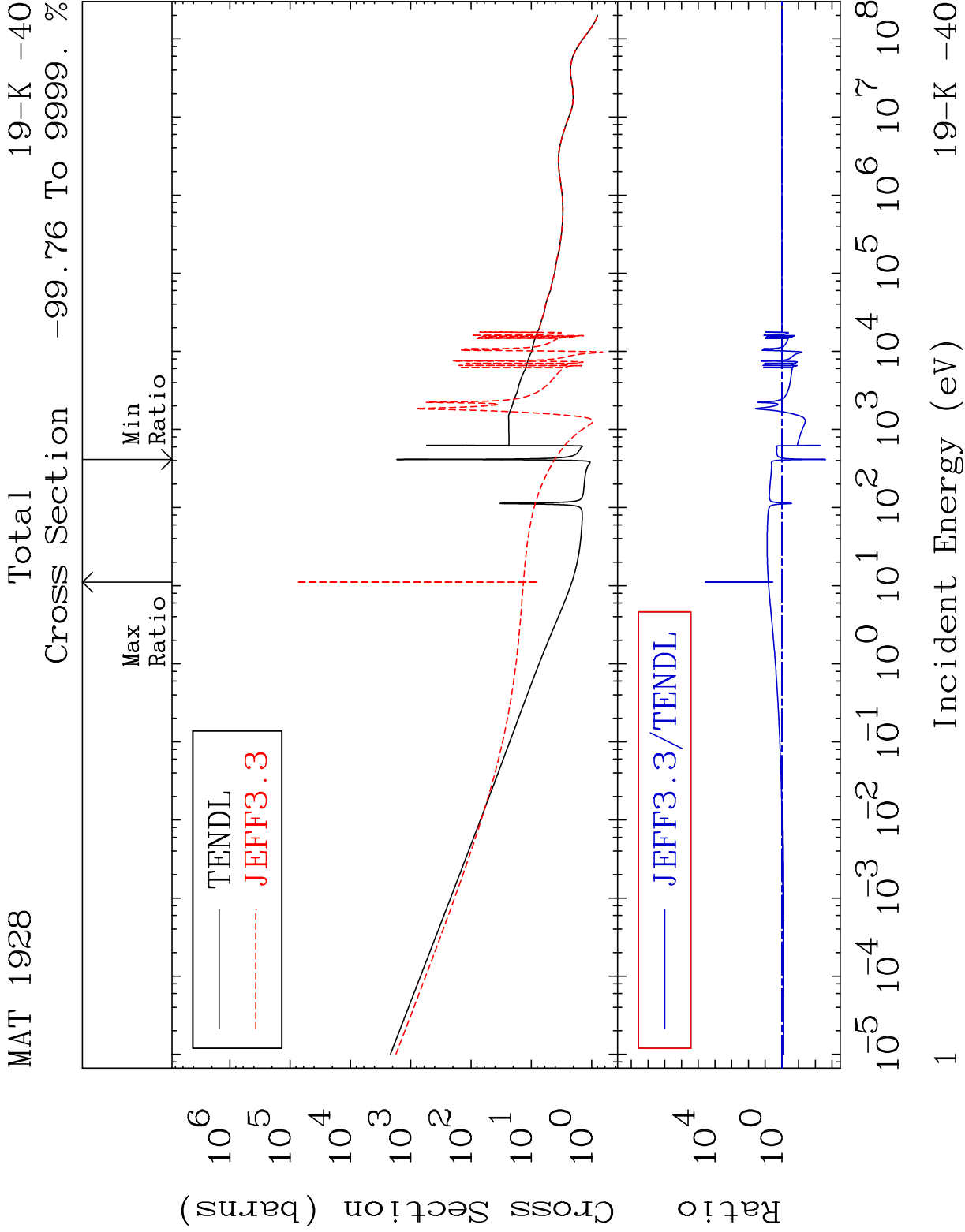
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1466 Hudson Way
Livermore, CA 94550

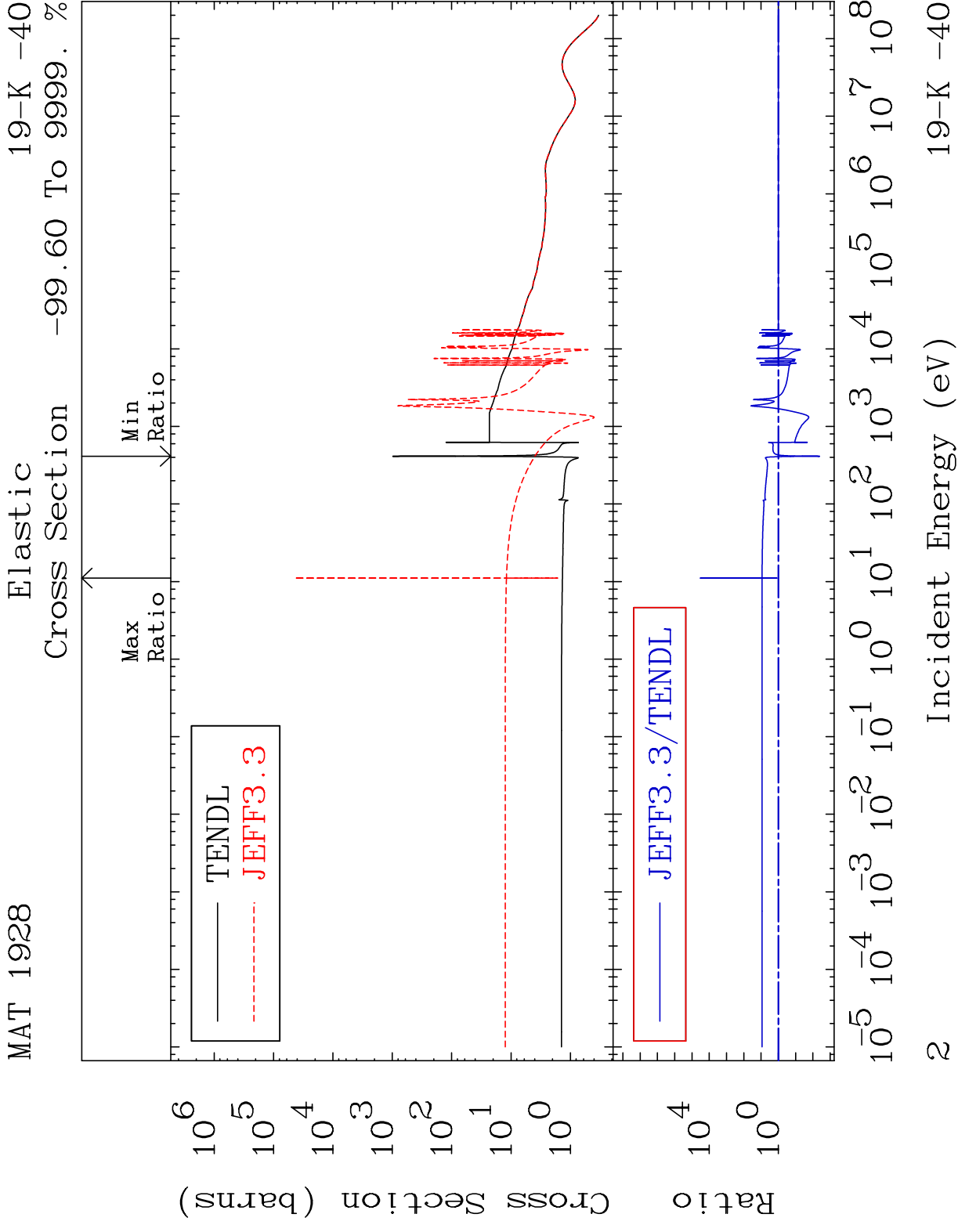
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Press Mouse Button to Start



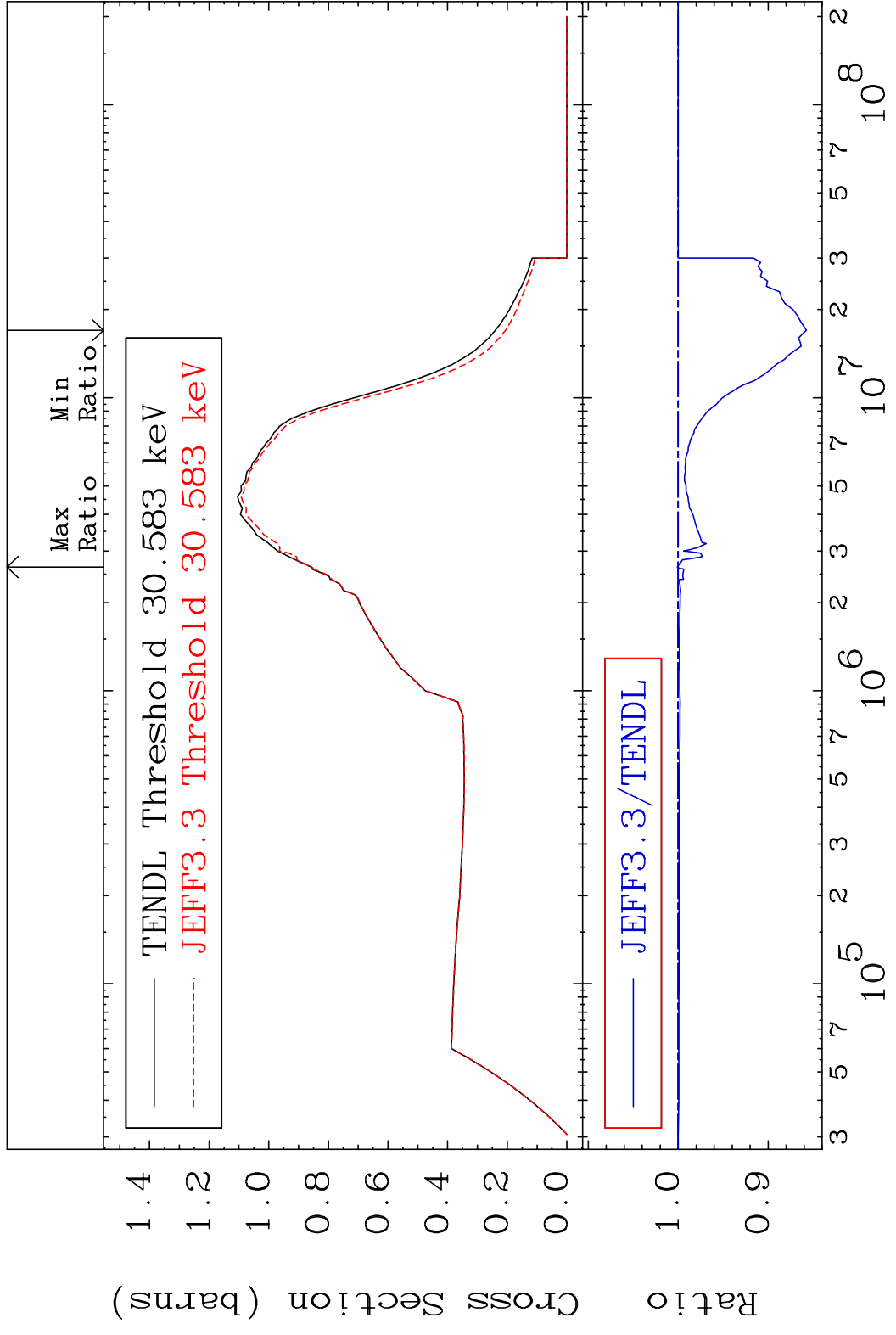


MAT 1928

Inelastic

19-K -40

Cross Section -14.26 To 0.107 %

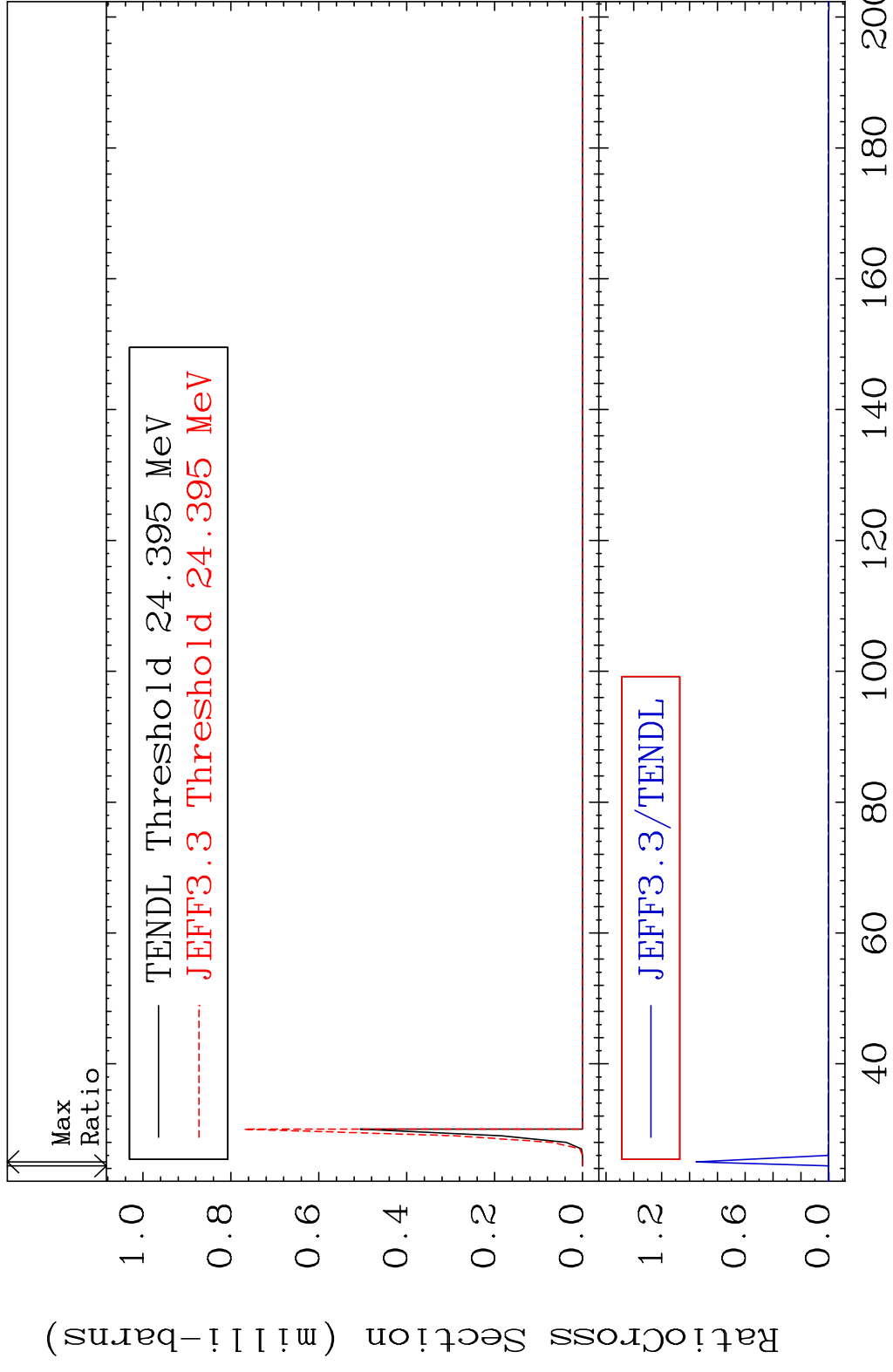


3

Incident Energy (eV)

19-K -40

MAT 1928 (n,2n) d 19-K -40
 Cross Section -100.0 To 9999. %



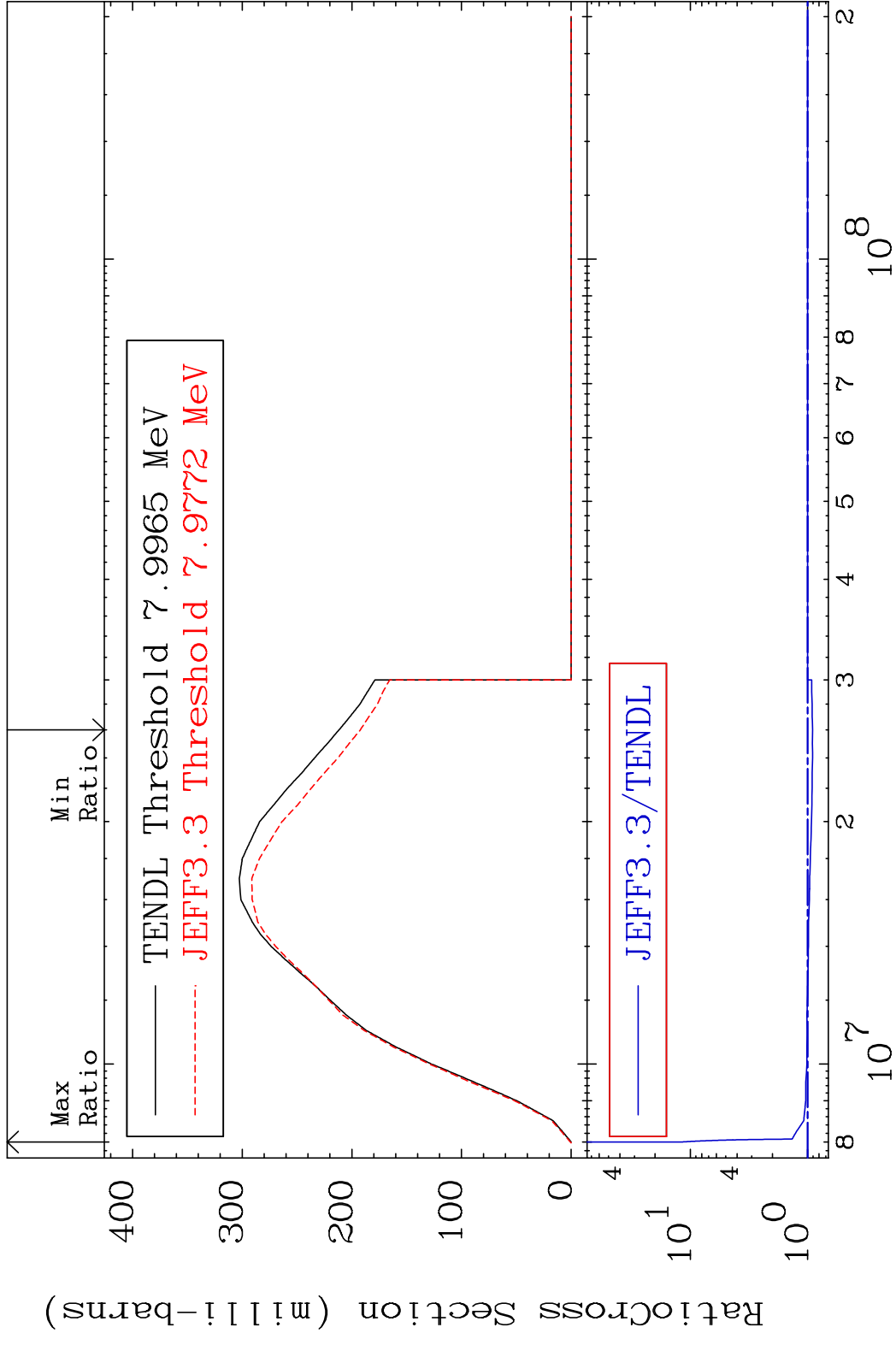
4 Incident Energy (MeV) 19-K -40

MAT 1928

(n,2n)

19-K -40

Cross Section -9.154 To 1071. %



5

Incident Energy (eV)

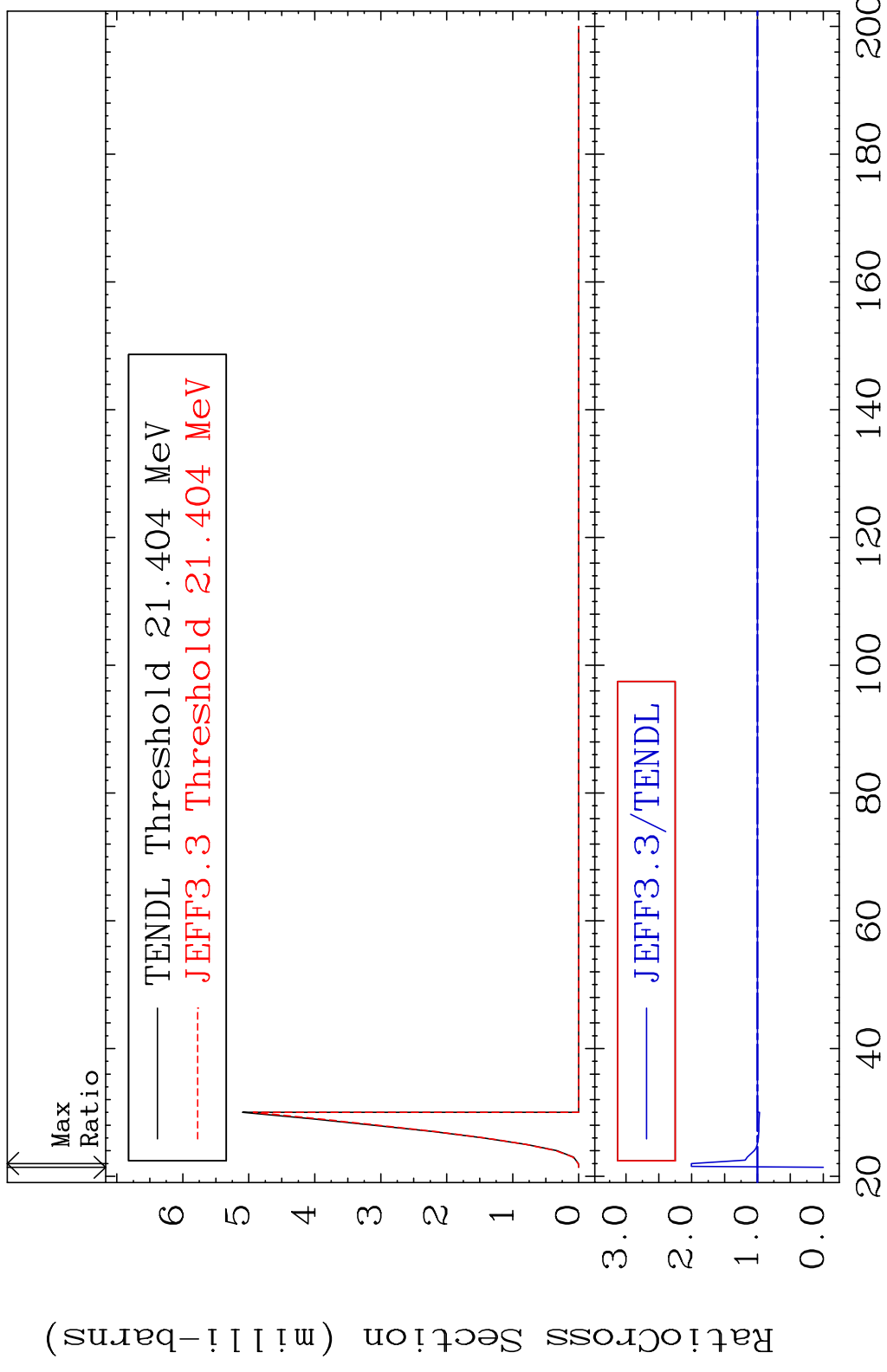
19-K -40

MAT 1928

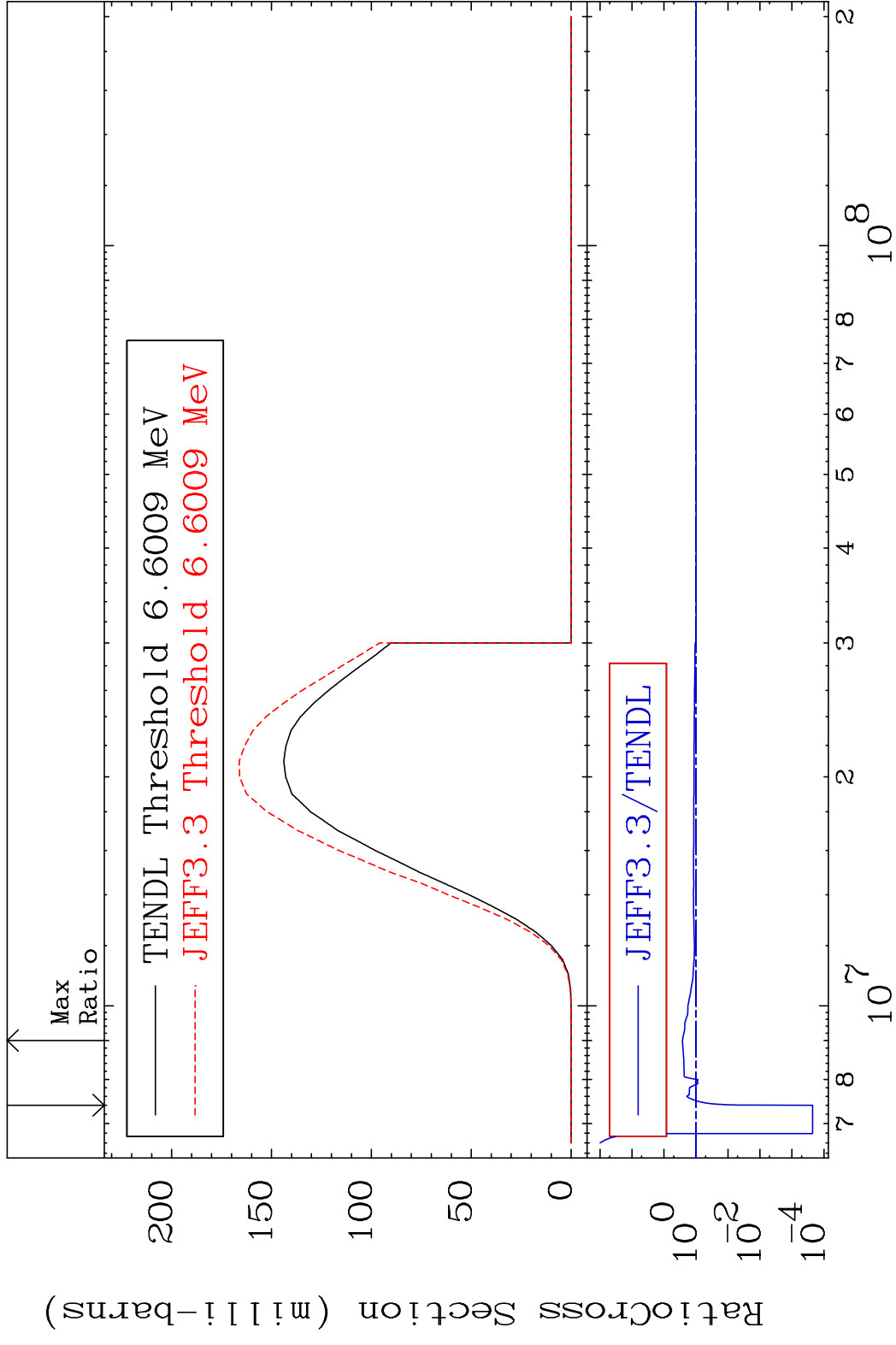
(n,3n)

19-K -40

Cross Section -100.0 To 100.6 %

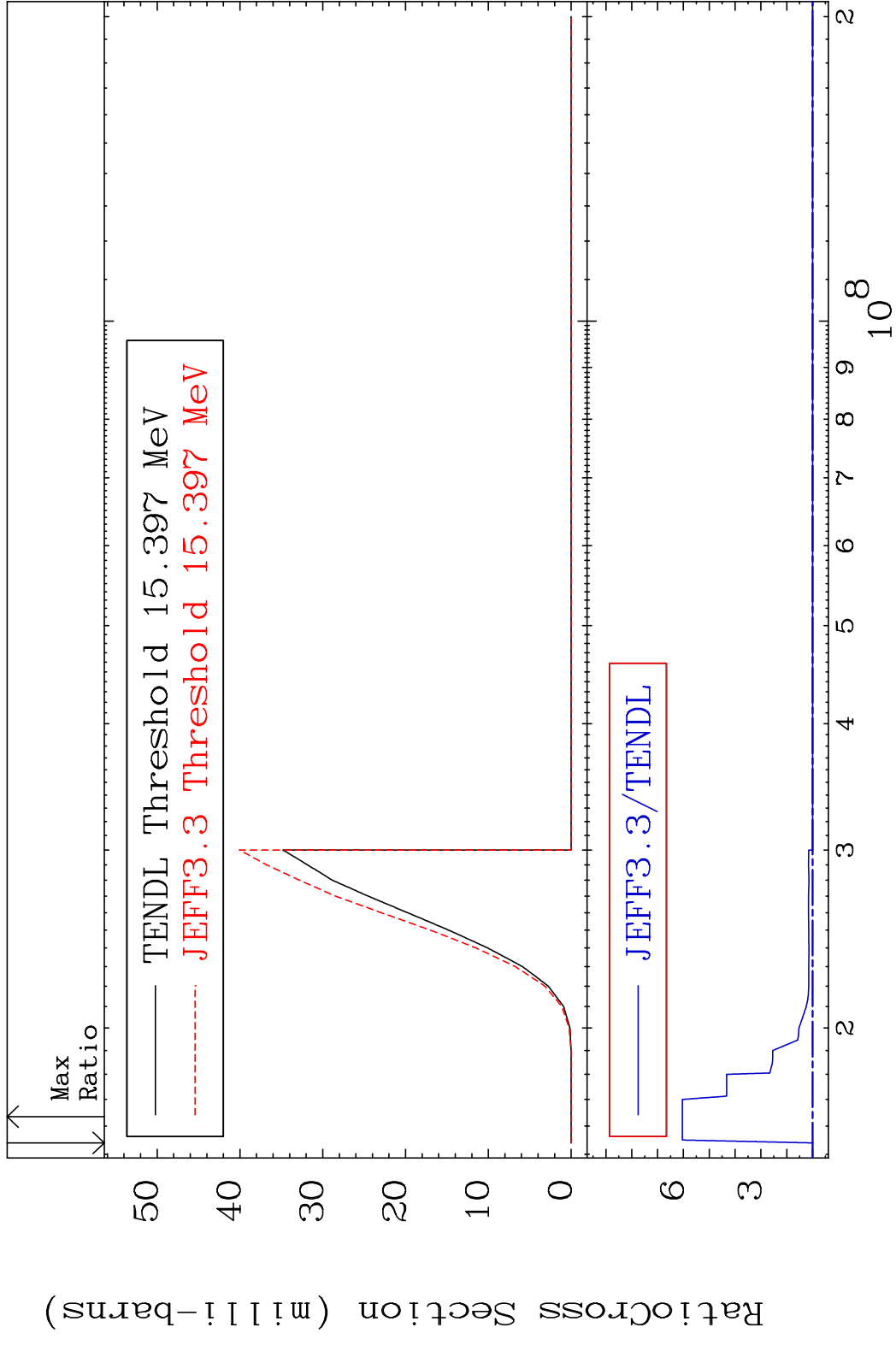


MAT 1928 (n, n') α 19-K -40
 Cross Section -99.98 To 167.2 %

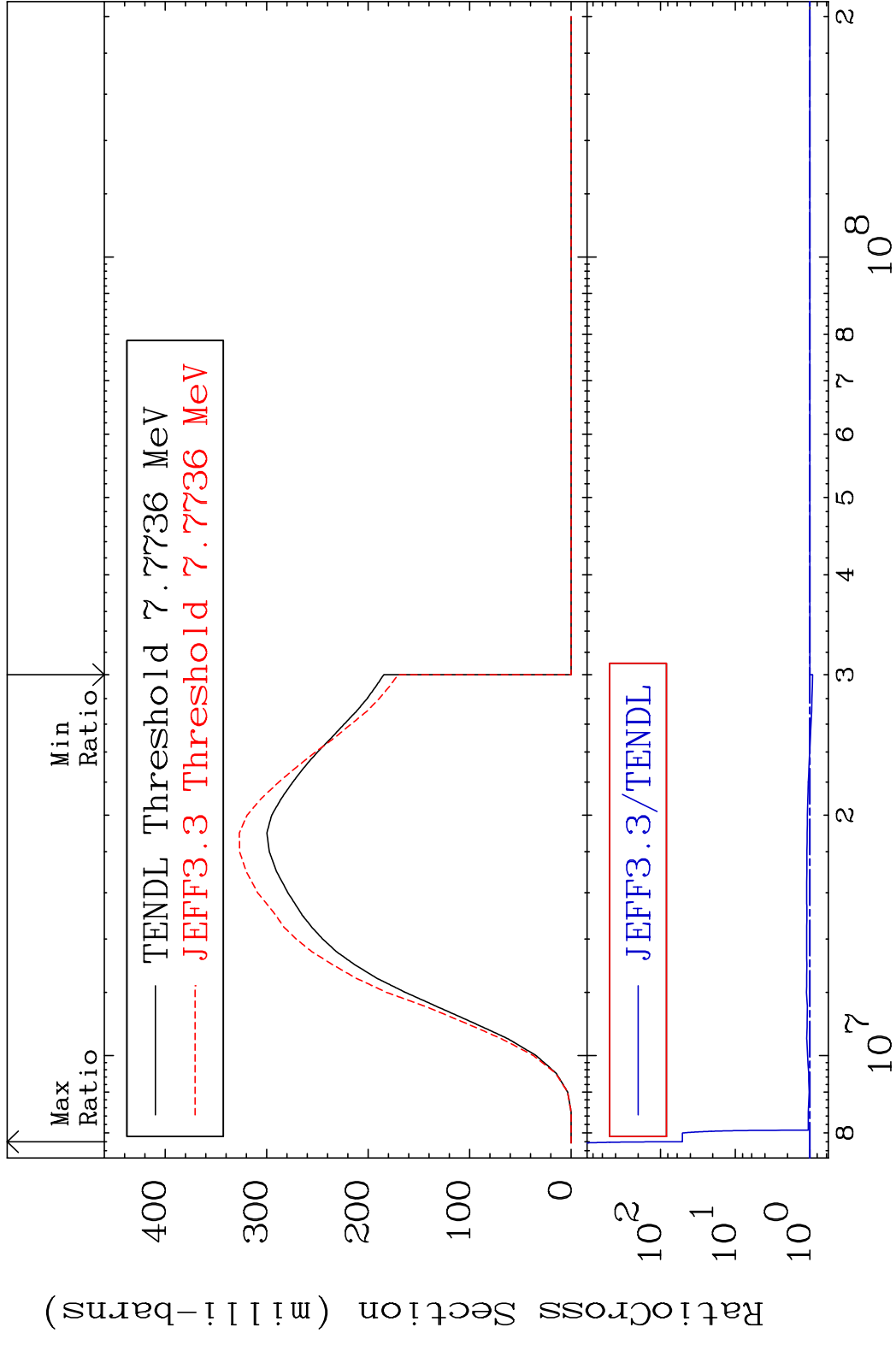


7 7 8 10⁷ 10⁸ 19-K -40

MAT 1928 (n,2n) α 19-K -40
 Cross Section 0.000 To 504.1 %

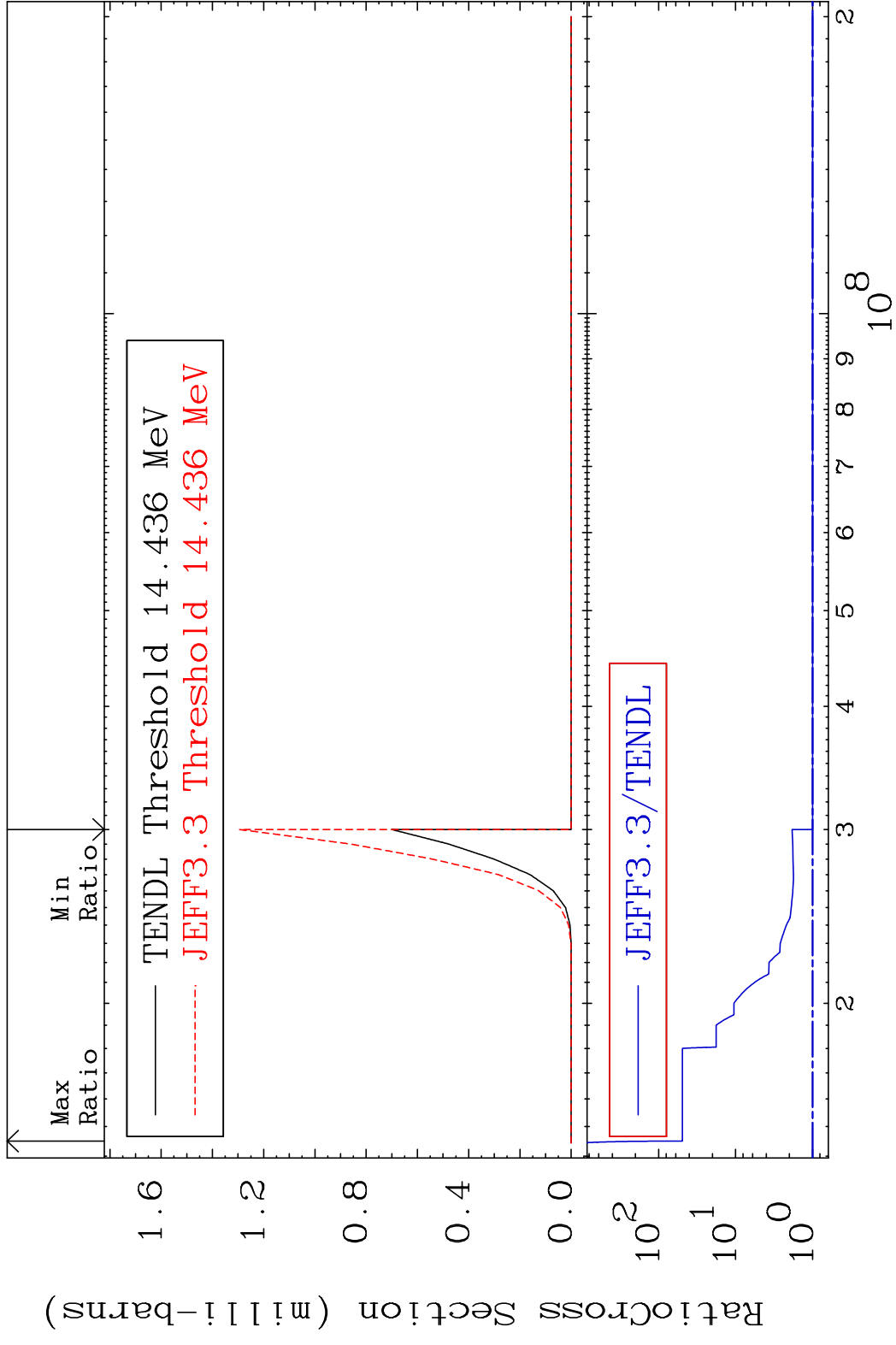


MAT 1928 (n, n') p 19-K -40
 Cross Section -7.673 To 5004. %



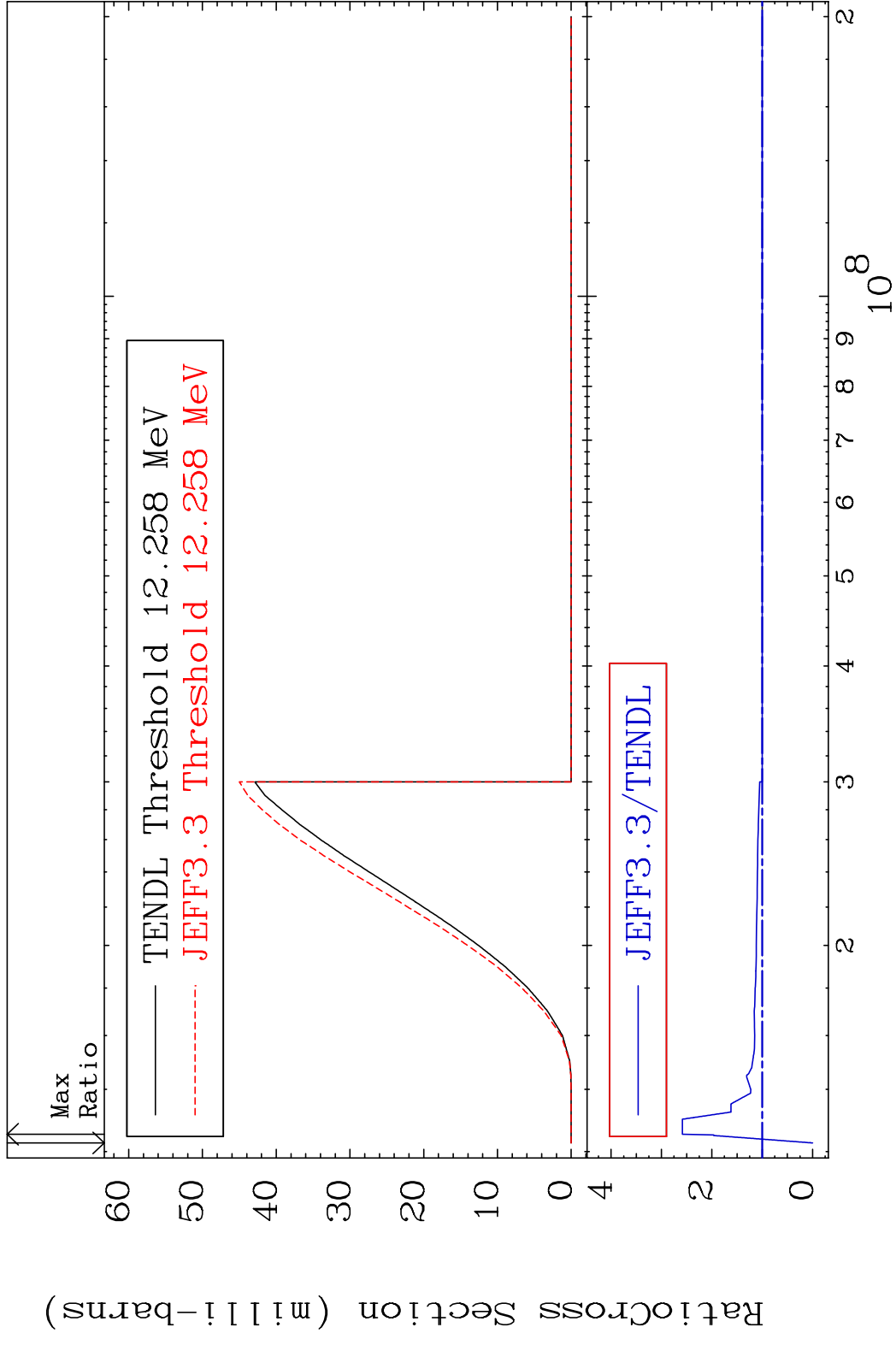
9 9 Incident Energy (eV) 19-K -40

MAT 1928 (n, n') 2α 19-K -40
 Cross Section 0.000 To 4818. %

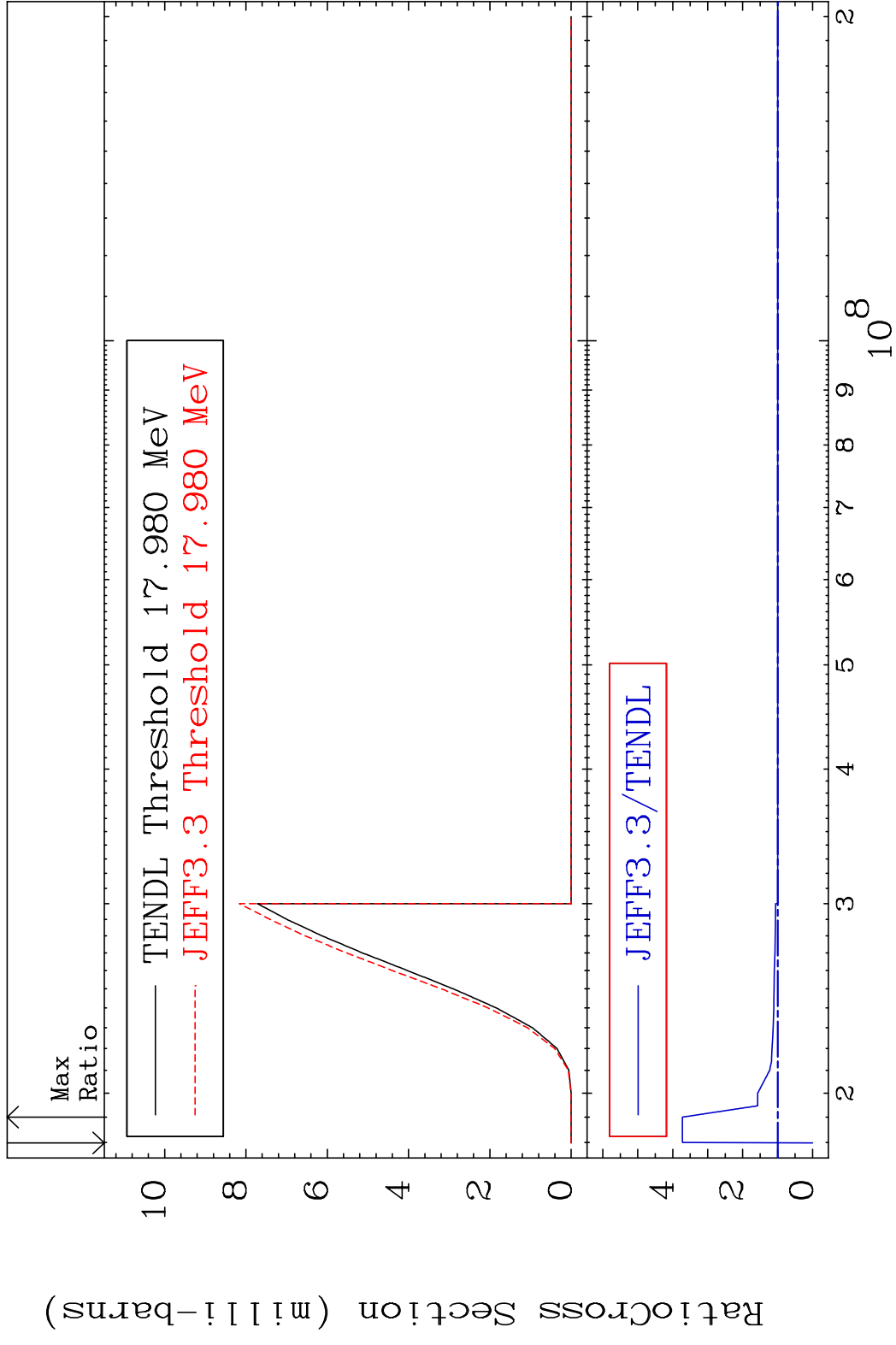


10 Incident Energy (eV) 19-K -40

MAT 1928 (n, n') d 19-K -40
 Cross Section -100.0 To 158.5 %

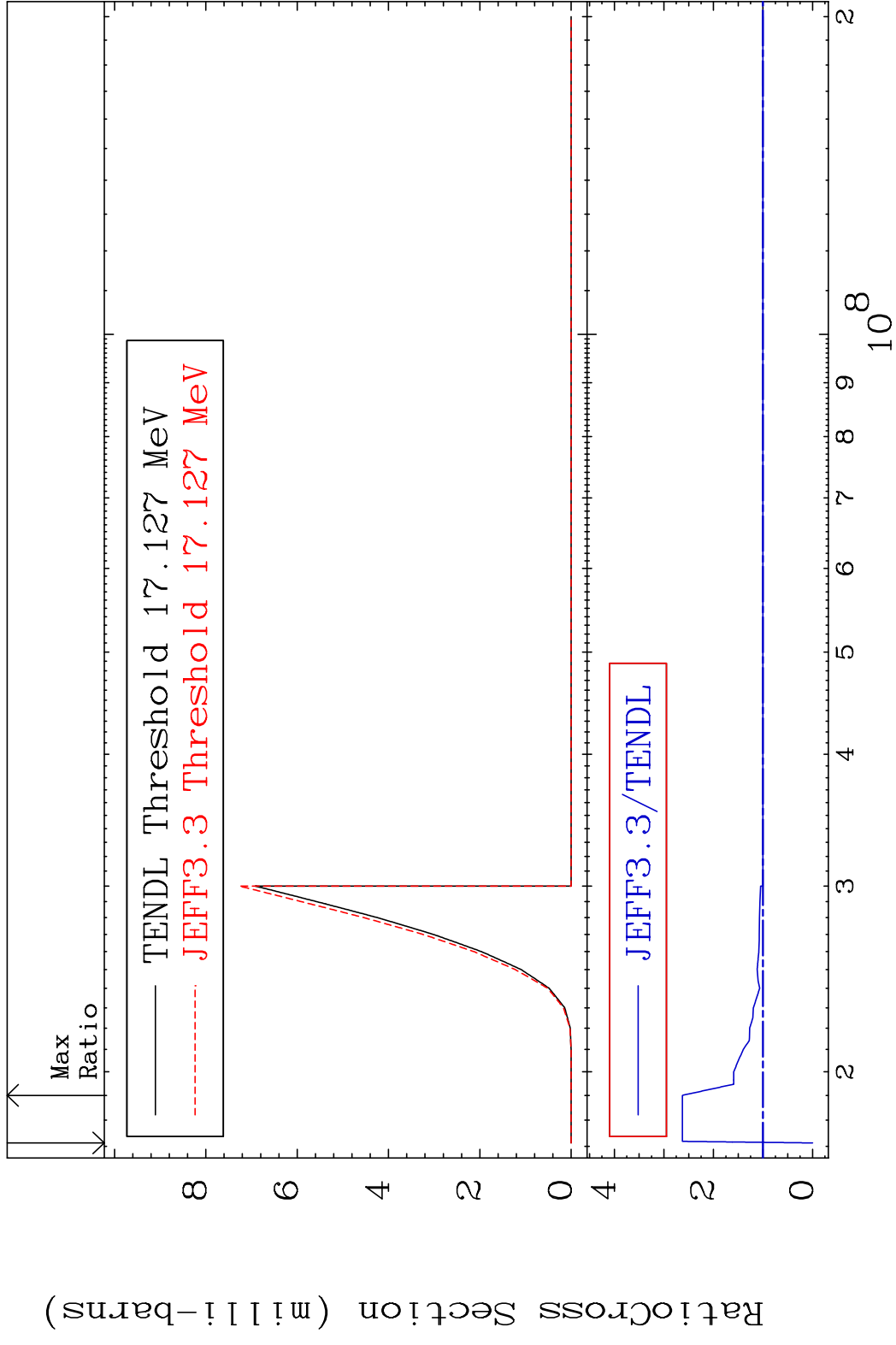


MAT 1928 (n, n') t 19-K -40
 Cross Section -100.0 To 272.5 %

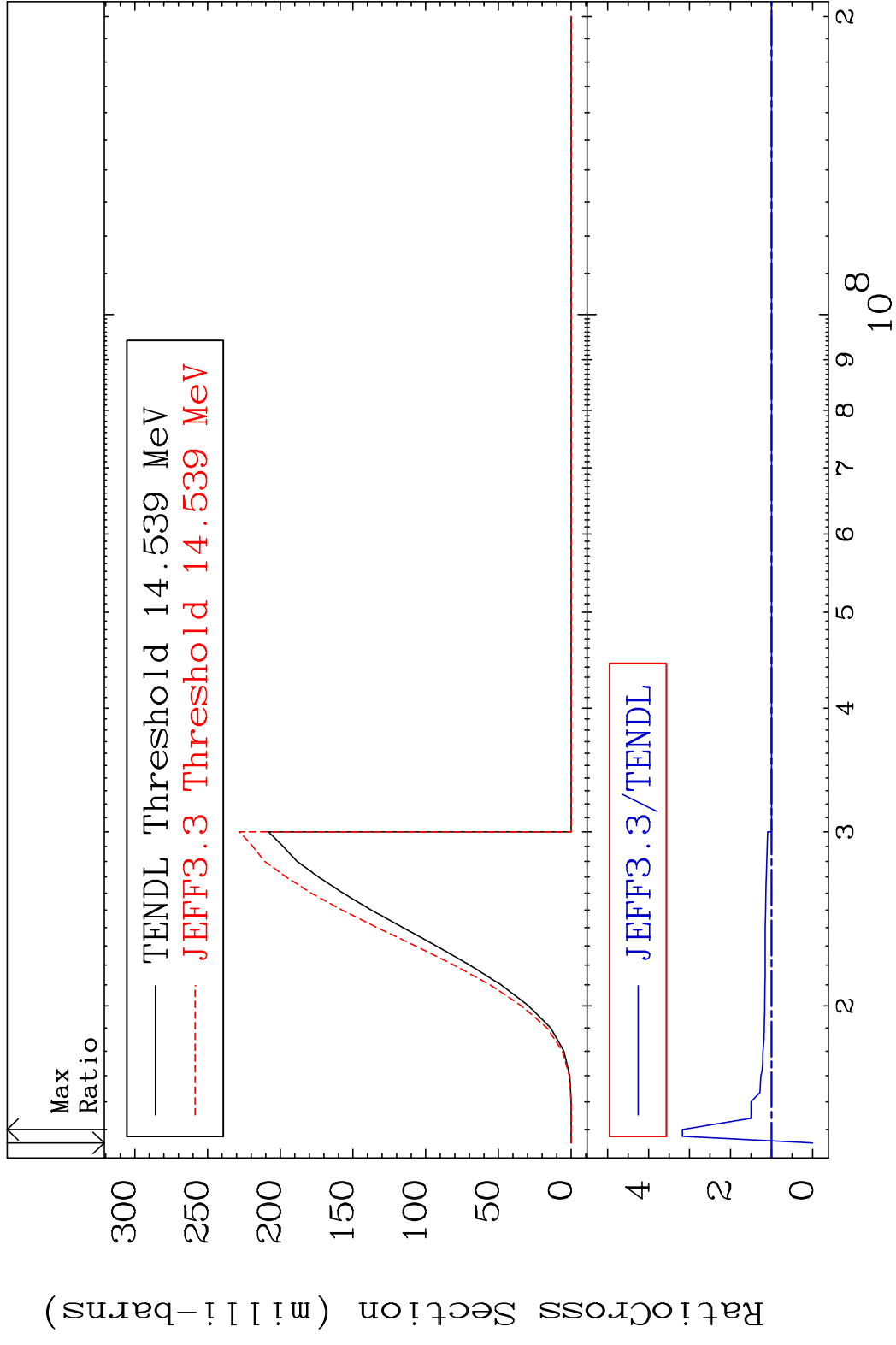


12 19-K -40

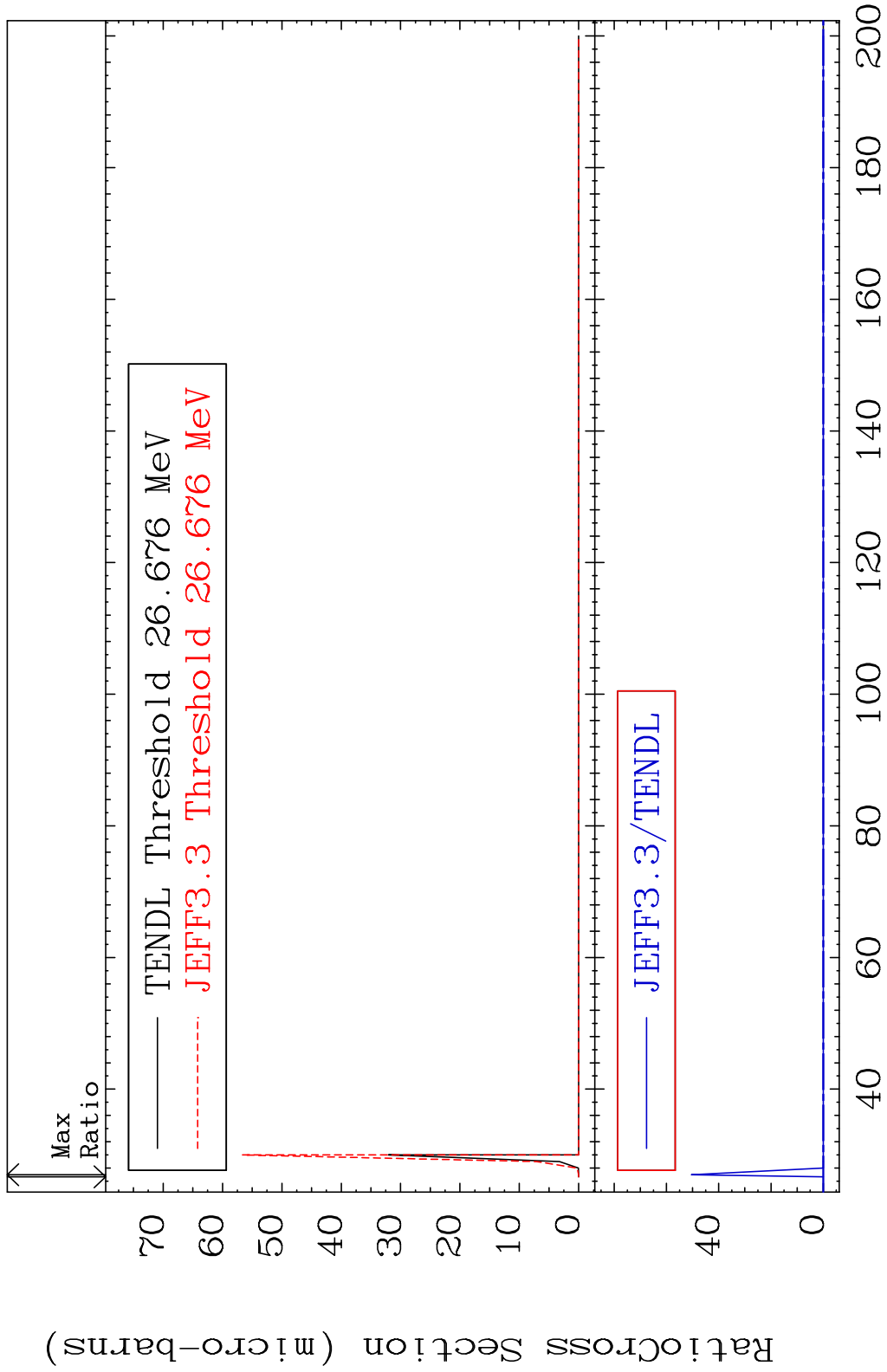
MAT 1928 (n,n') He-3 19-K -40
 Cross Section -100.0 To 162.8 %



MAT 1928 (n,2n) p 19-K -40
 Cross Section -100.0 To 217.6 %

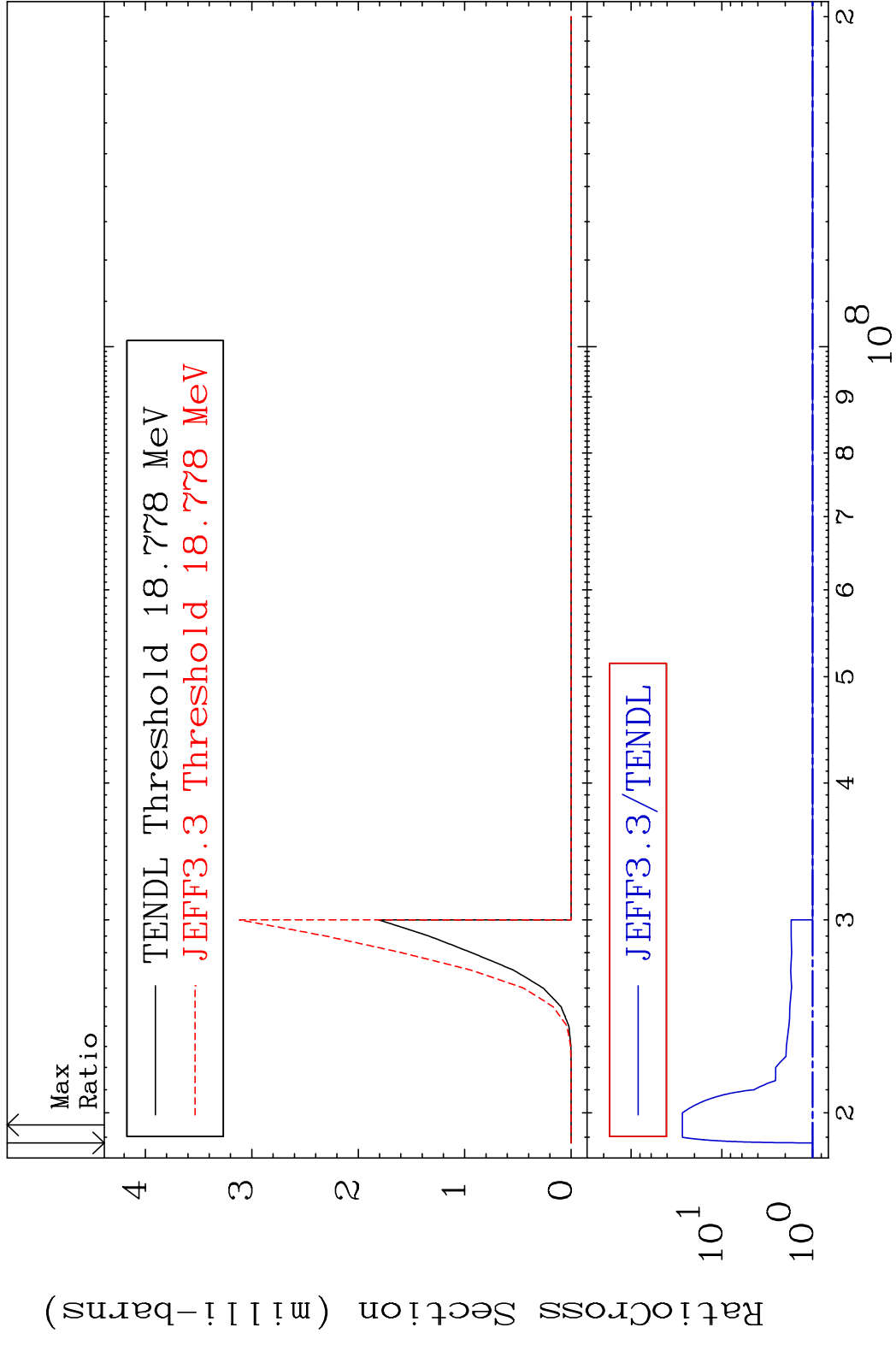


MAT 1928 (n,3n) p 19-K -40
 Cross Section -100.0 To 9999. %



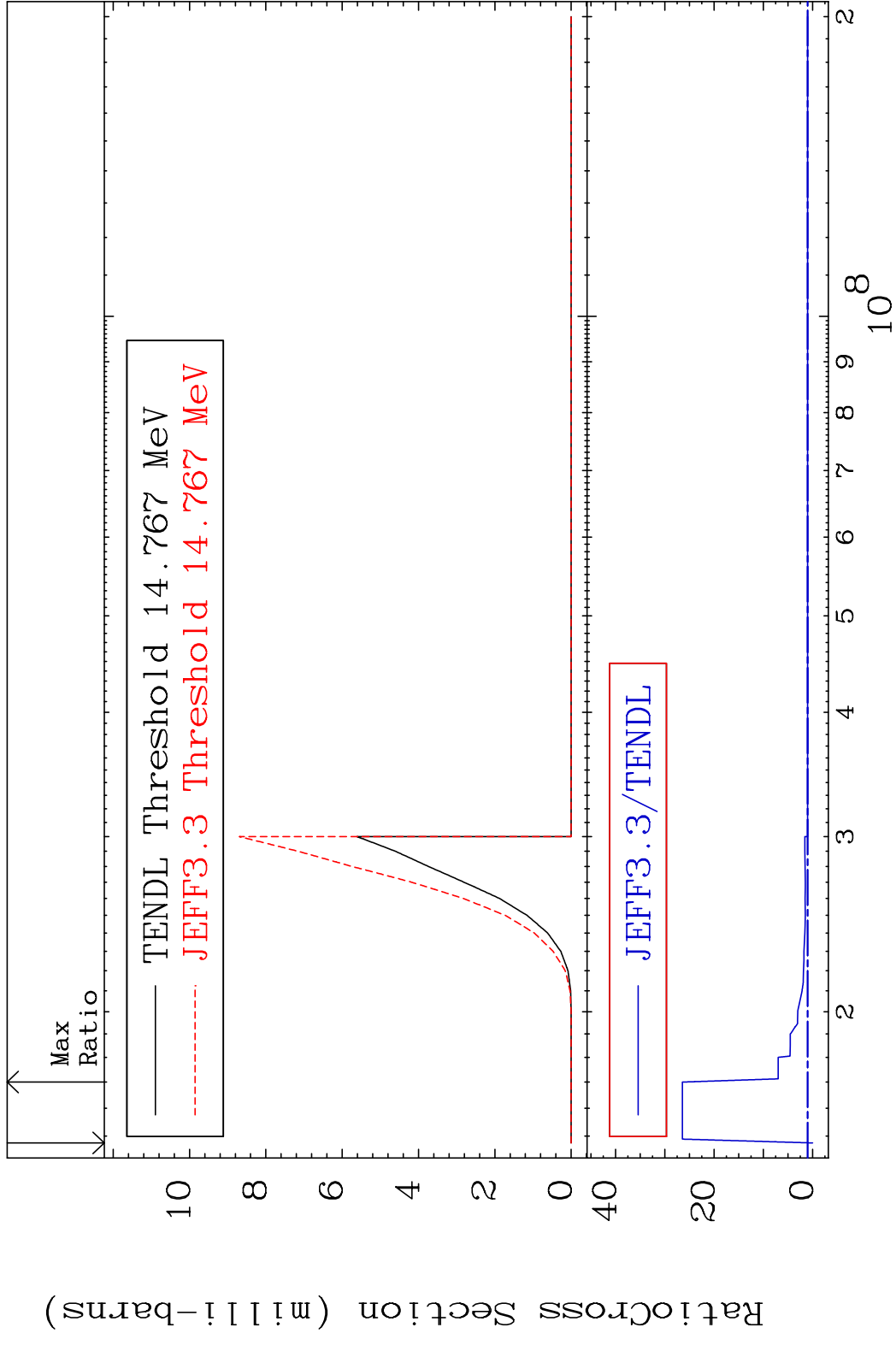
15 Incident Energy (MeV) 19-K -40

MAT 1928 (n,2n) p 19-K -40
 Cross Section 0.000 To 2623. %



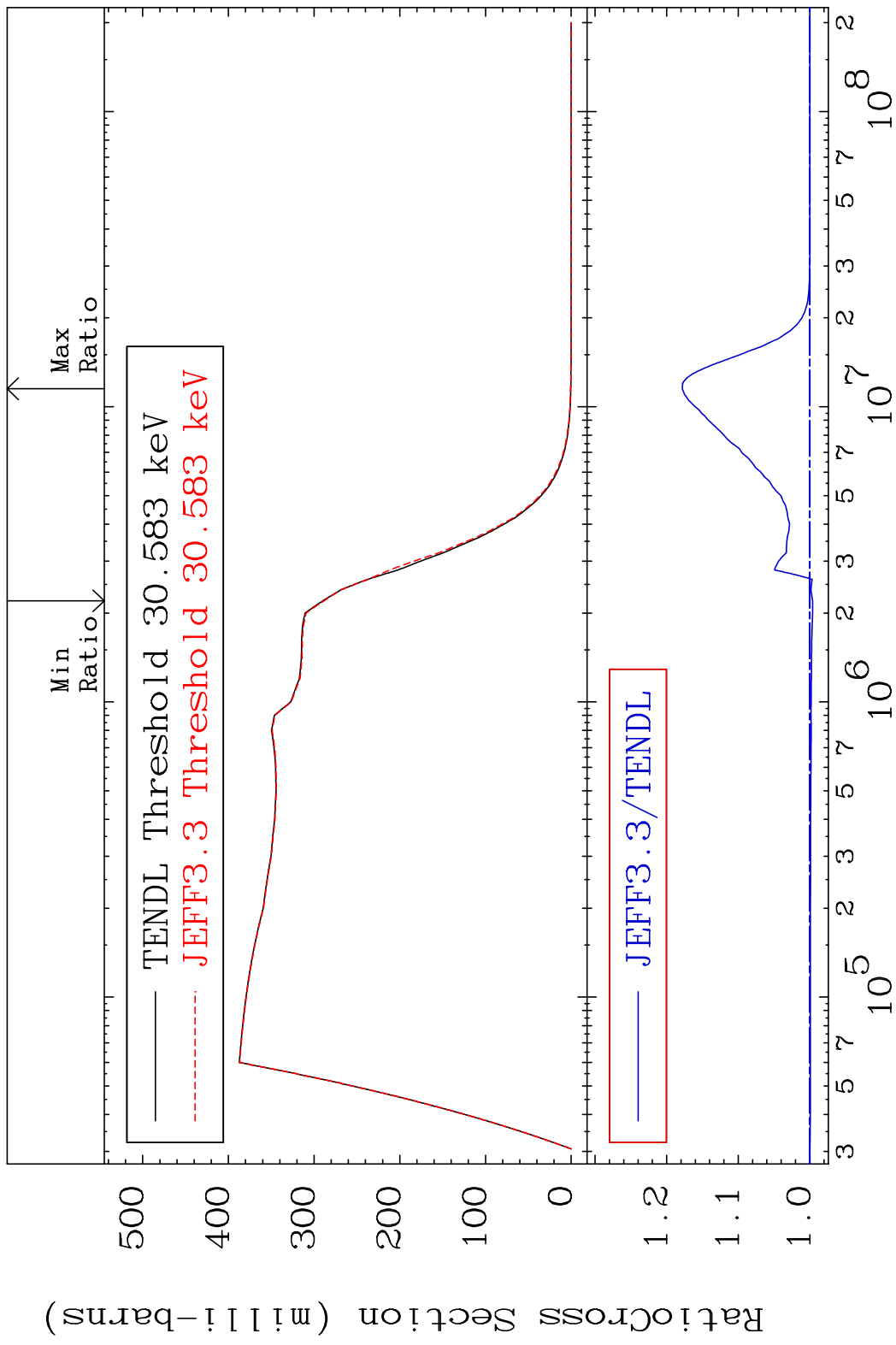
16 19-K -40

MAT 1928 (n,n') p α 19-K -40
 Cross Section -100.0 To 2543. %

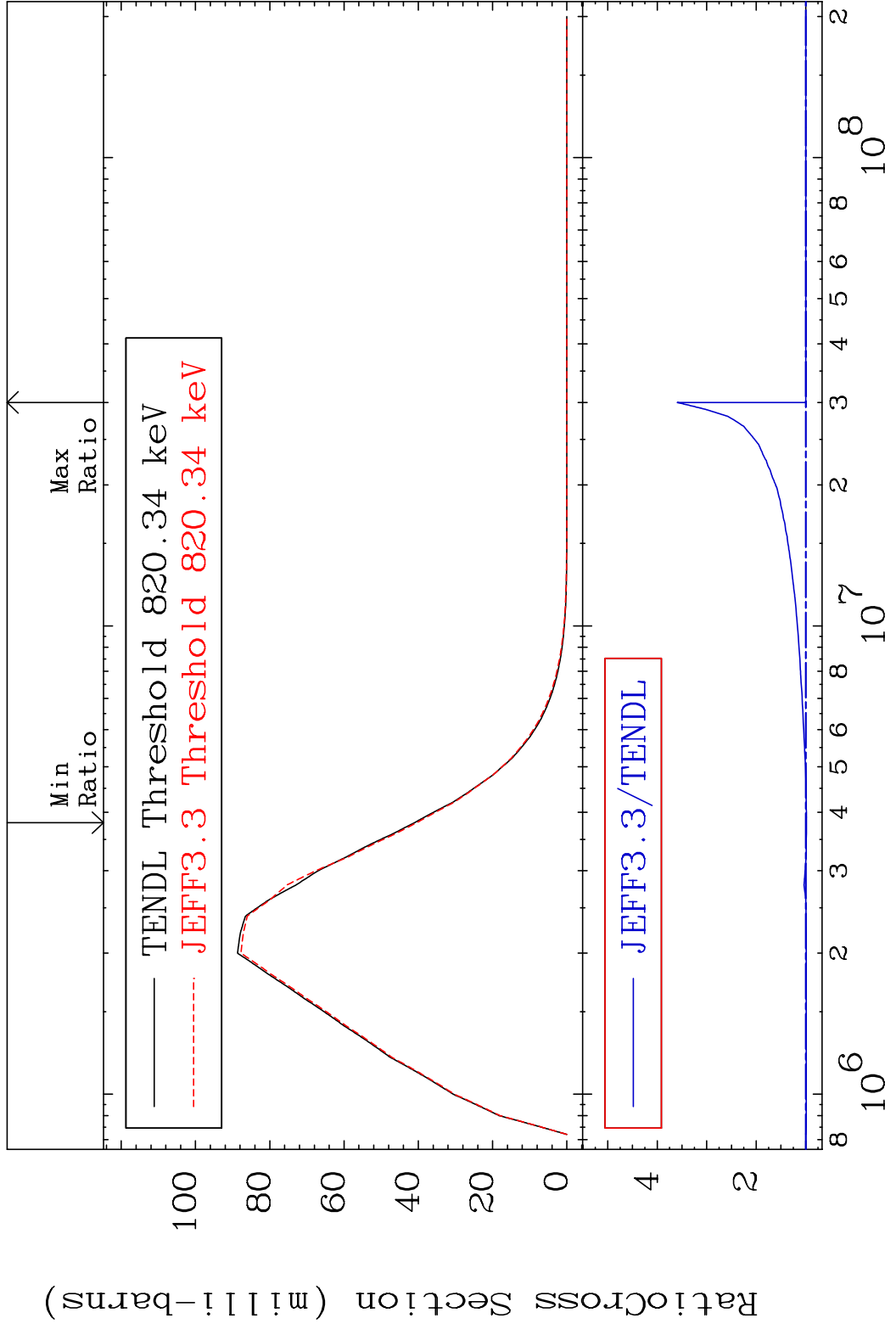


17 19-K -40

MAT 1928 MT= 51 (n, n') Level 19-K -40
 Cross Section -0.388 To 17.81 %

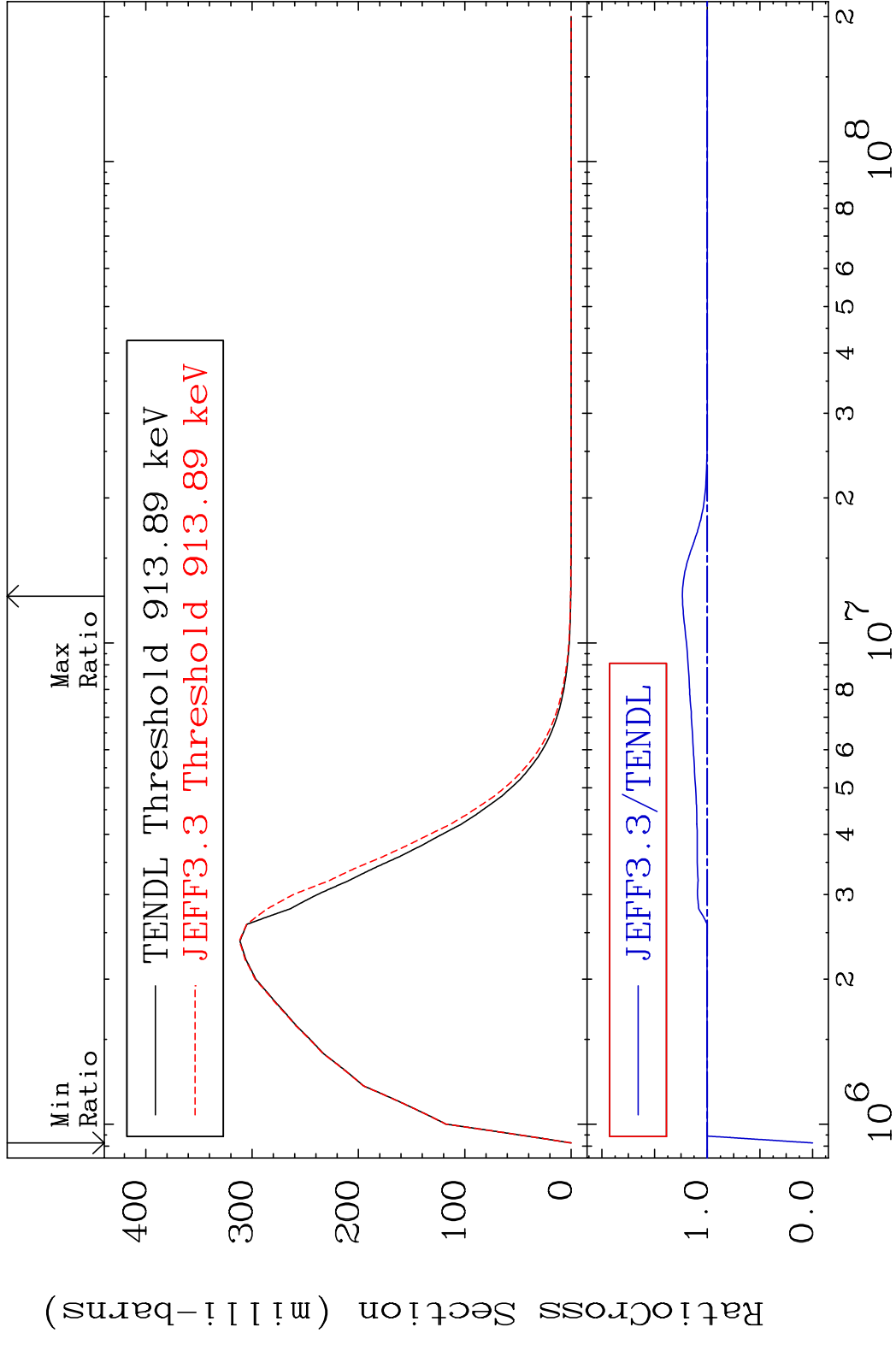


MAT 1928 MT= 52 (n, n') Level 19-K -40
 Cross Section -1.487 To 259.7 %



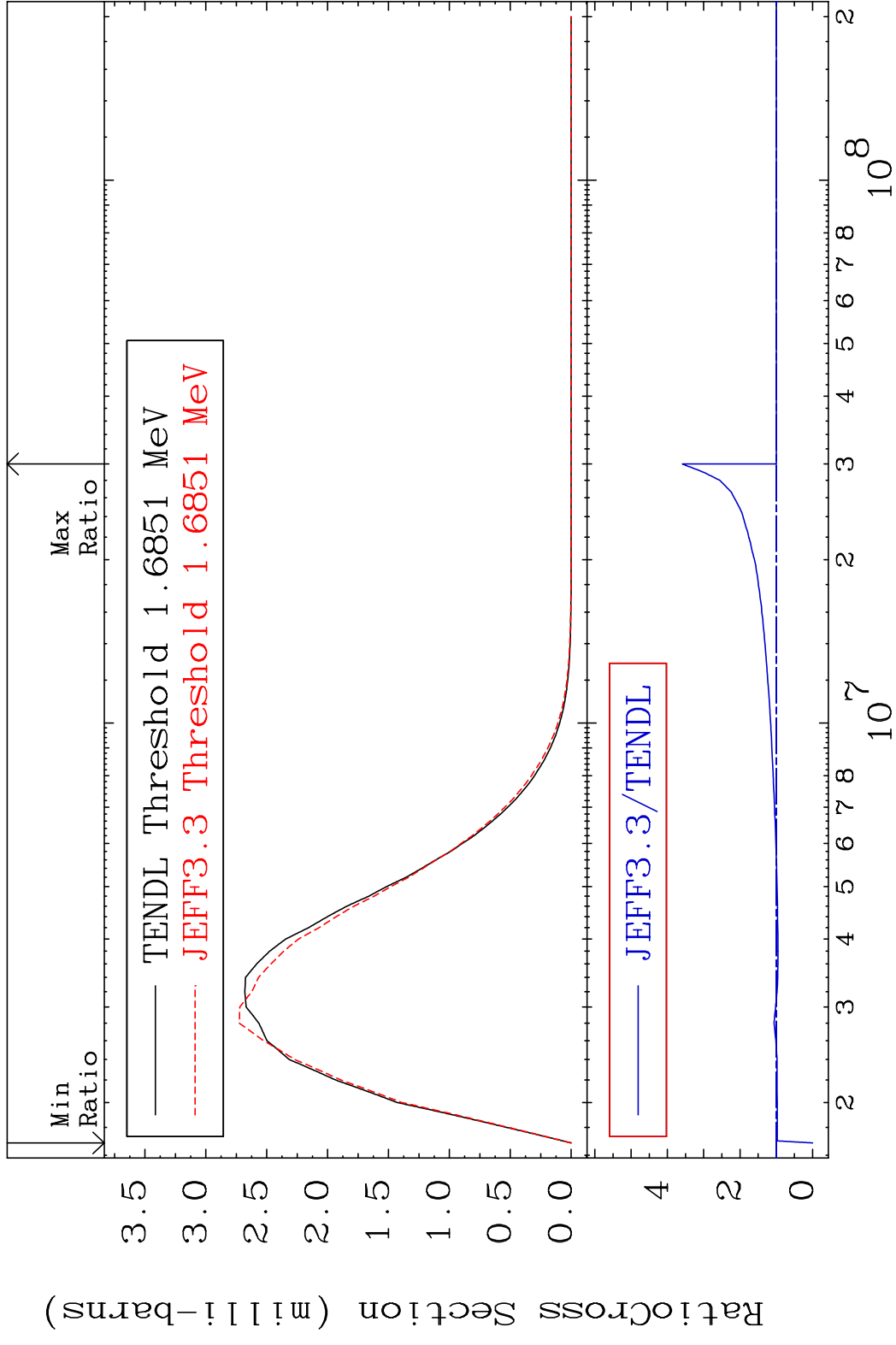
19 19-K -40

MAT 1928 MT= 53 (n, n') Level 19-K -40
 Cross Section -100.0 To 23.67 %

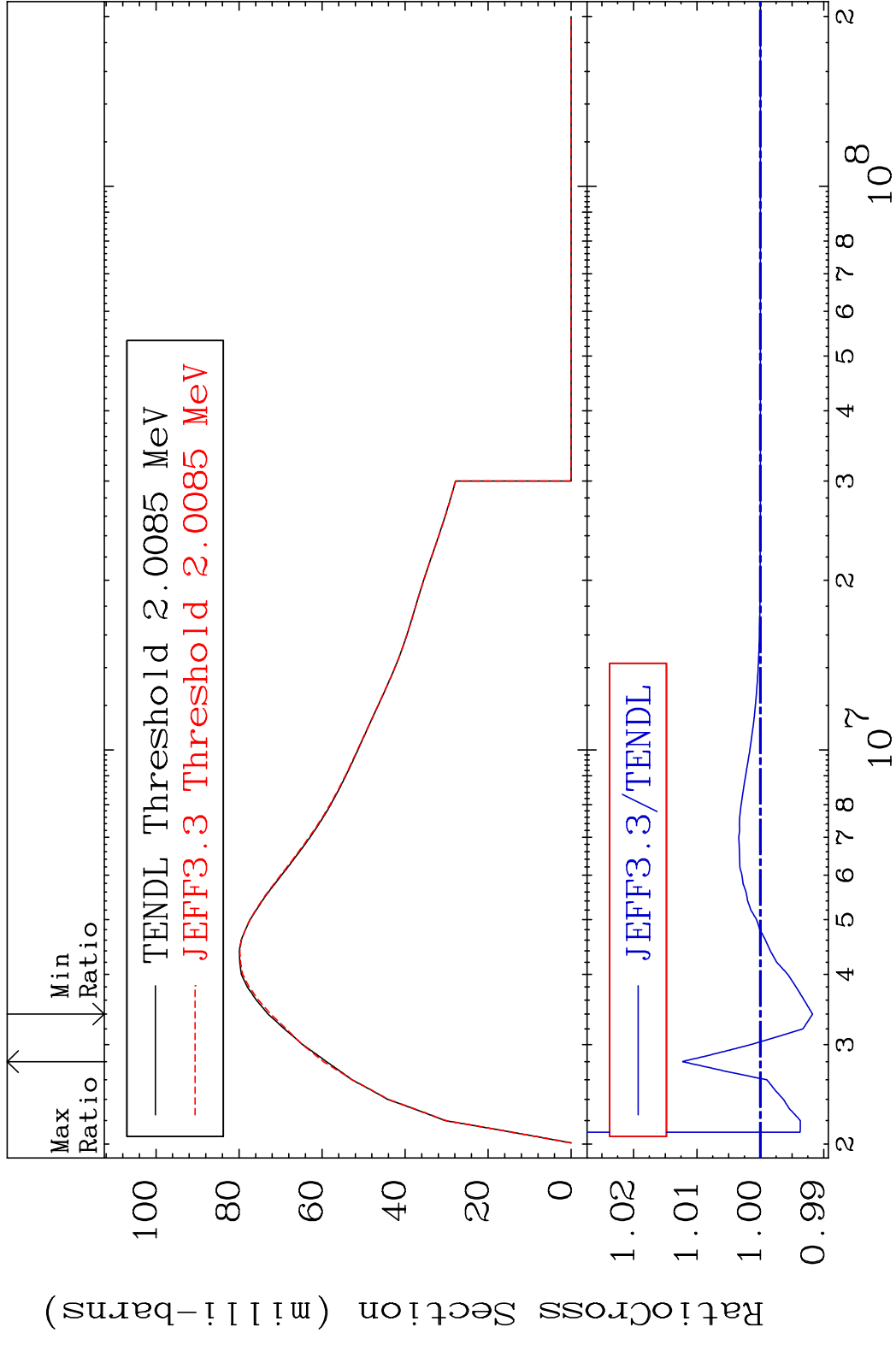


20 1.0 0.0 400 300 200 100 0 10⁶ 10⁷ 10⁸ 2 3 4 5 6 8

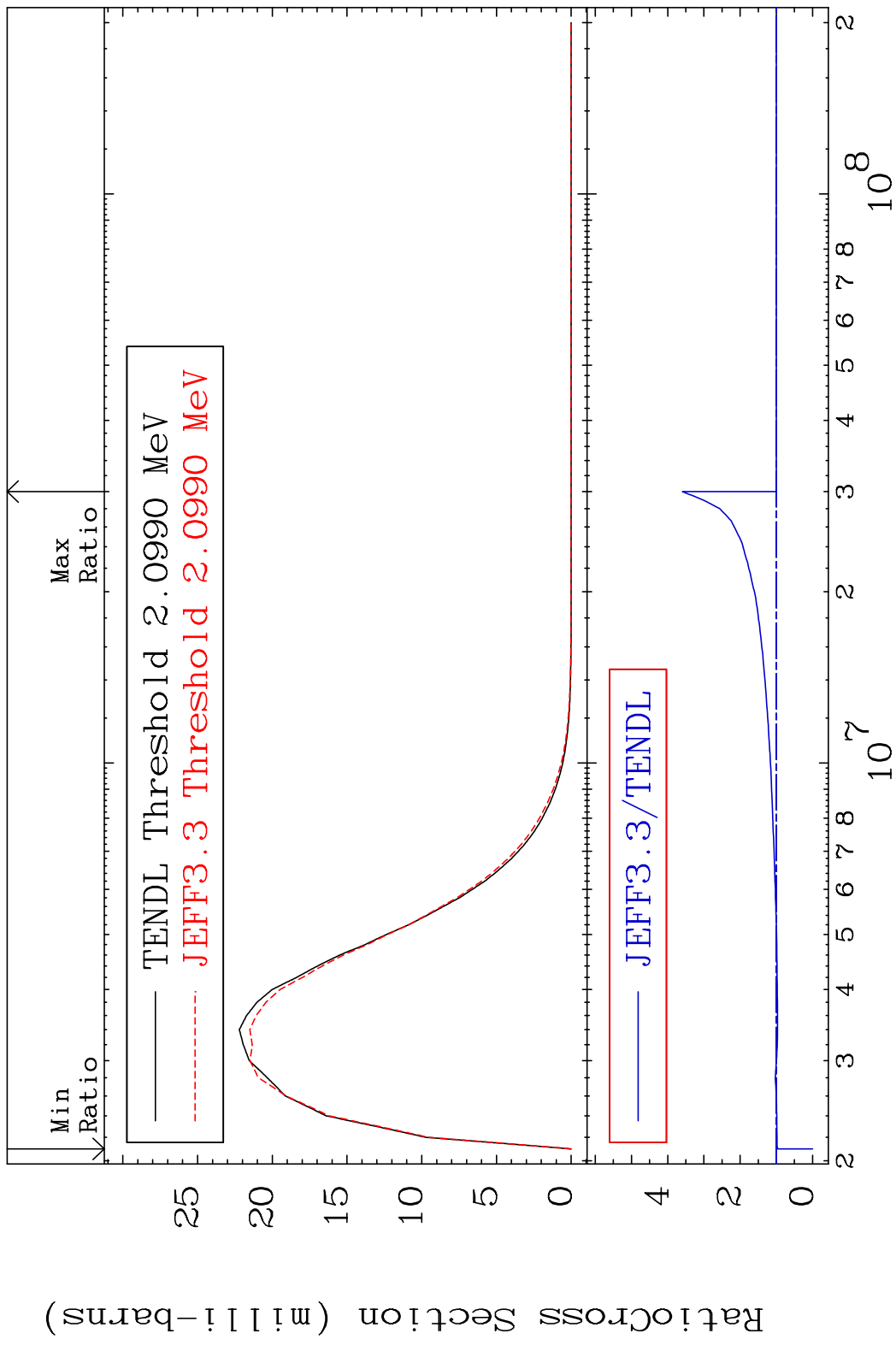
MAT 1928 MT= 54 (n,n') Level 19-K -40
 Cross Section -100.0 To 258.8 %



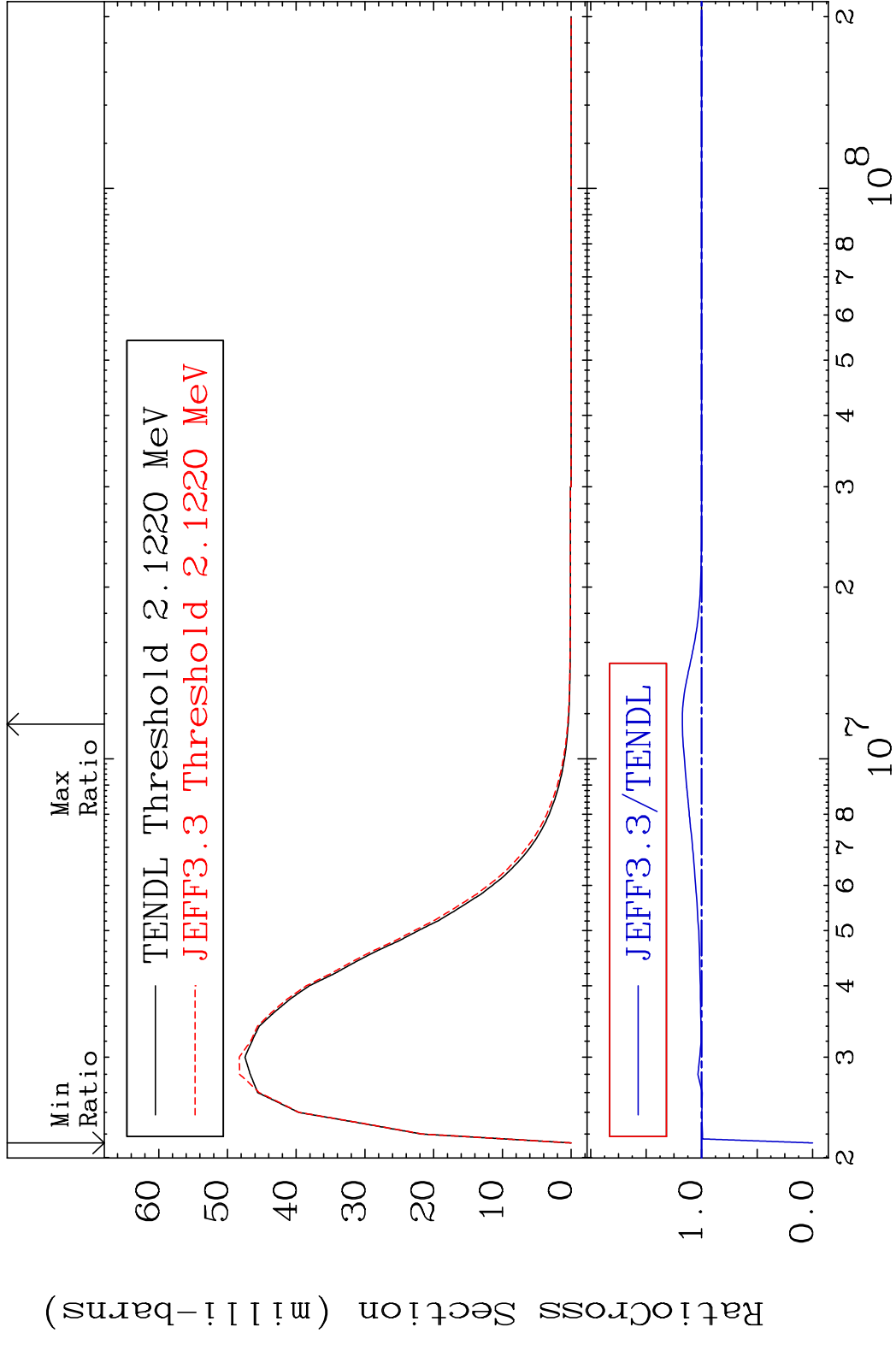
MAT 1928 MT= 55 (n,n') Level 19-K -40
 Cross Section -0.824 To 1.230 %



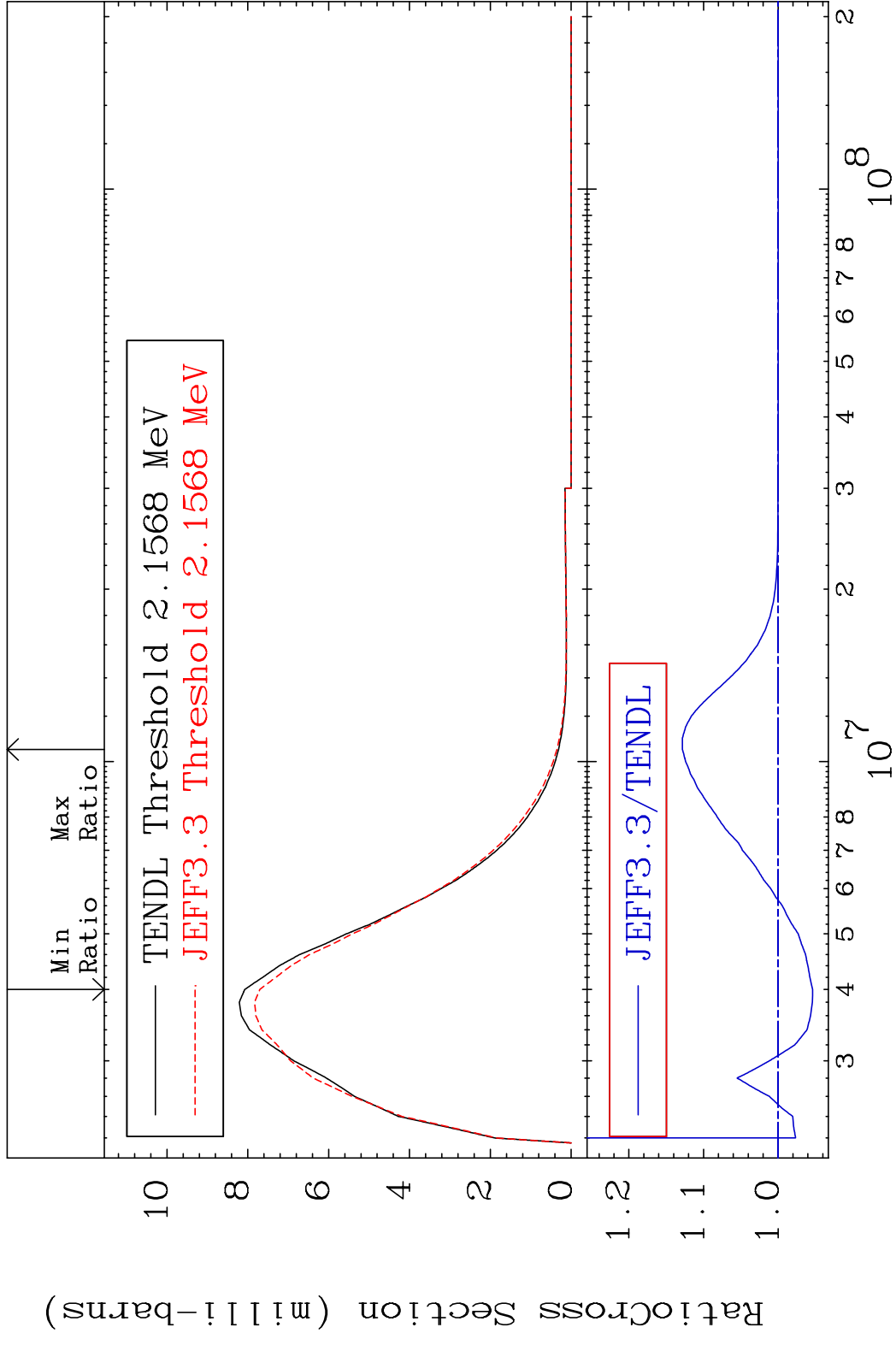
MAT 1928 MT= 56 (n, n') Level 19-K -40
 Cross Section -100.0 To 259.5 %



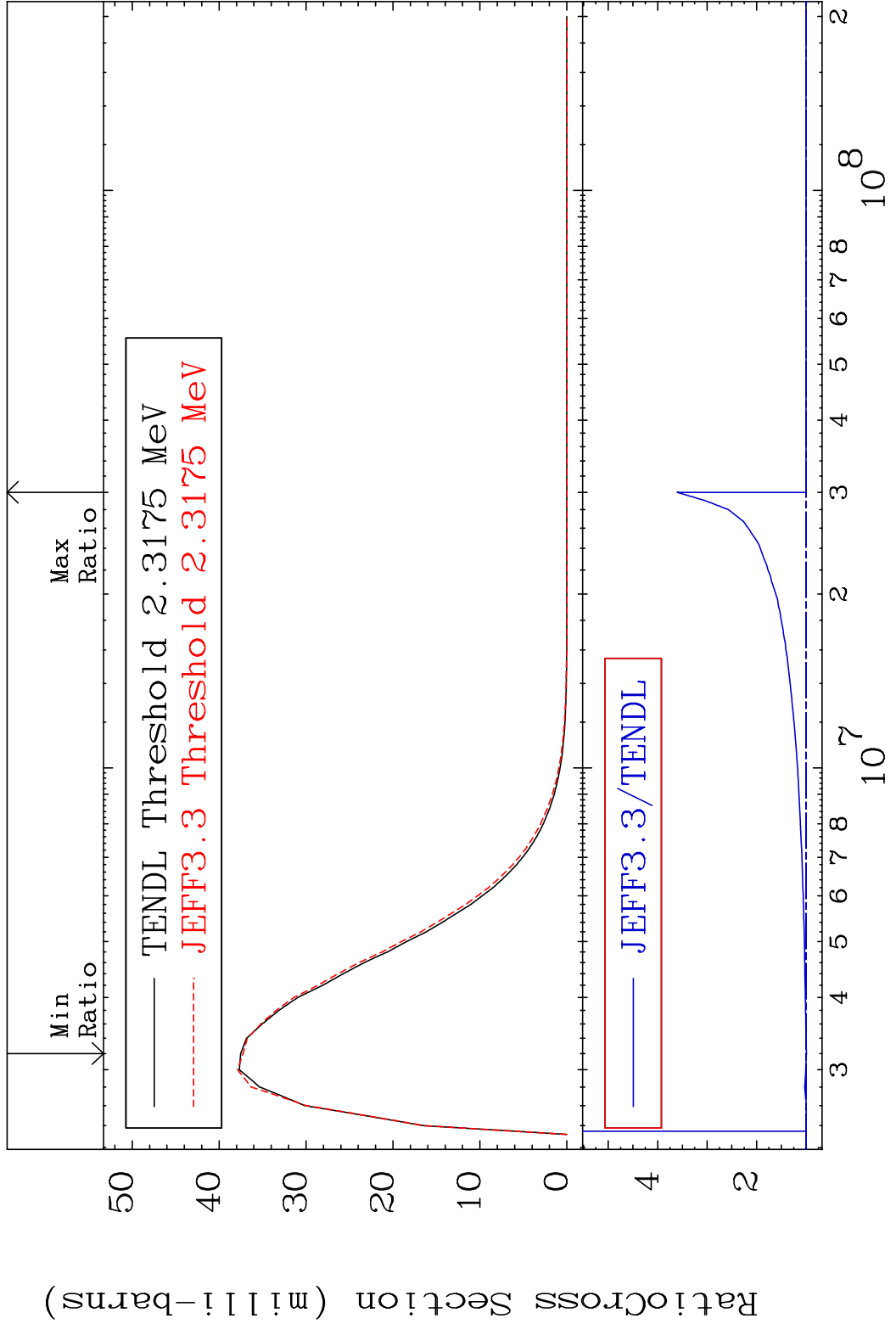
MAT 1928 MT= 57 (n, n') Level 19-K -40
 Cross Section -100.0 To 17.38 %



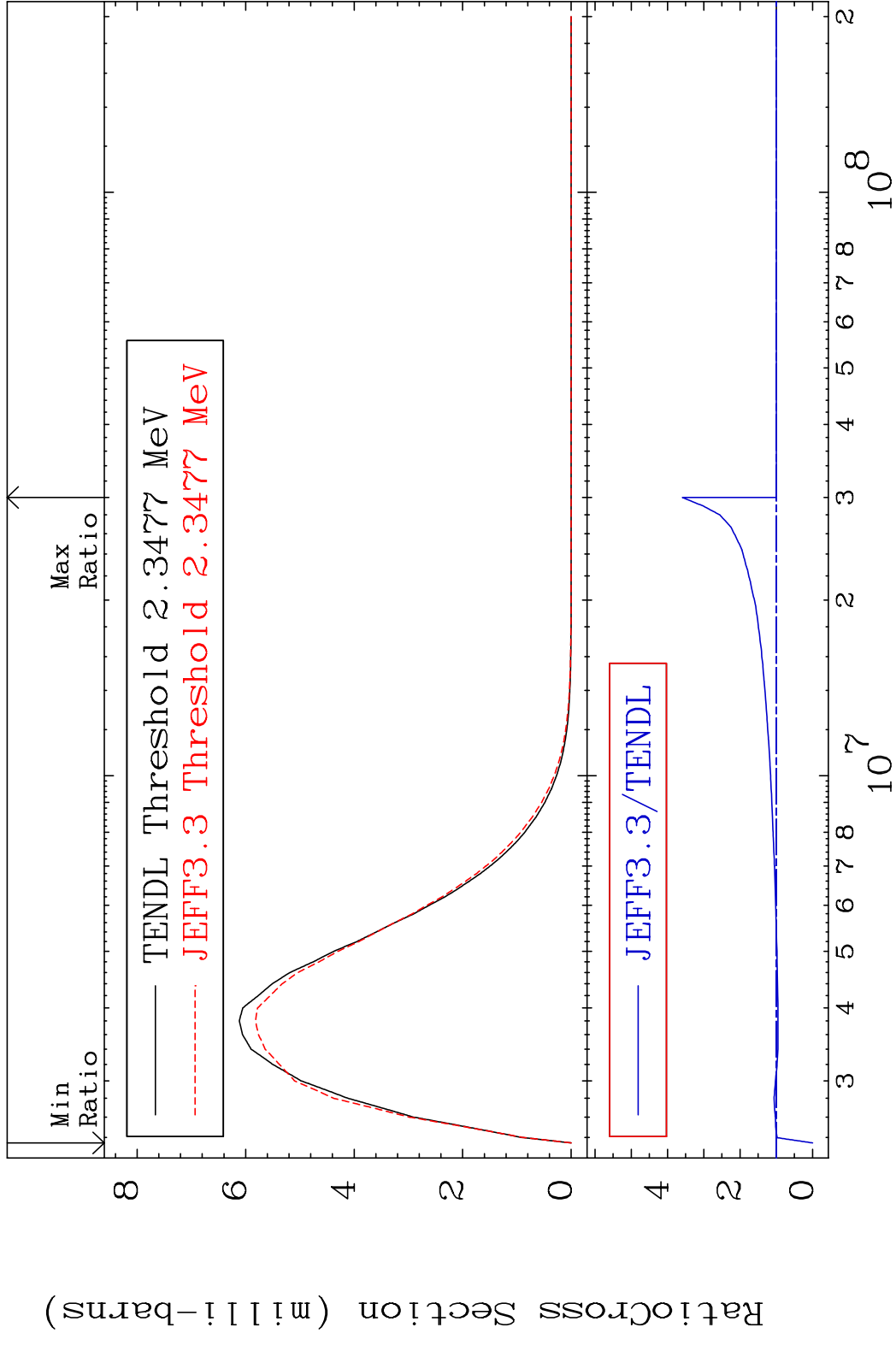
MAT 1928 MT= 58 (n, n') Level 19-K -40
 Cross Section -4.621 To 12.83 %



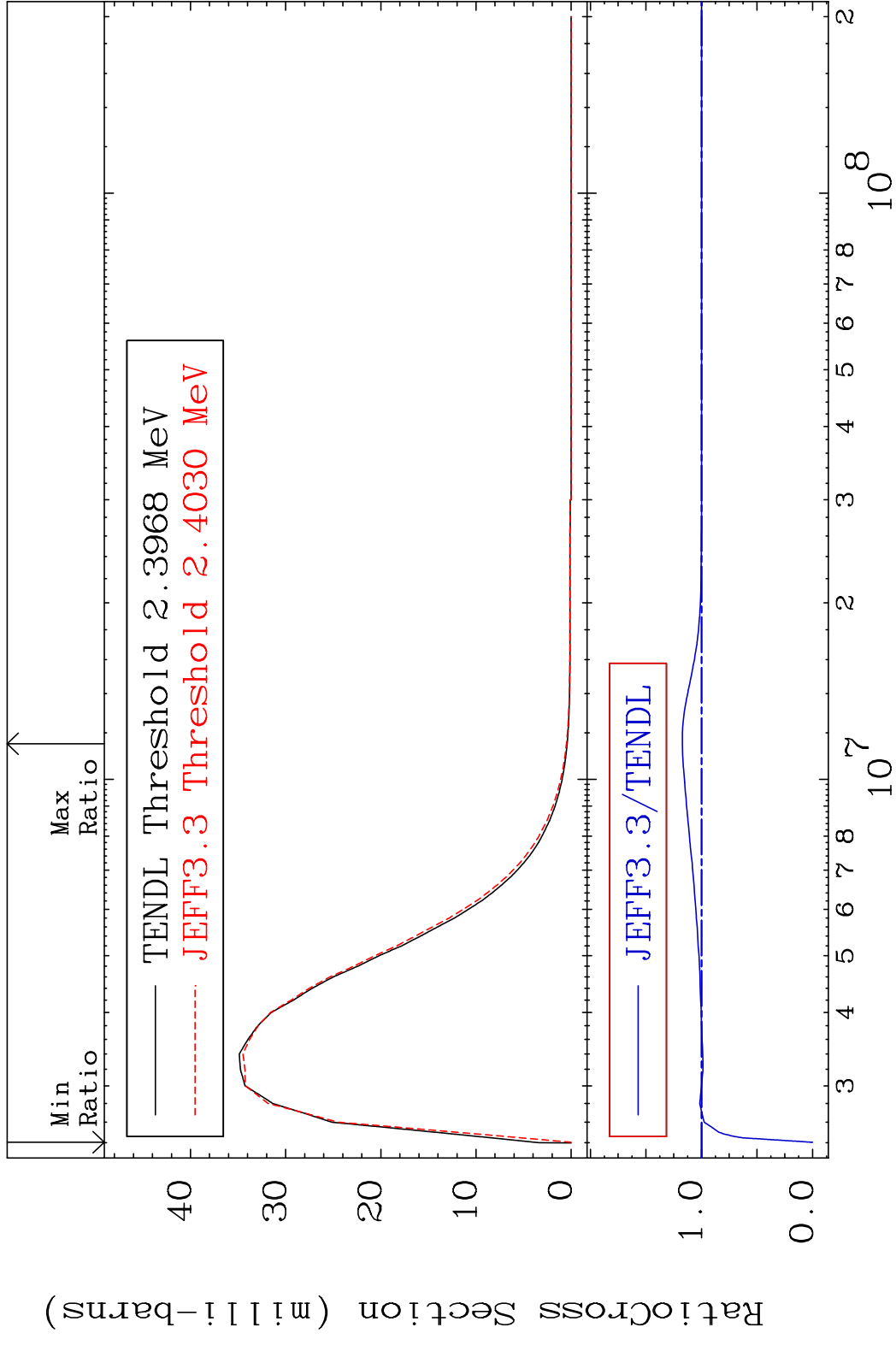
MAT 1928 MT= 59 (n, n') Level 19-K -40
 Cross Section -0.732 To 260.5 %



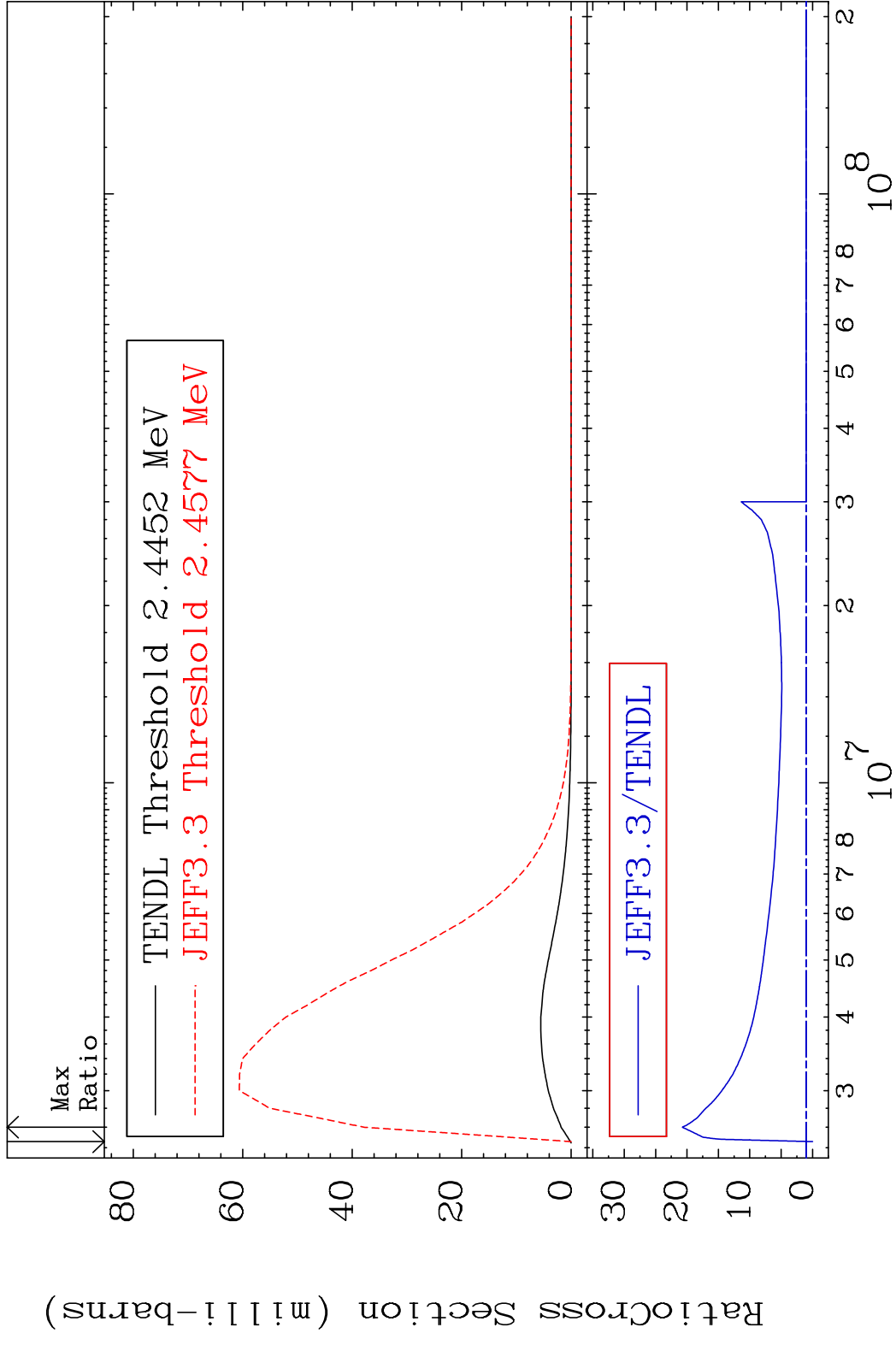
MAT 1928 MT= 60 (n, n') Level 19-K -40
 Cross Section -100.0 To 259.0 %



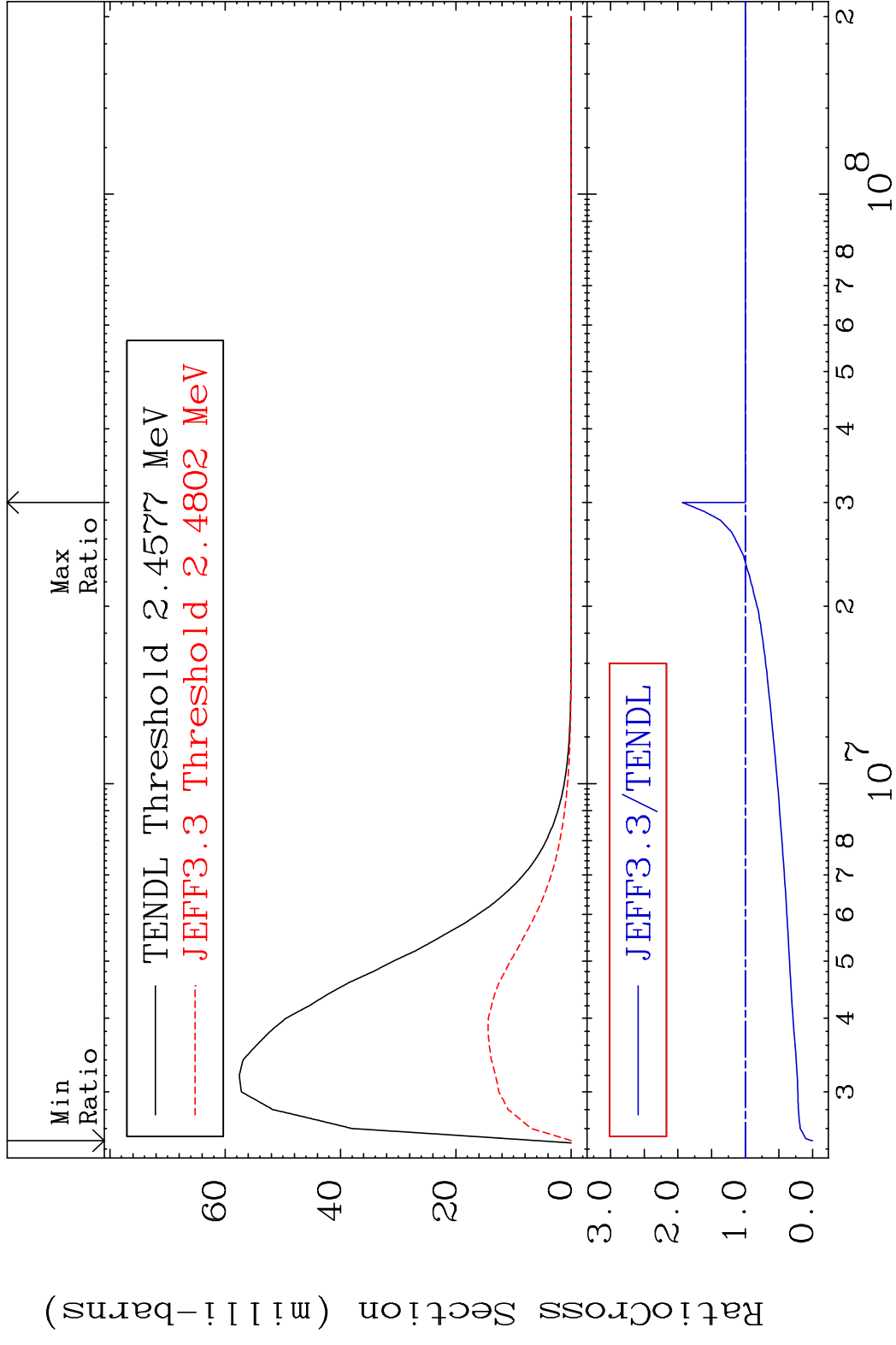
MAT 1928 MT= 61 (n, n') Level 19-K -40
 Cross Section -100.0 To 17.22 %



MAT 1928 MT= 62 (n, n') Level 19-K -40
 Cross Section -100.0 To 1974. %

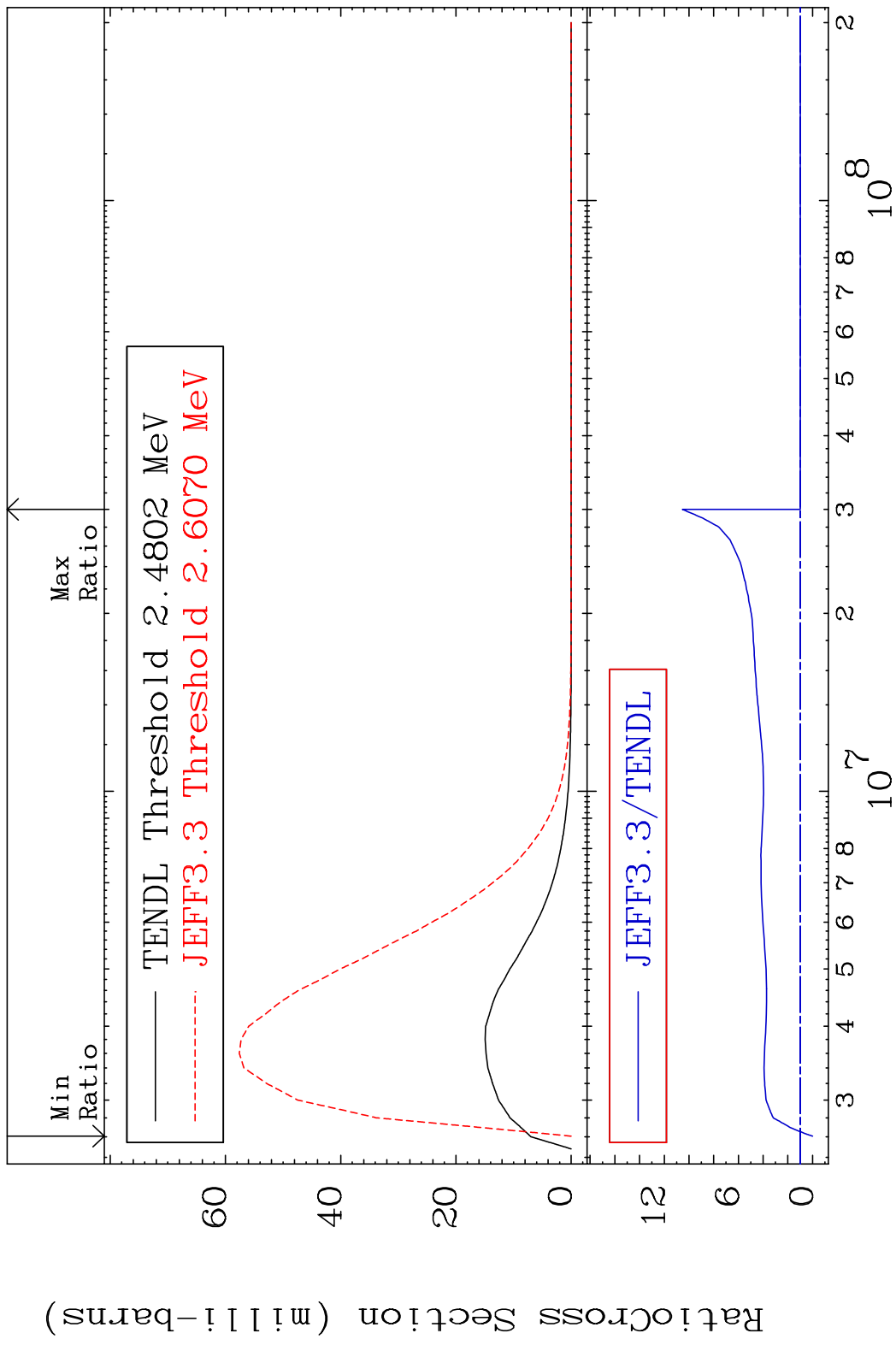


MAT 1928 MT= 63 (n, n') Level 19-K -40
 Cross Section -100.0 To 93.38 %

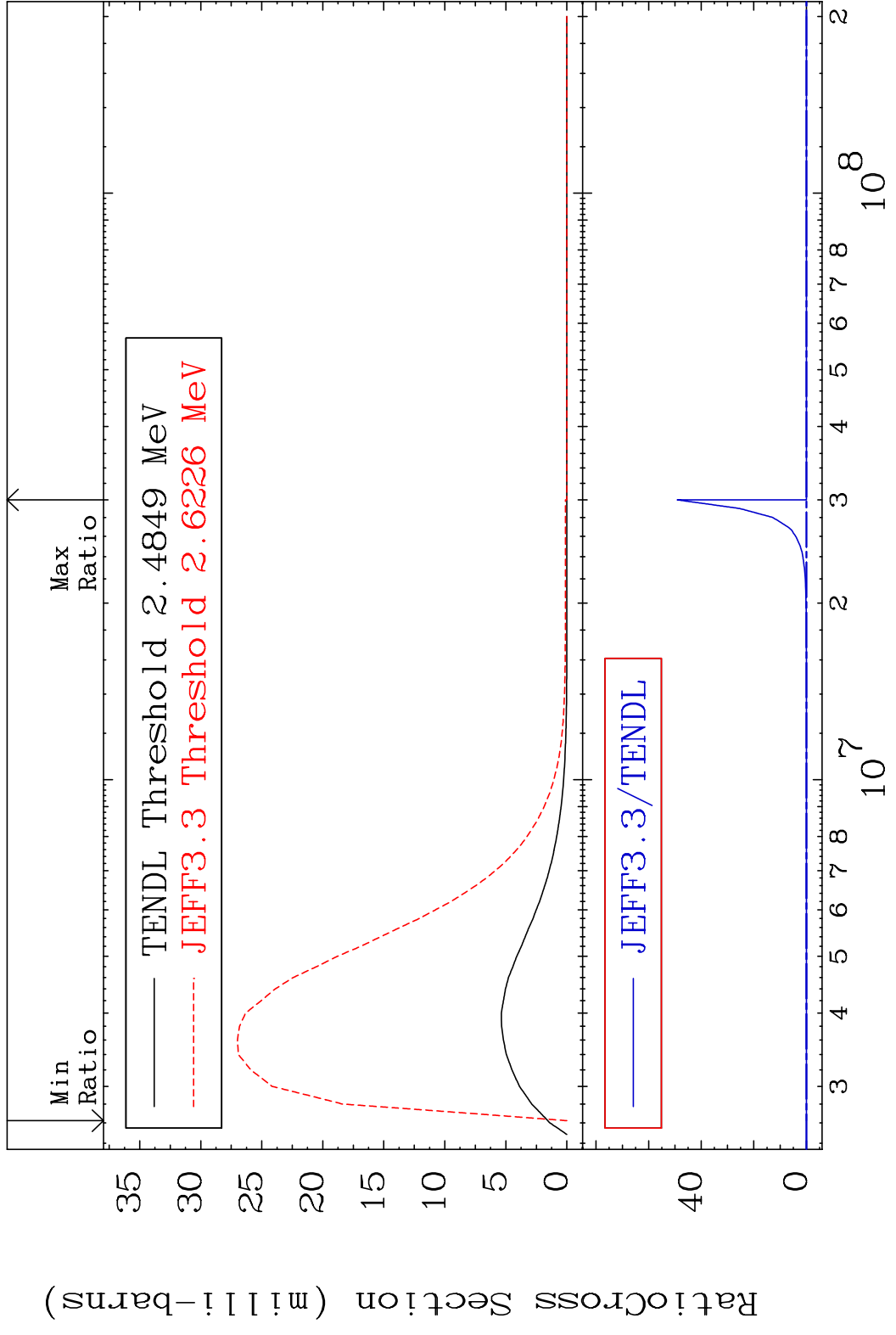


30 Incident Energy (eV) 19-K -40

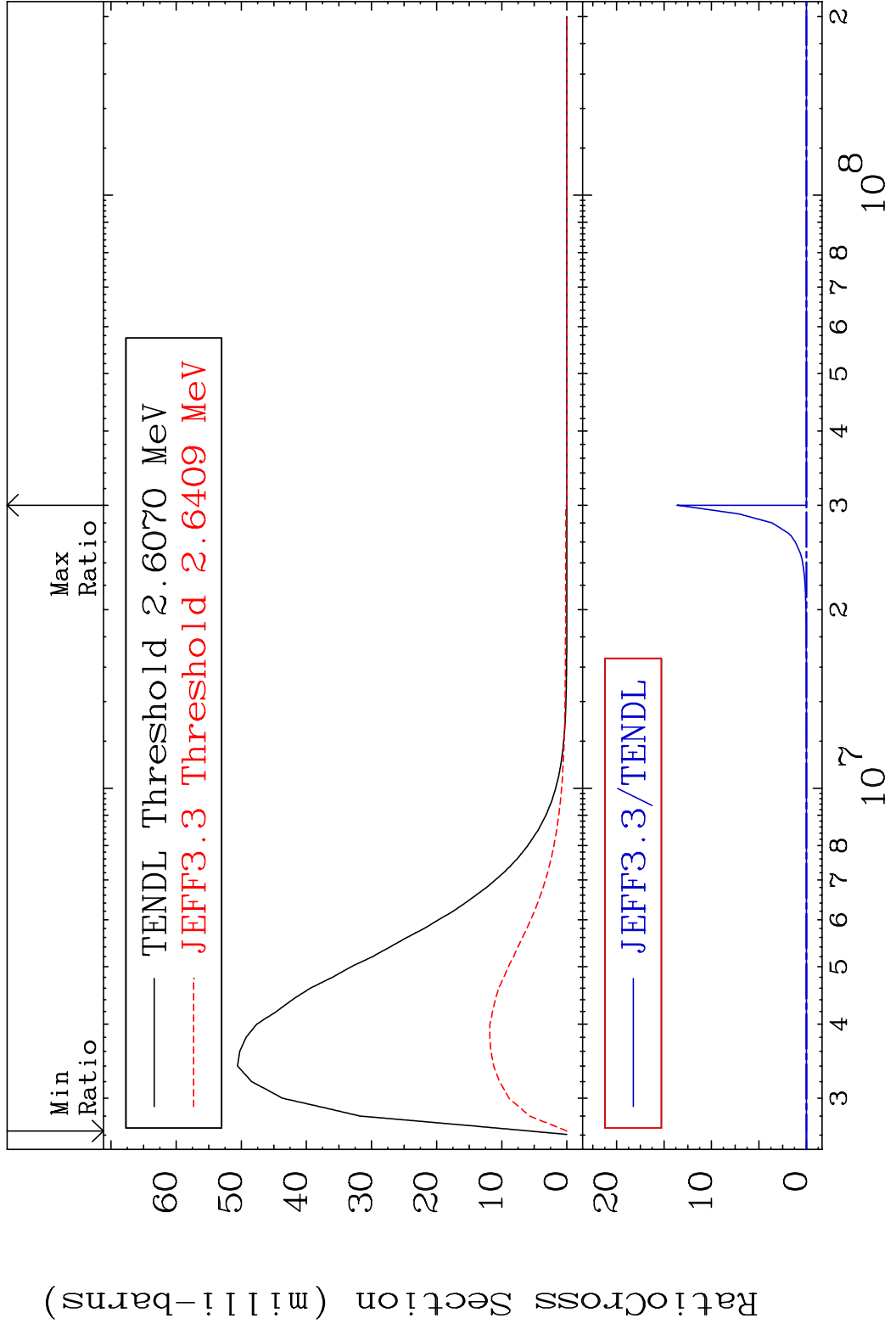
MAT 1928 MT= 64 (n, n') Level 19-K -40
 Cross Section -100.0 To 953.6 %



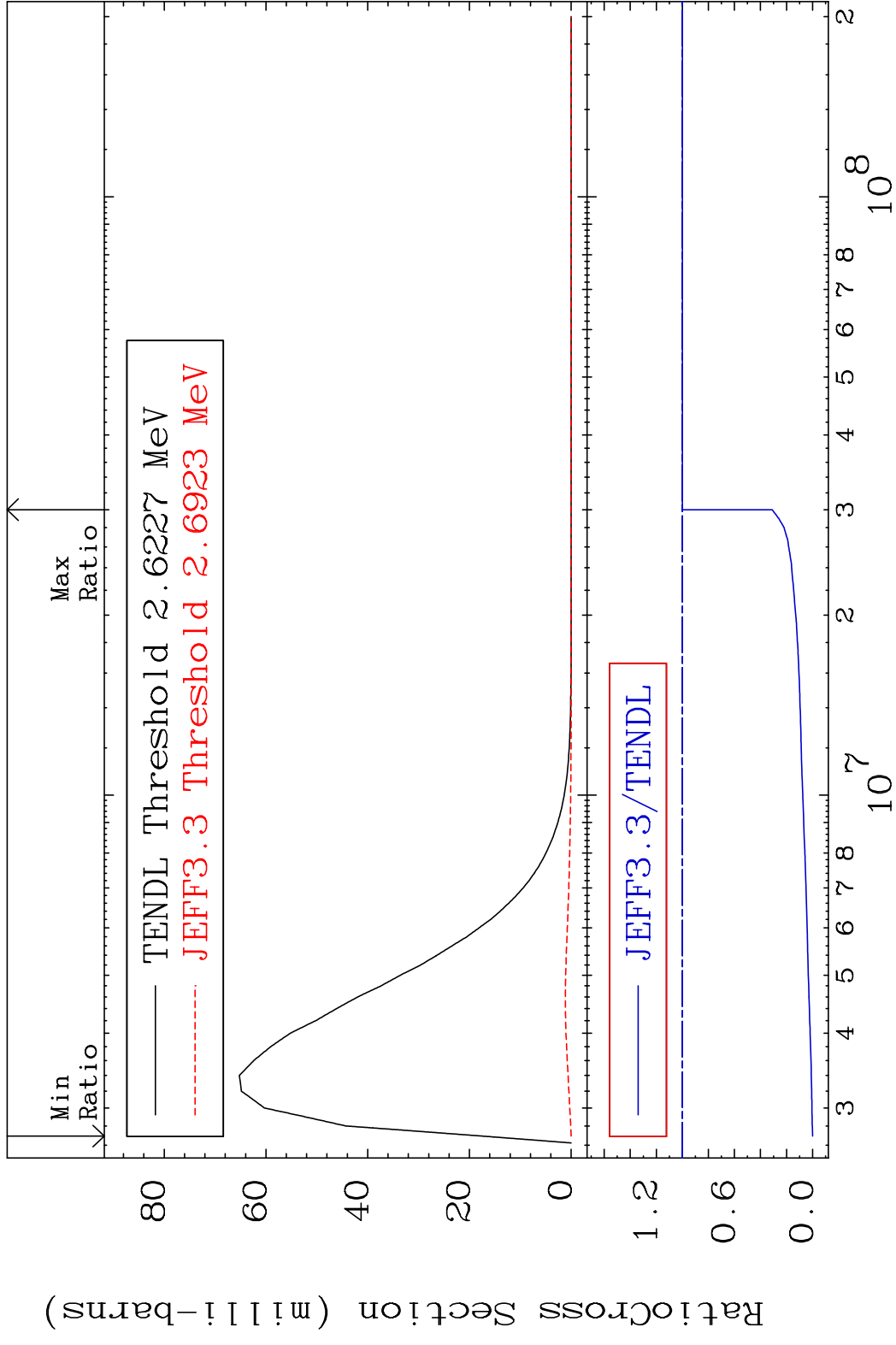
MAT 1928 MT= 65 (n, n') Level 19-K -40
 Cross Section -100.0 To 9999. %



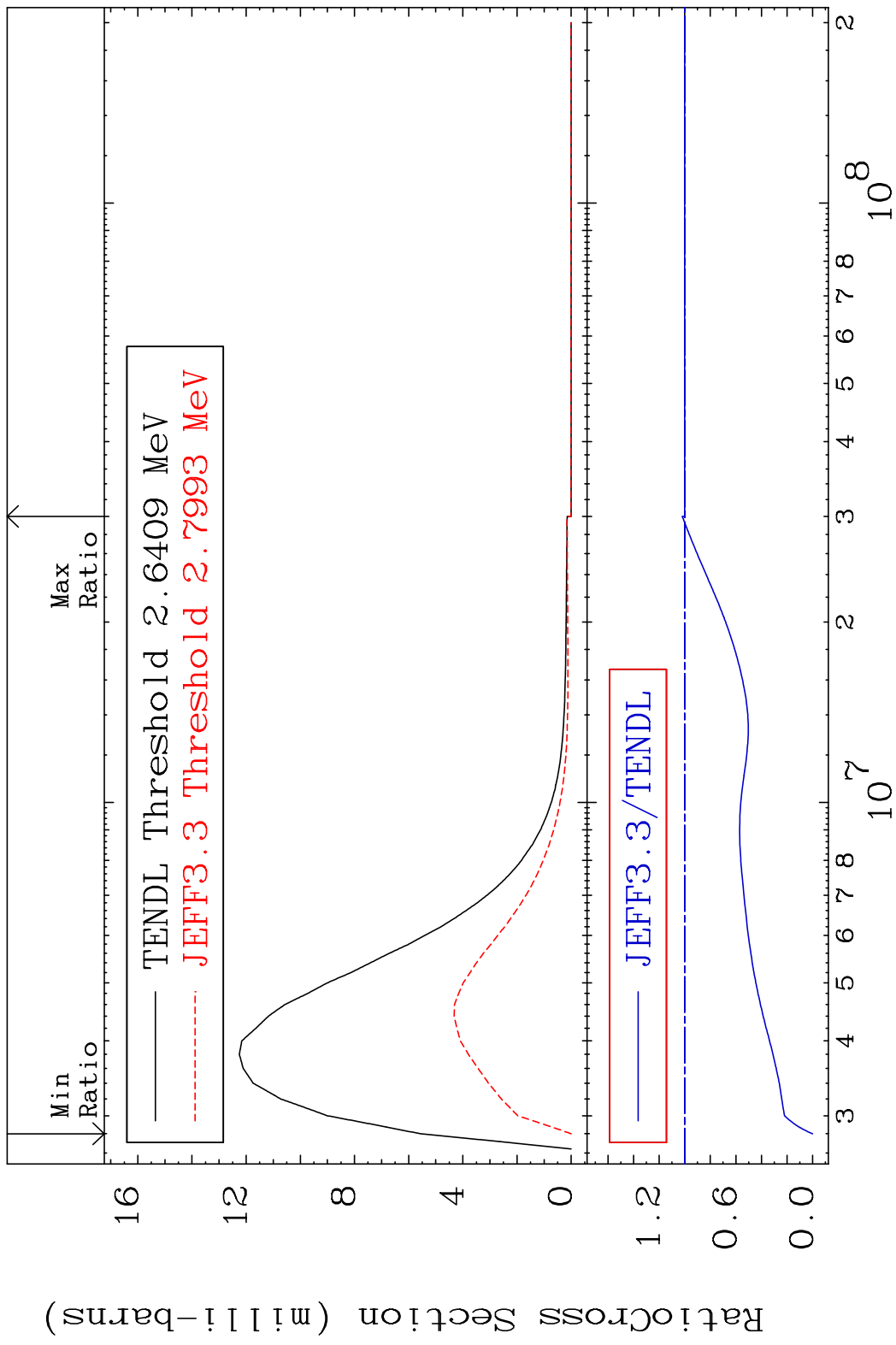
MAT 1928 MT= 66 (n, n') Level 19-K -40
 Cross Section -100.0 To 9999. %



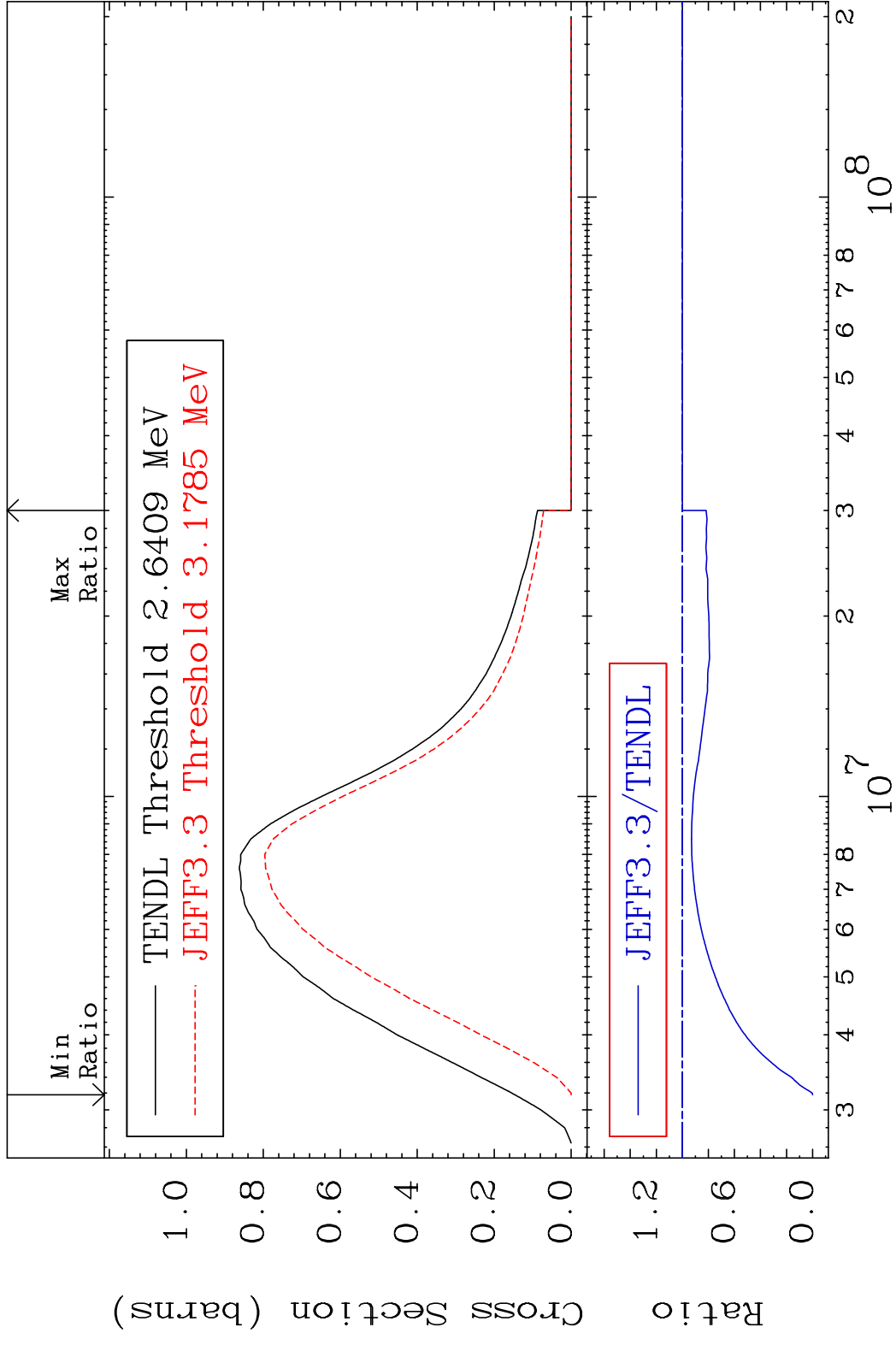
MAT 1928 MT= 67 (n, n') Level 19-K -40
 Cross Section -100.0 To 0.000 %



MAT 1928 MT= 68 (n, n') Level 19-K -40
 Cross Section -100.0 To 1.871 %



MAT 1928 (n,n') Continuum 19-K -40
 Cross Section -100.0 To 0.000 %

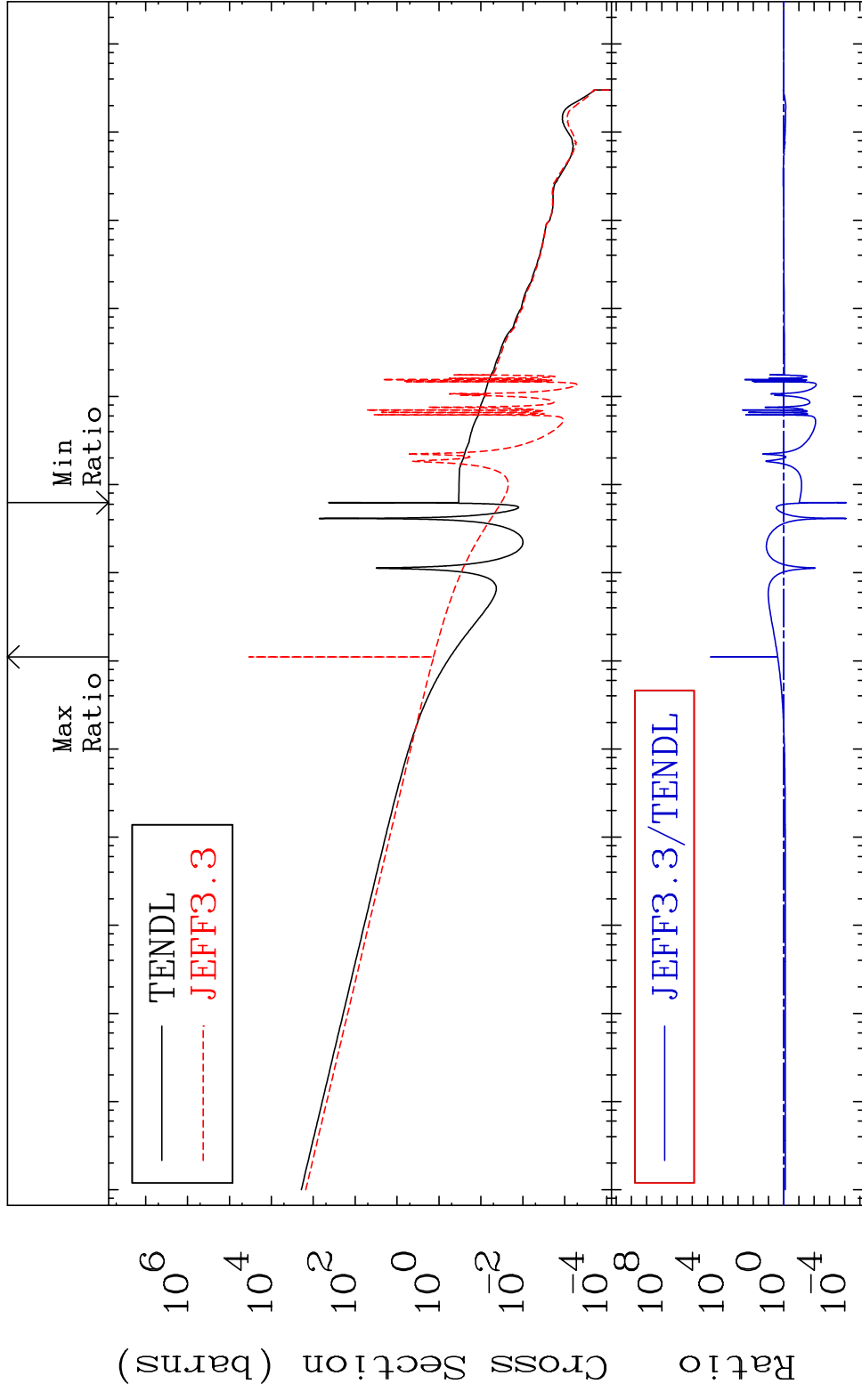


MAT 1928

(n, γ)

19-K -40

Cross Section -99.99 To 9999. %



Incident Energy (eV) 10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

37

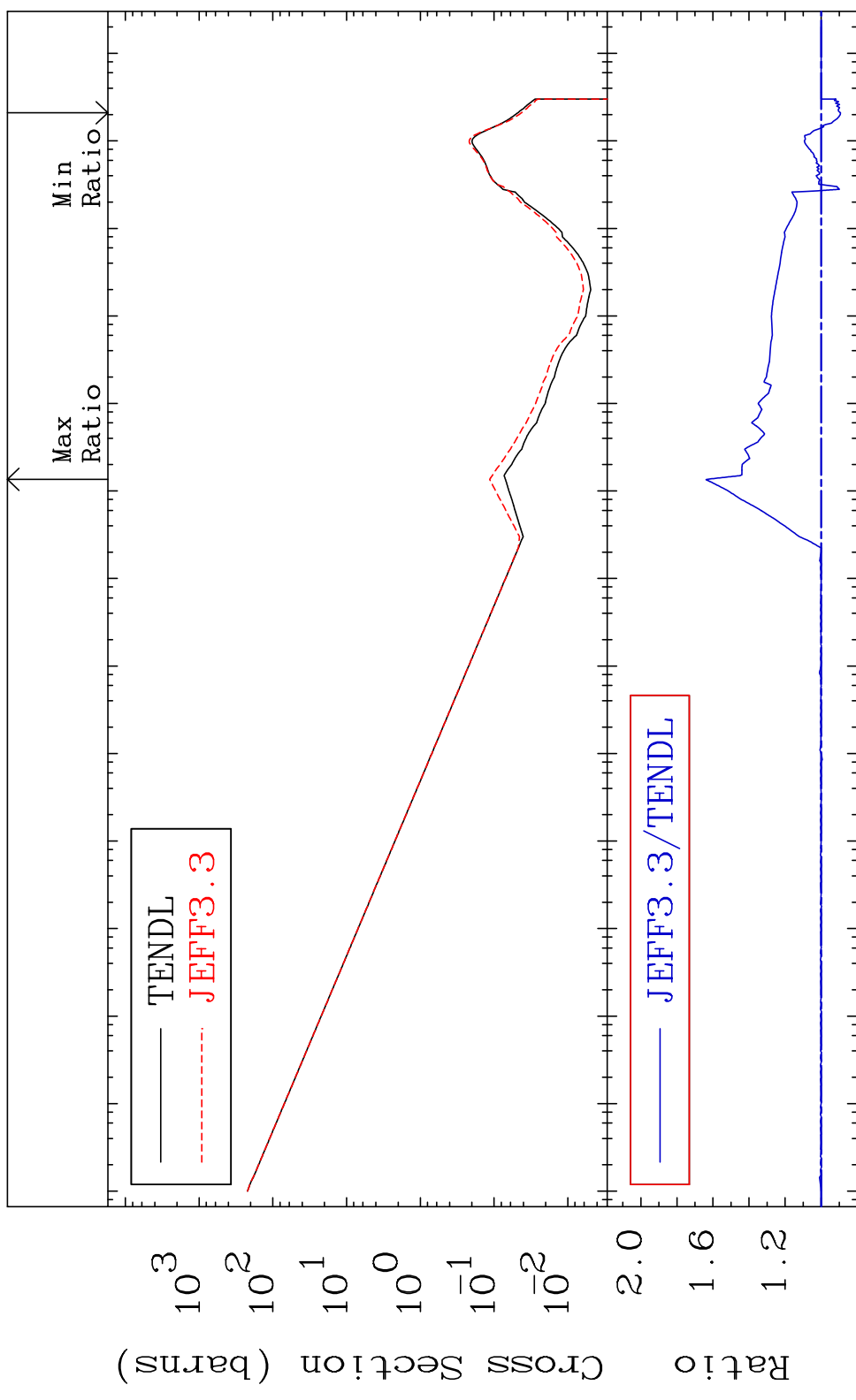
19-K -40

MAT 1928

(n, p)

19-K -40

Cross Section -10.677 To 64.01 %



Cross Section (barns)

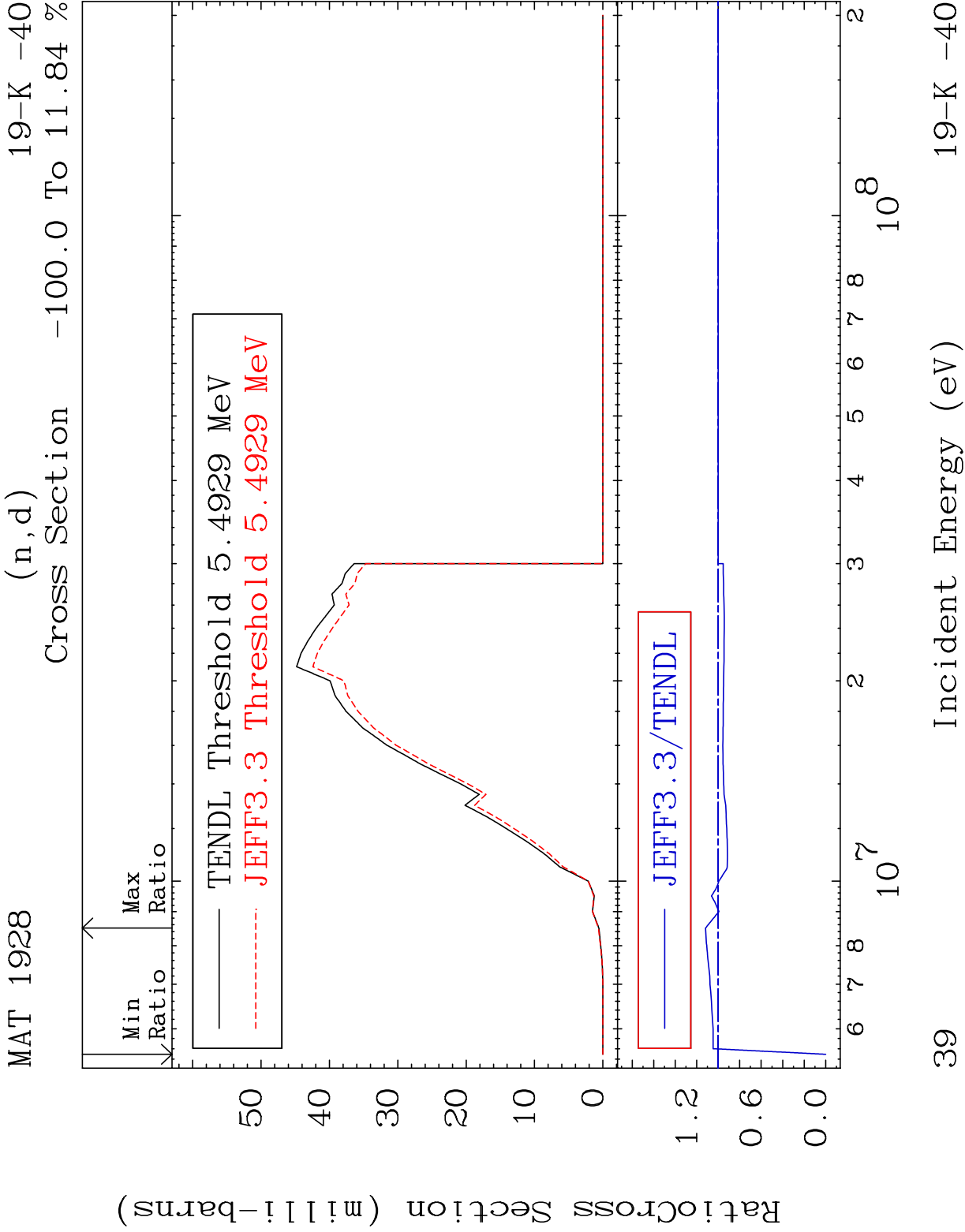
Ratio

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

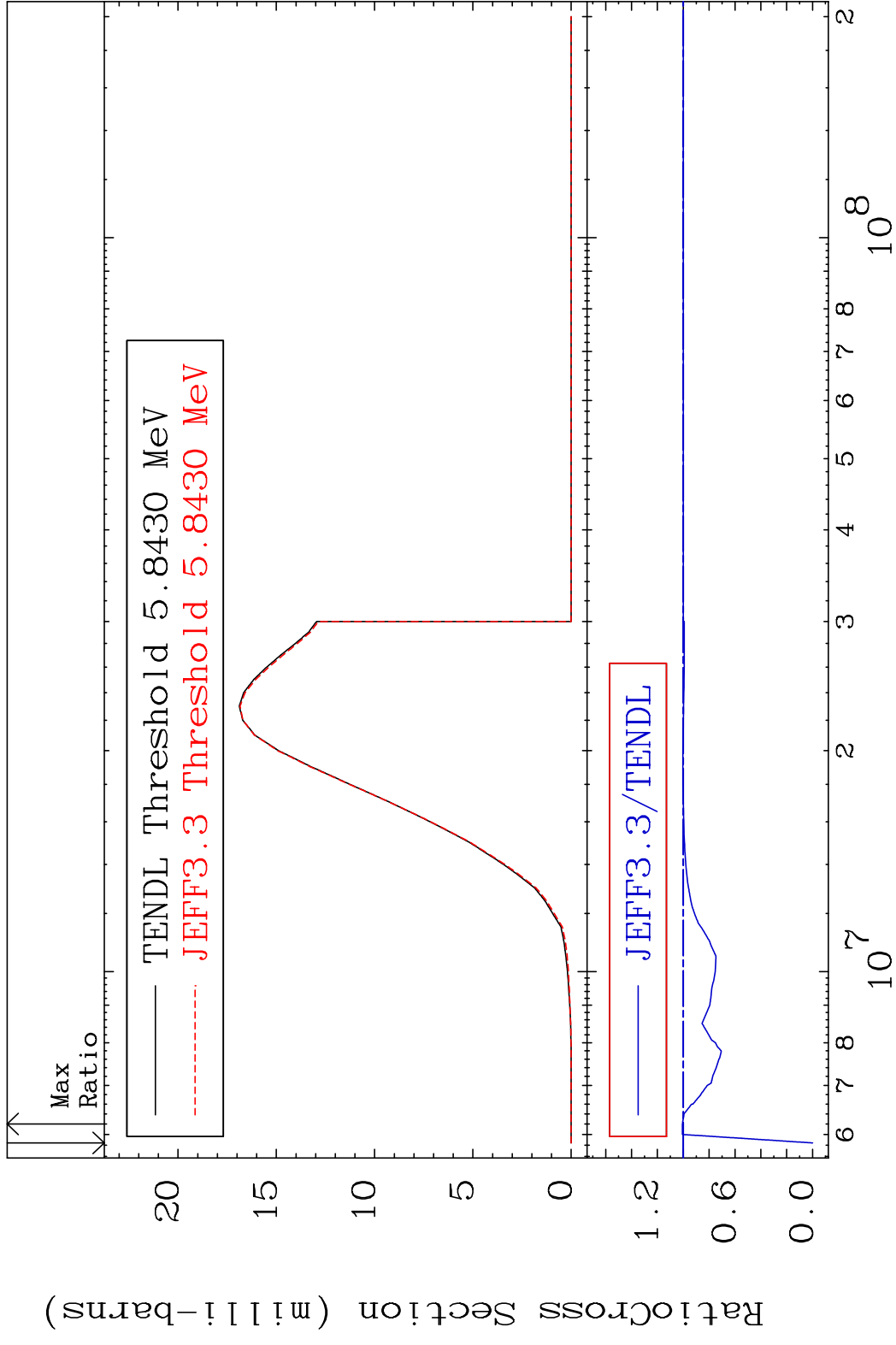
38

Incident Energy (eV)

19-K -40



MAT 1928 (n, t) 19-K -40
 Cross Section -100.0 To 0.702 %



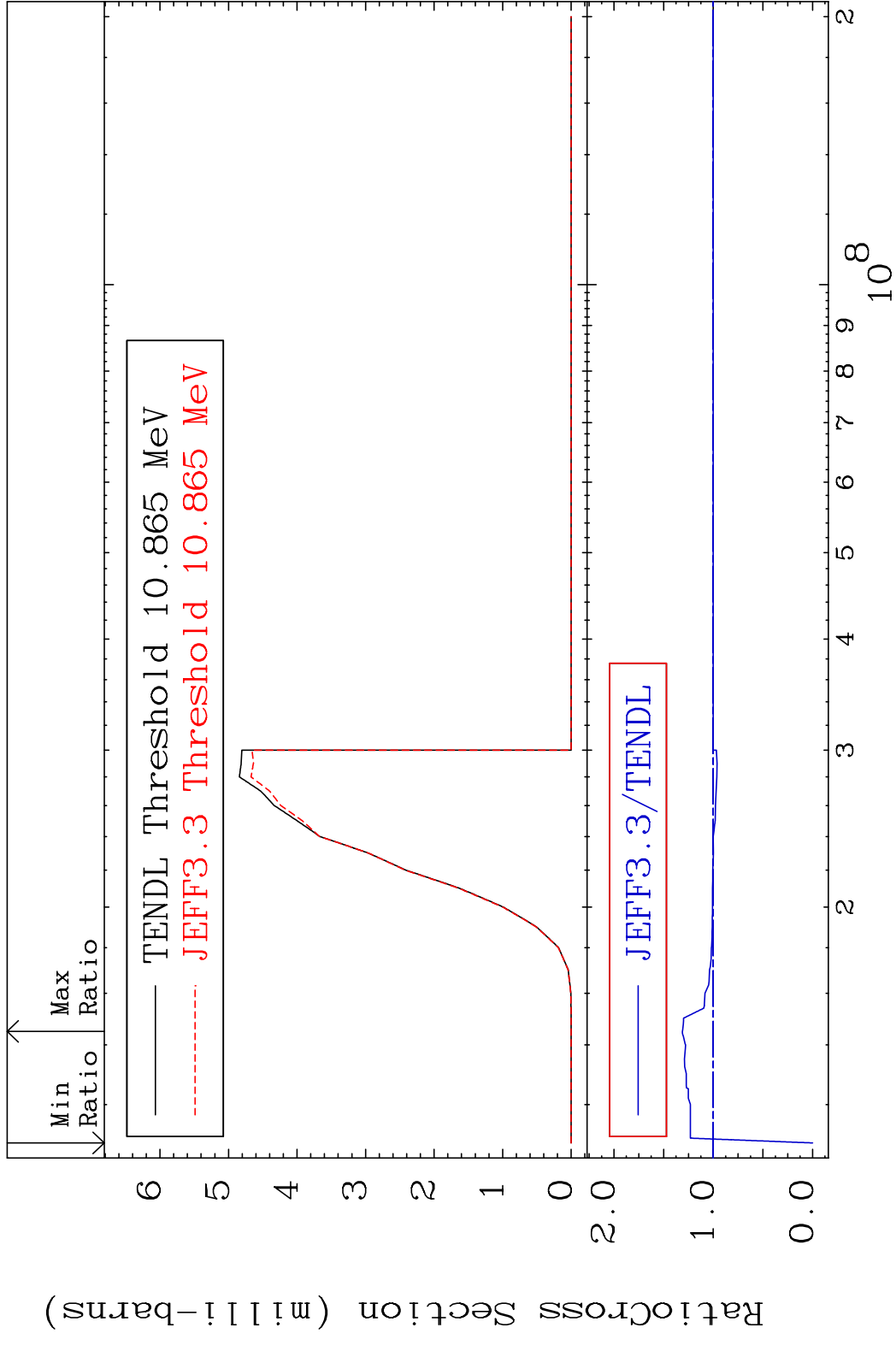
40 Incident Energy (eV) 19-K -40

MAT 1928

(n, He-3)

19-K -40

Cross Section -100.0 To 31.14 %



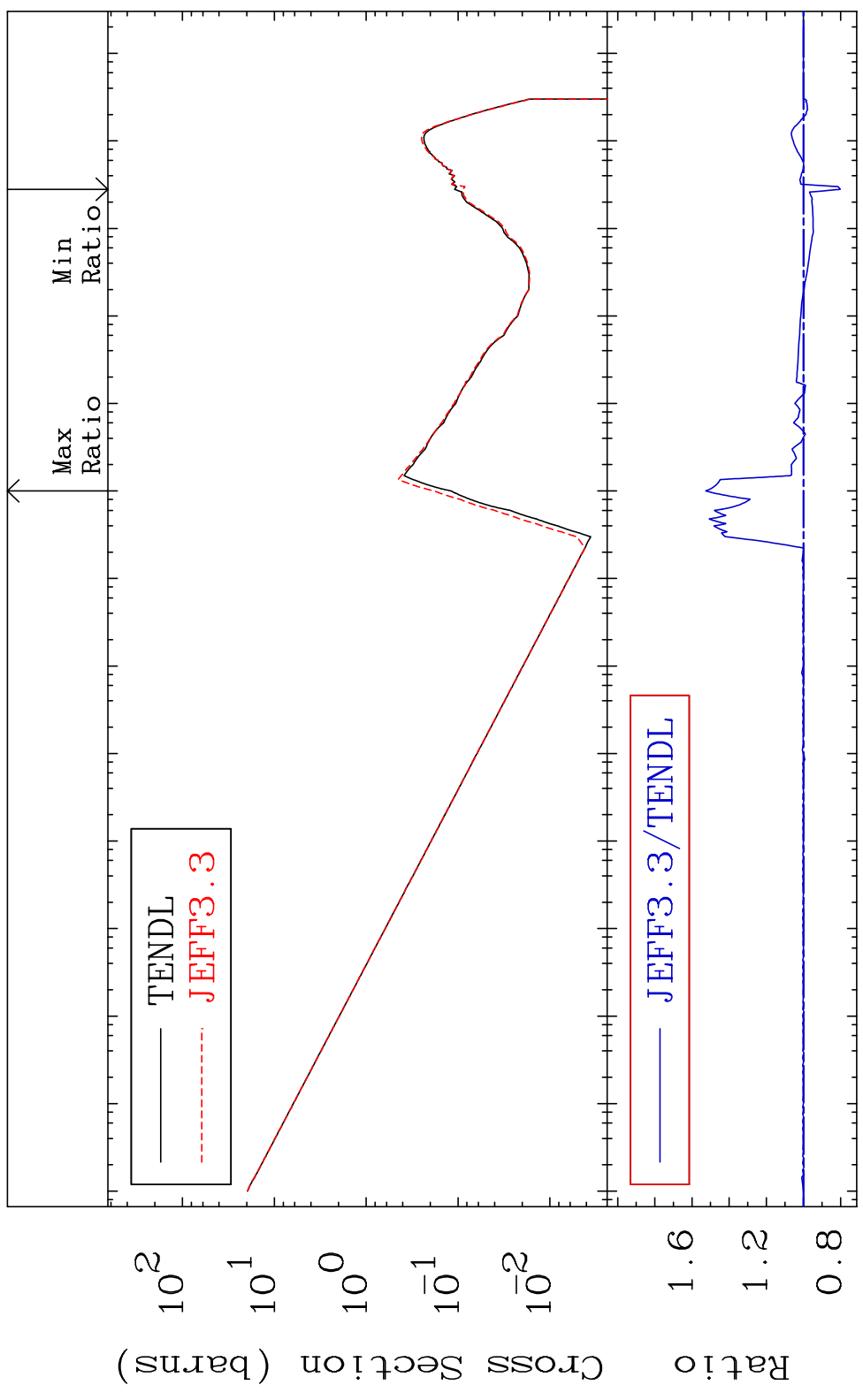
41

19-K -40

MAT 1928

(n, α)

Cross Section 19-K -40
-19.85 To 52.62 %

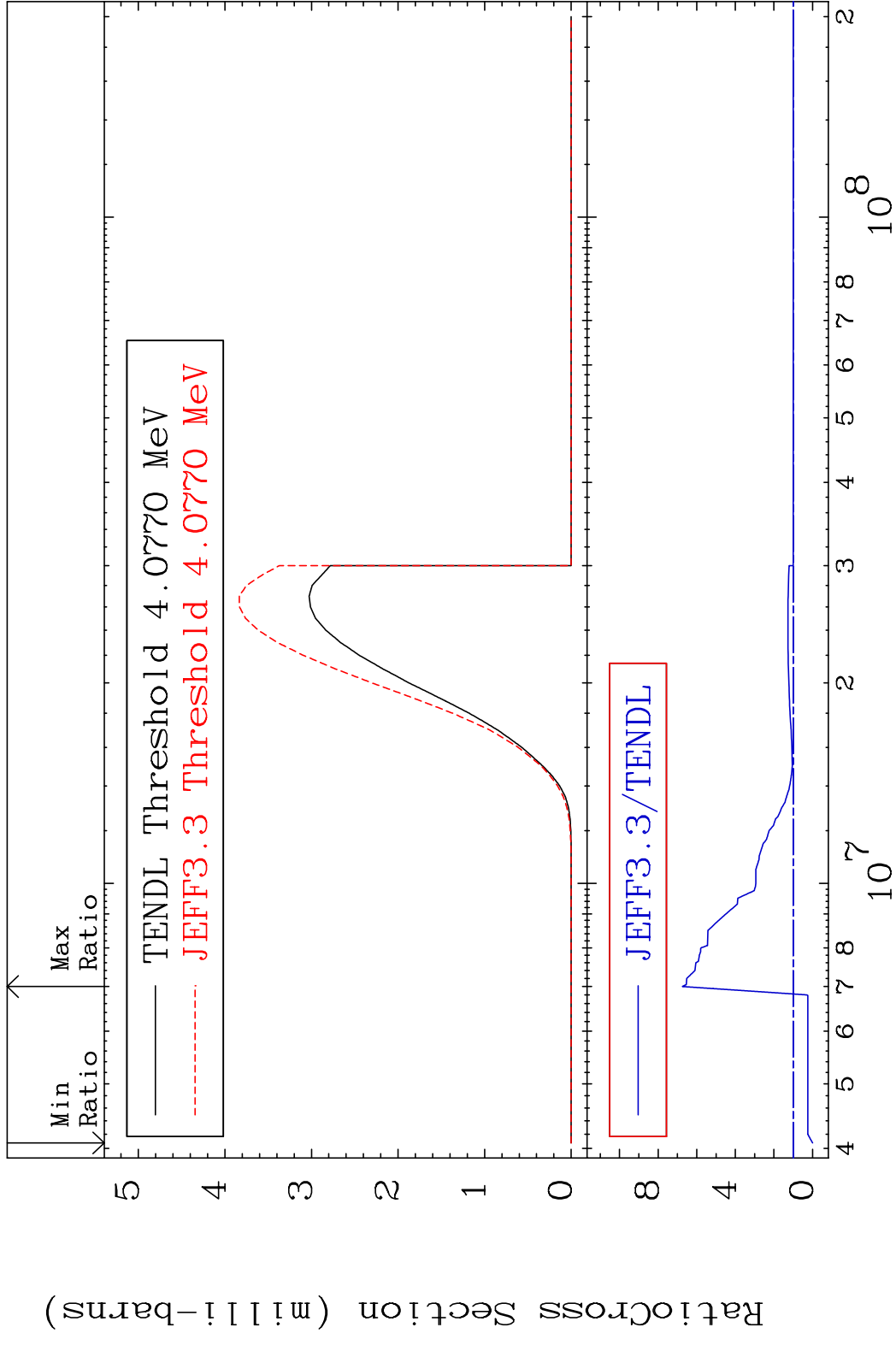


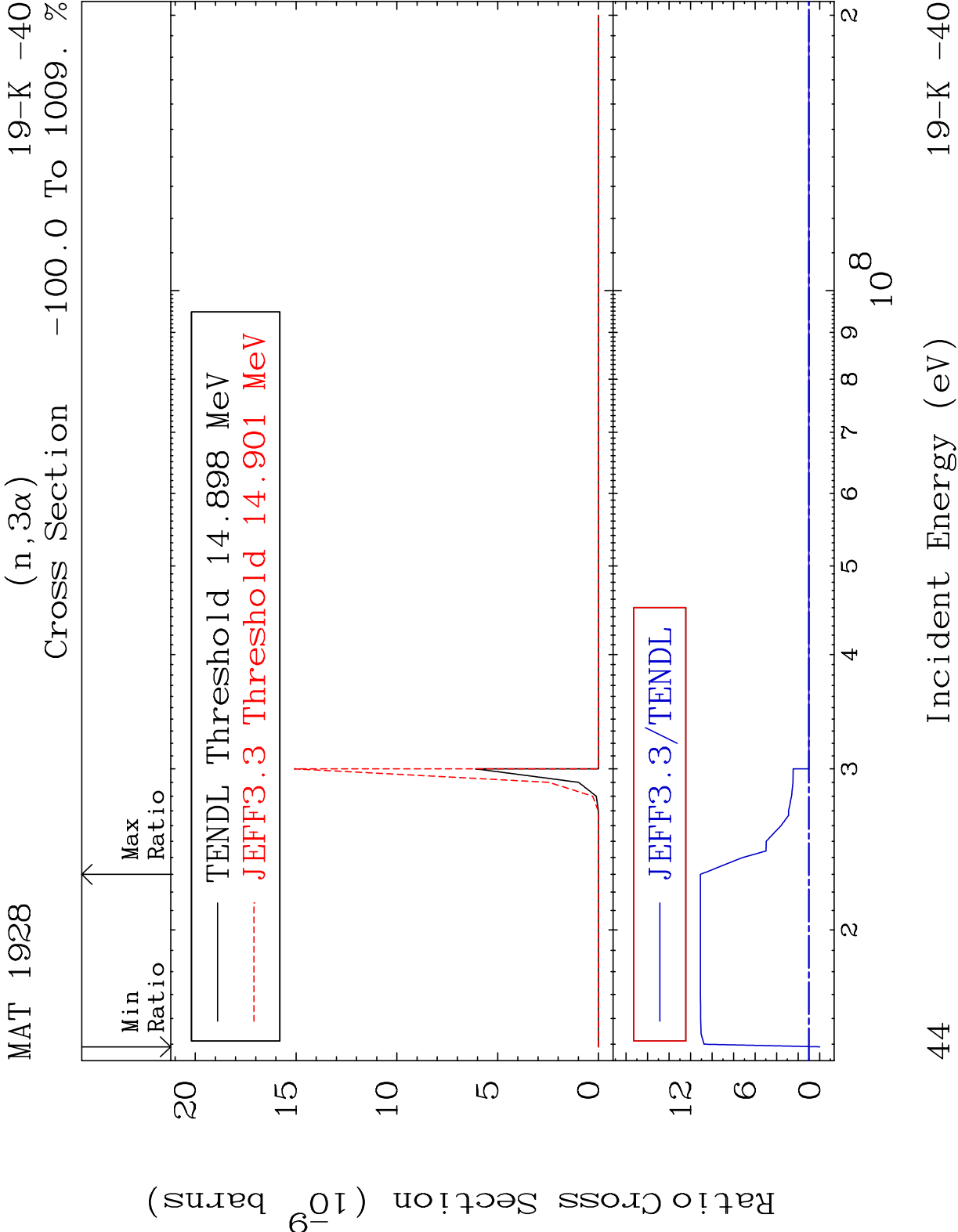
42

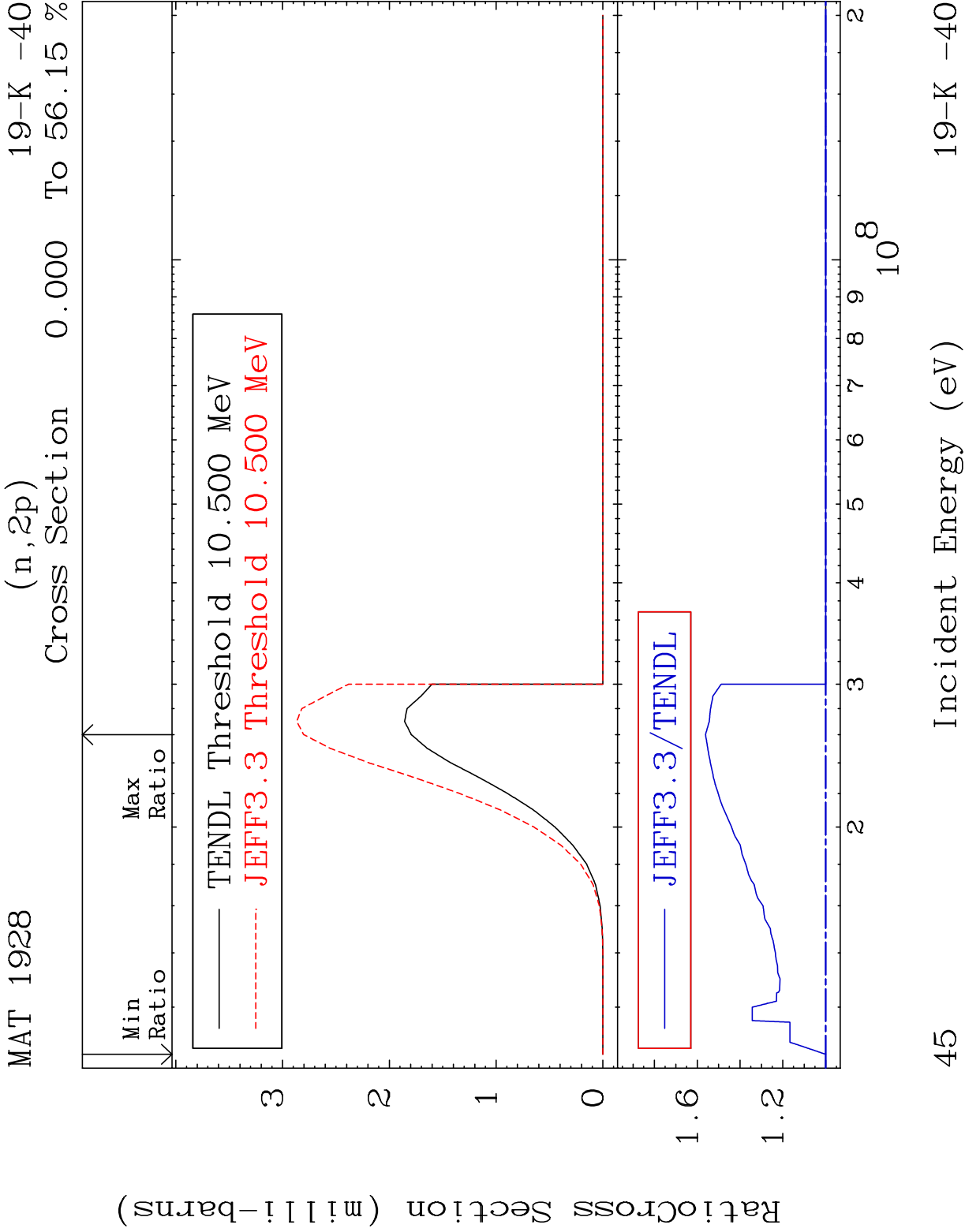
Incident Energy (eV)

19-K -40

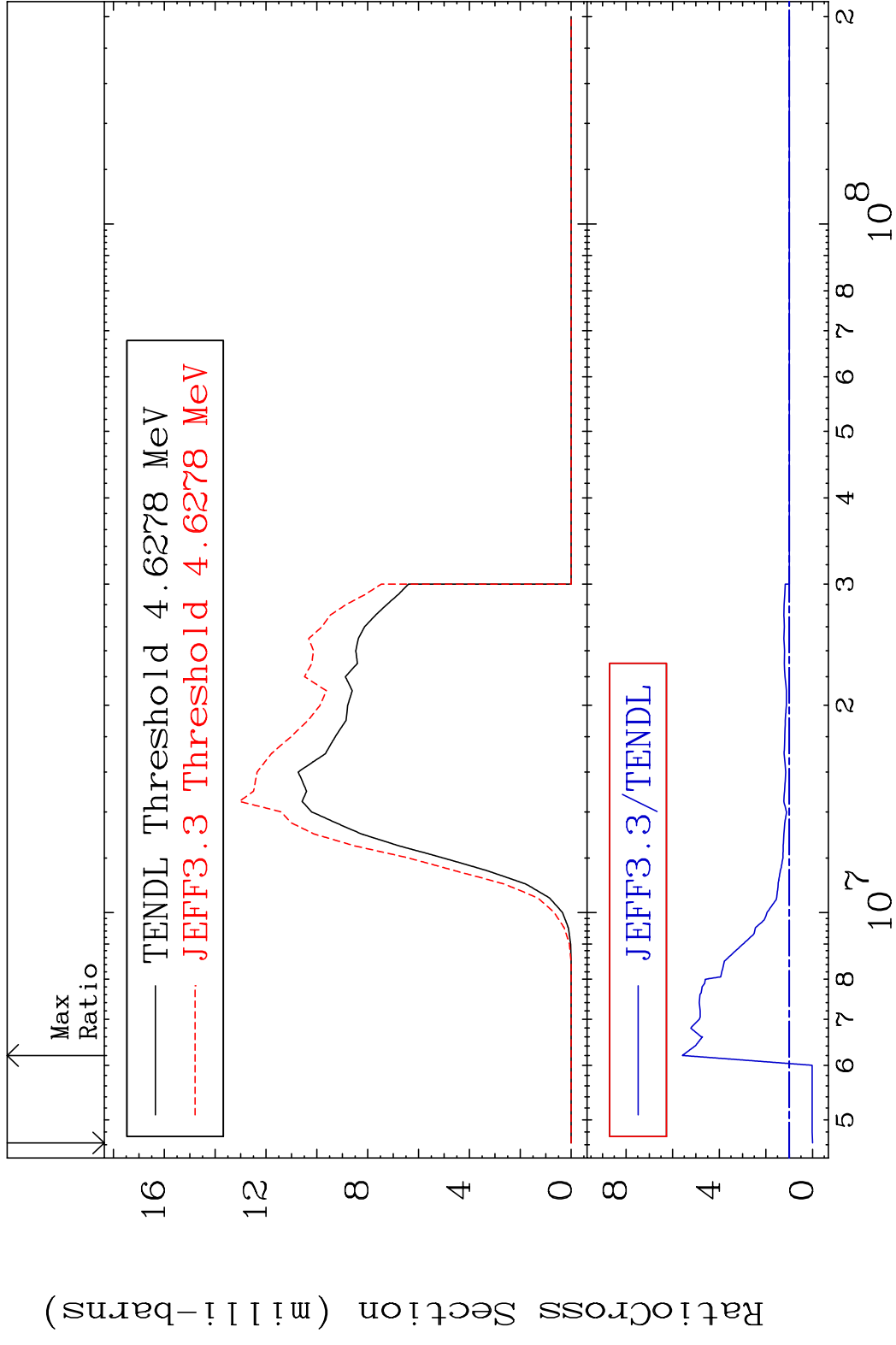
MAT 1928 (n,2α) 19-K -40
 Cross Section -100.0 To 574.5 %



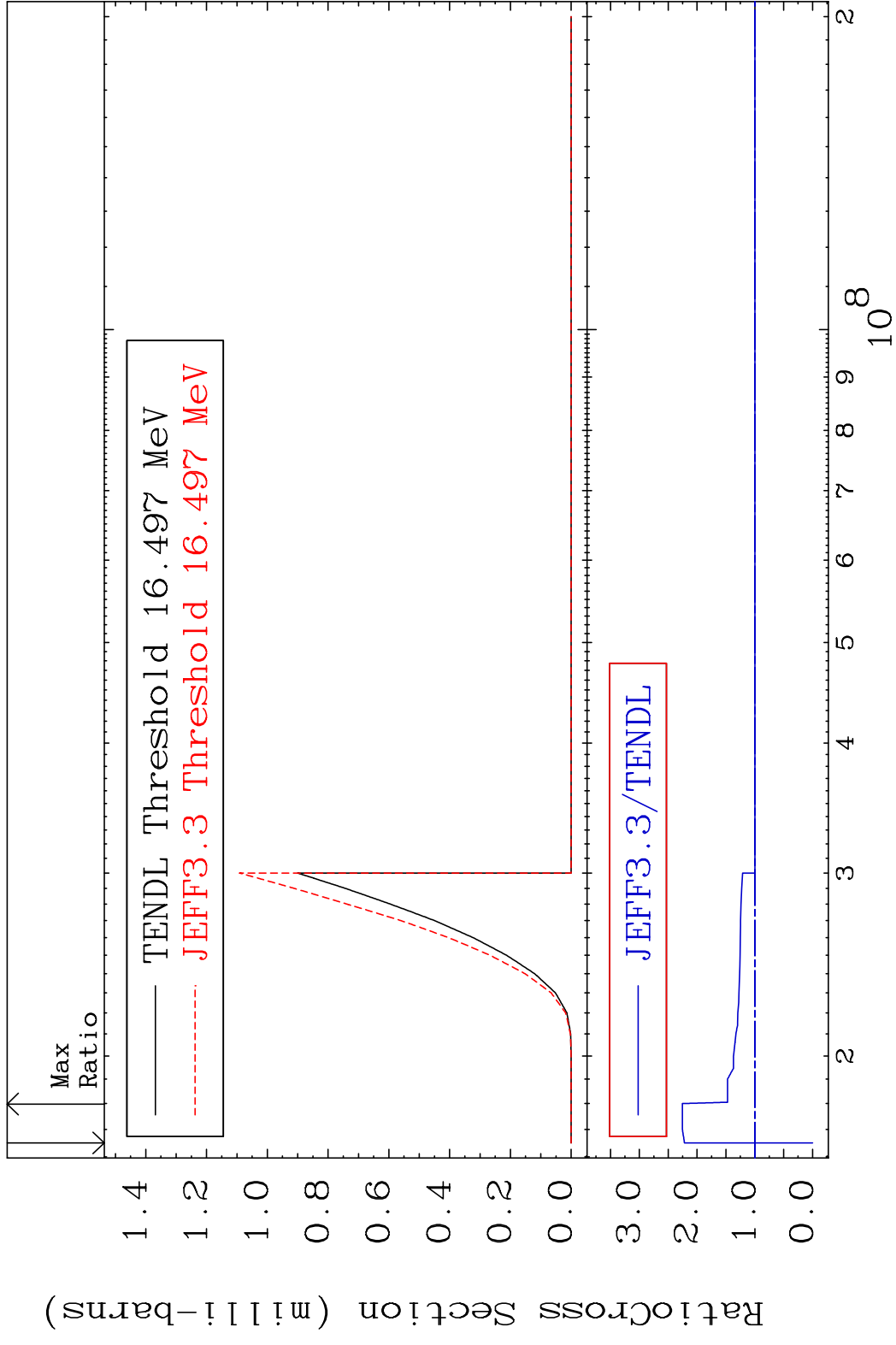




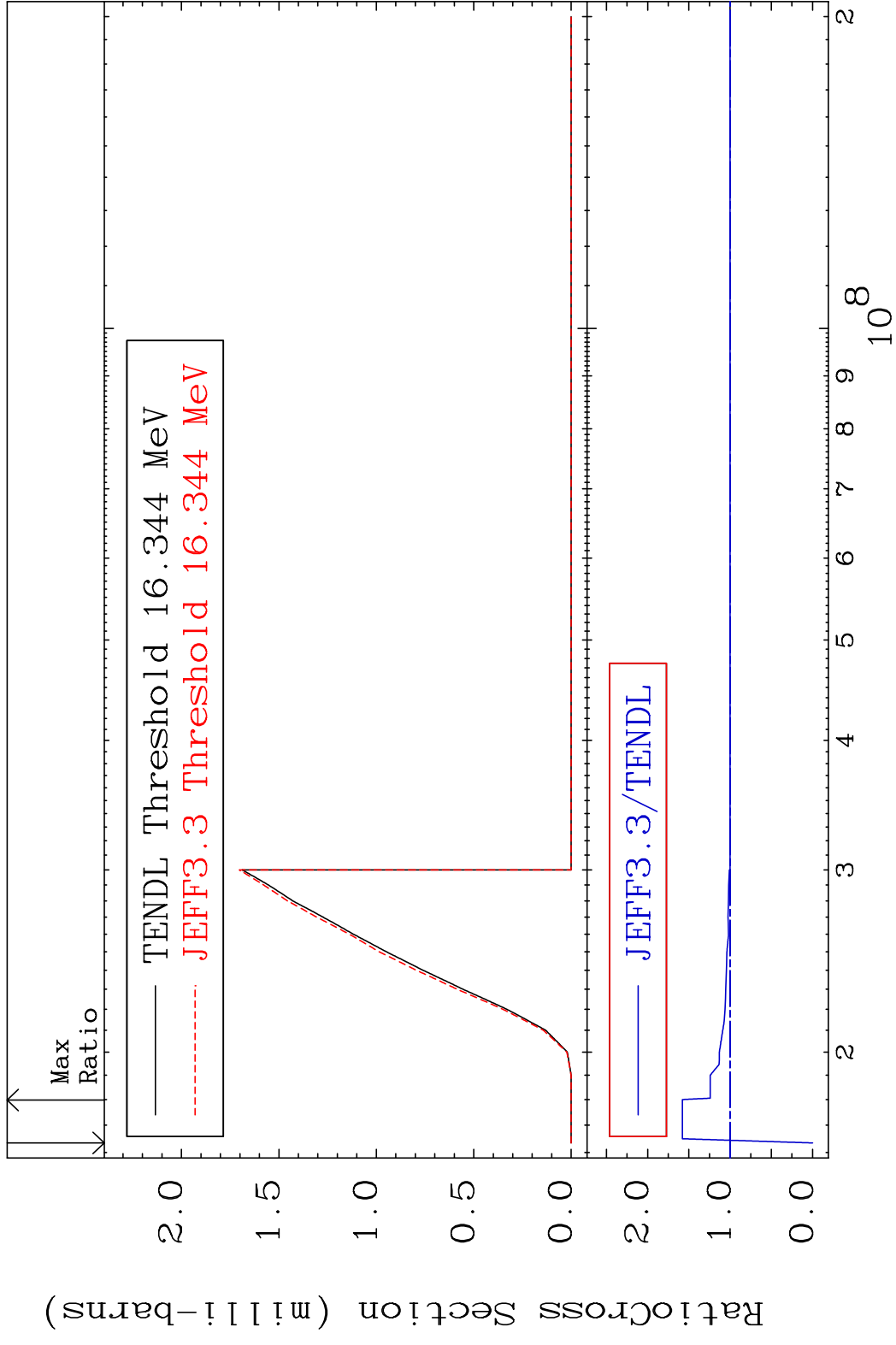
MAT 1928 (n,p) α 19-K -40
 Cross Section -100.0 To 458.2 %



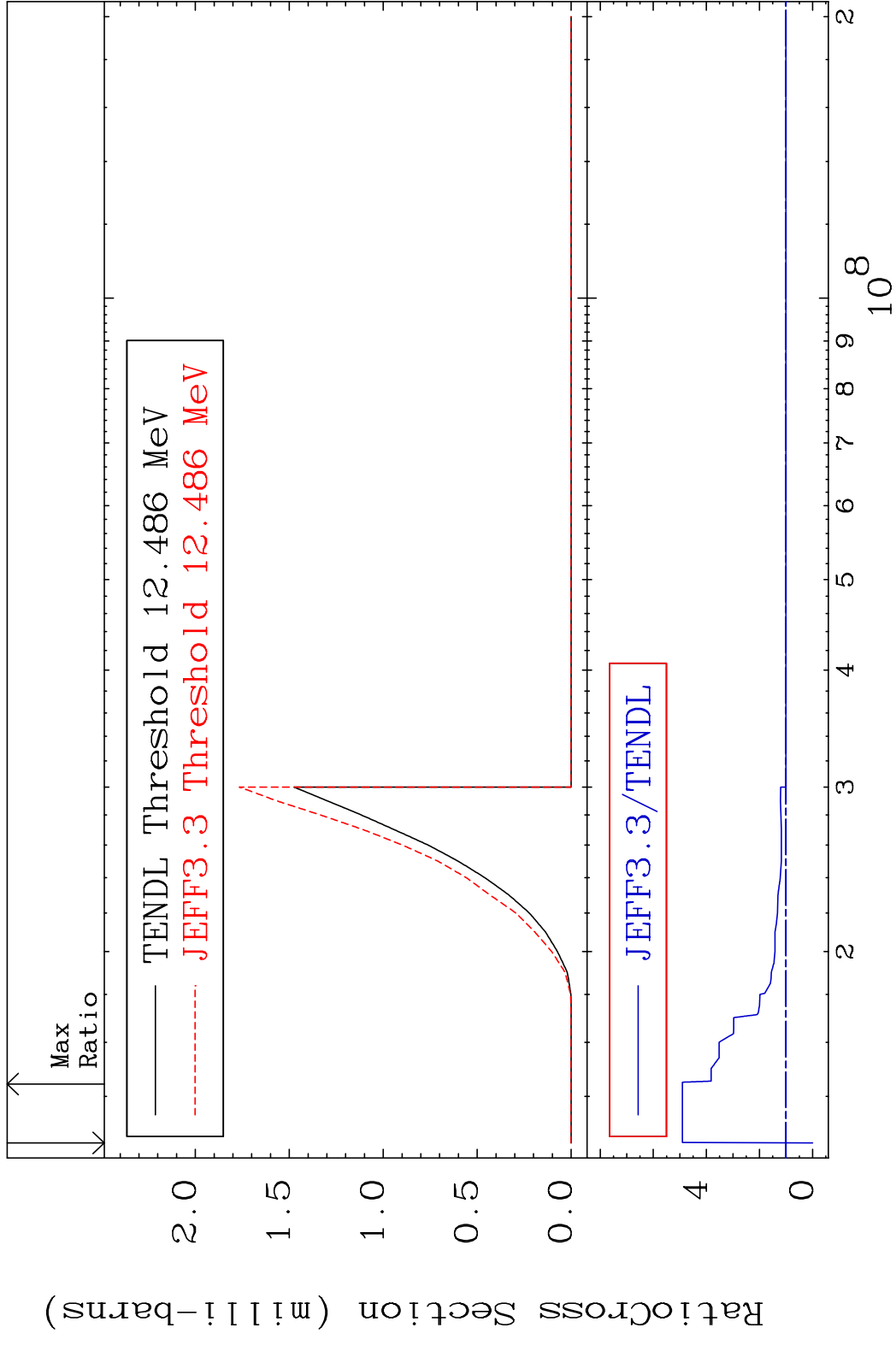
MAT 1928 (n,p) d 19-K -40
 Cross Section -100.0 To 125.5 %



MAT 1928 (n,p) t 19-K -40
 Cross Section -100.0 To 57.89 %



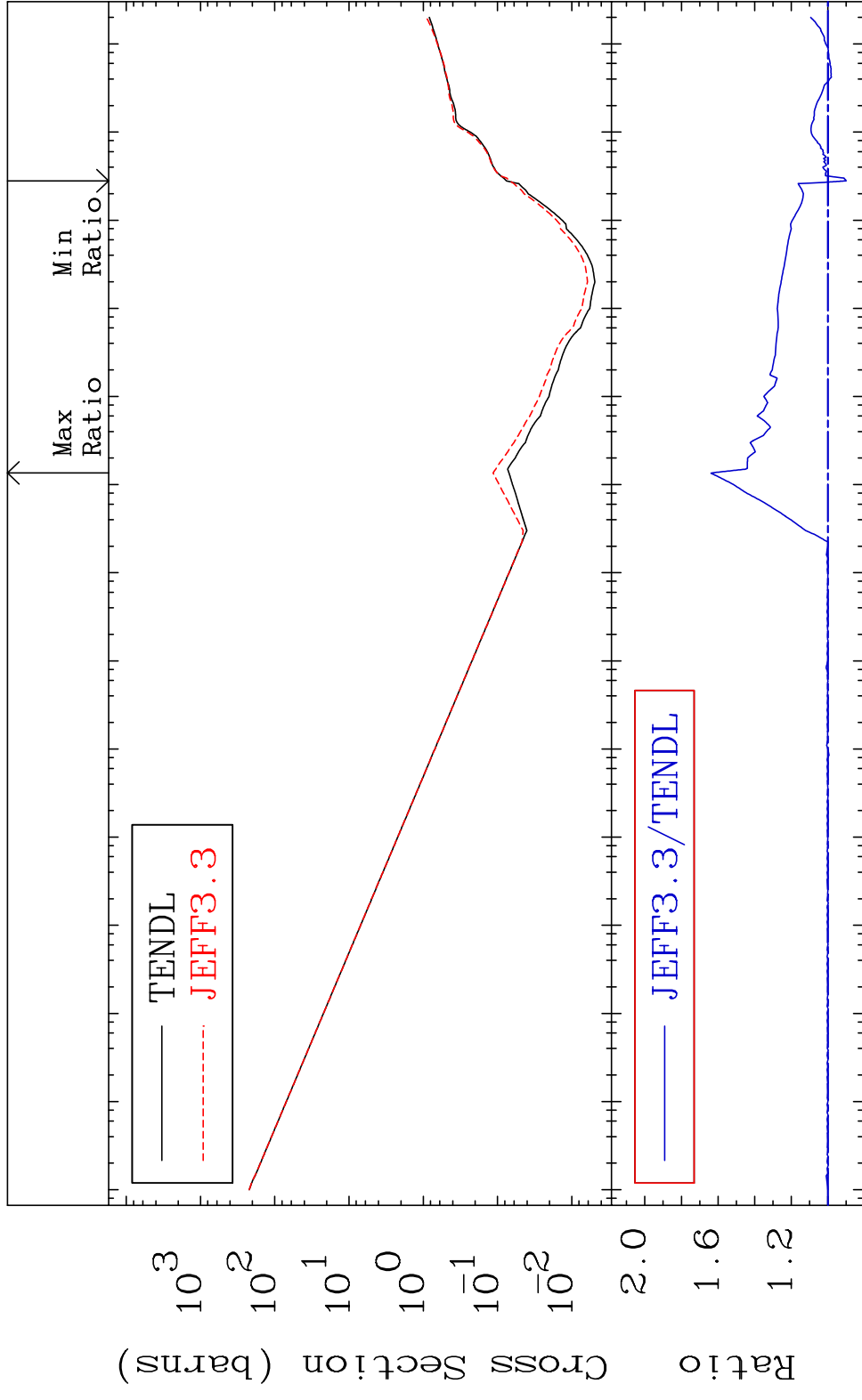
MAT 1928 (n,d) α 19-K -40
 Cross Section -100.0 To 390.6 %



MAT 1928

Hydrogen Production
Cross Section -10.06 To 64.01 %

19-K -40

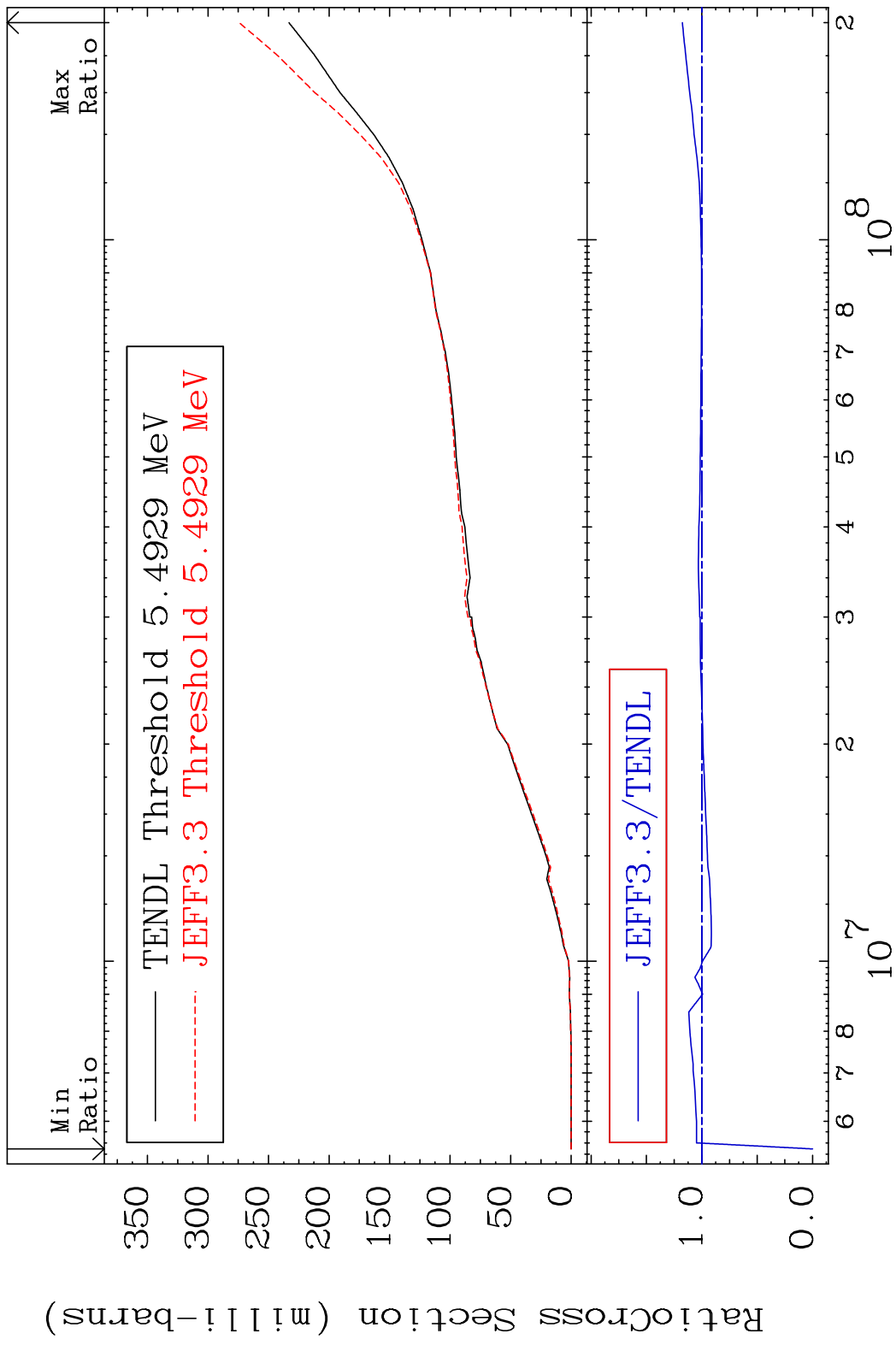


50

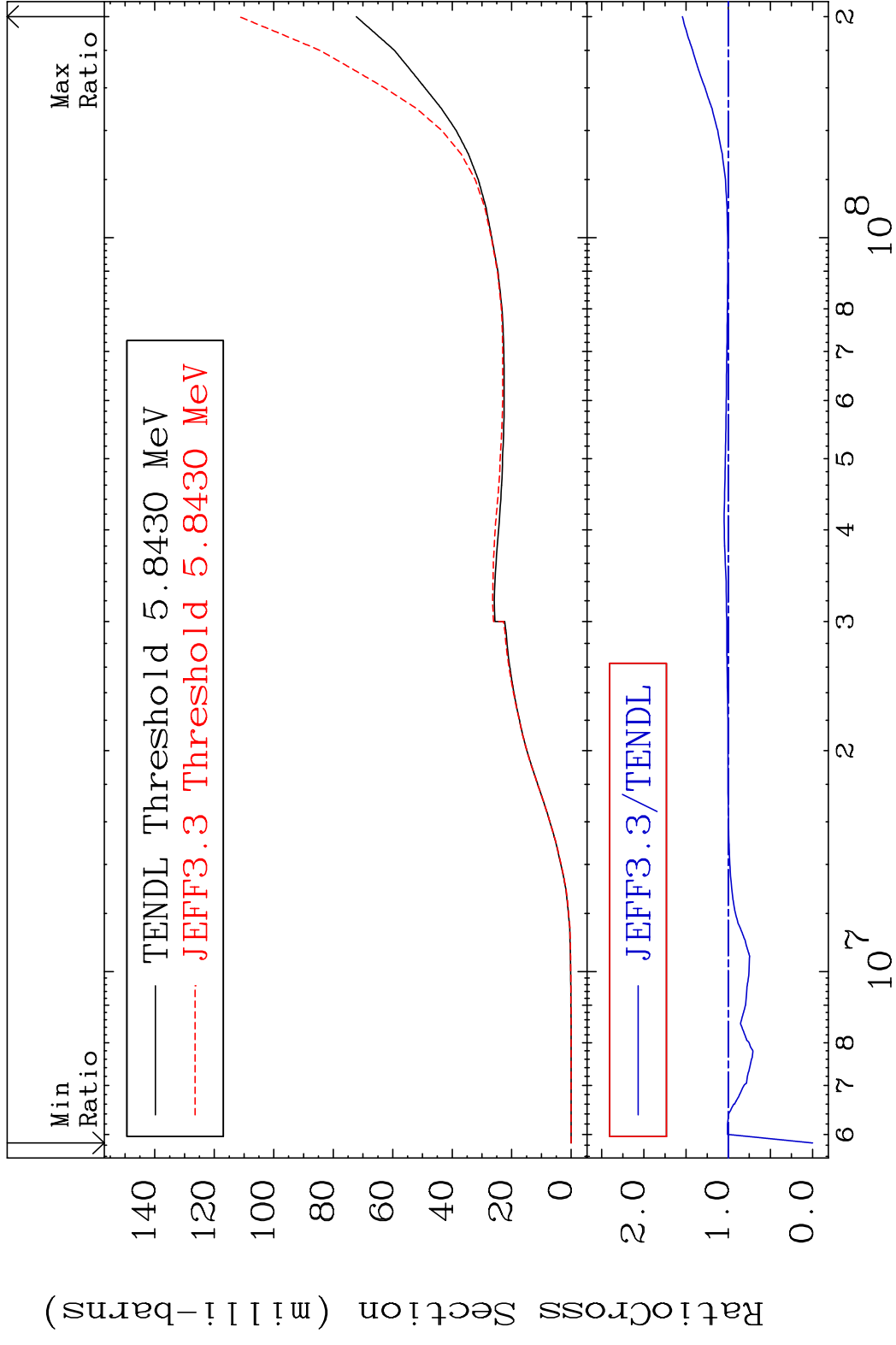
Incident Energy (eV)

19-K -40

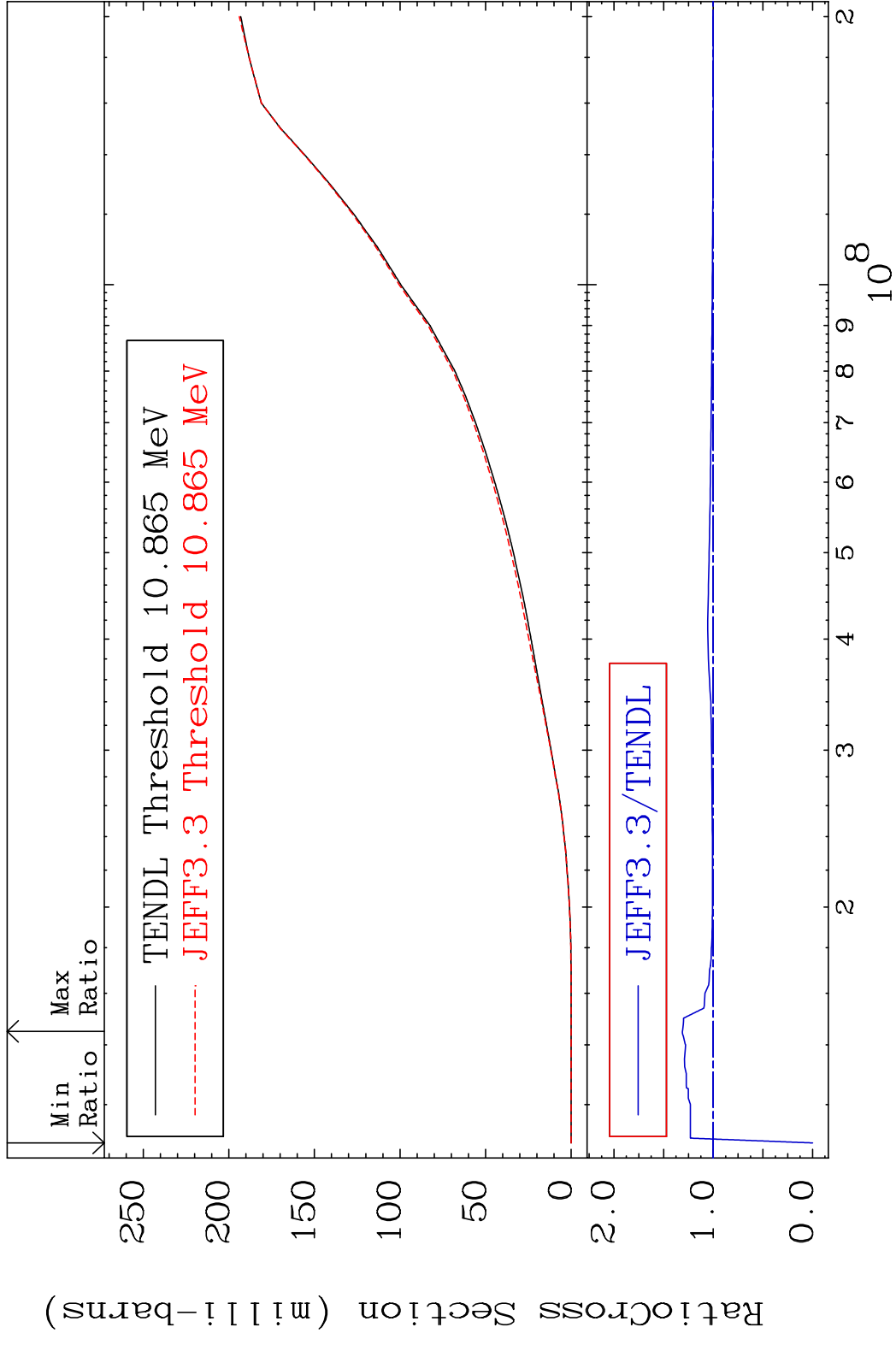
MAT 1928 Deuterium Production 19-K -40
 Cross Section -100.0 To 17.58 %



MAT 1928 Tritium Production 19-K -40
 Cross Section -100.0 To 54.38 %



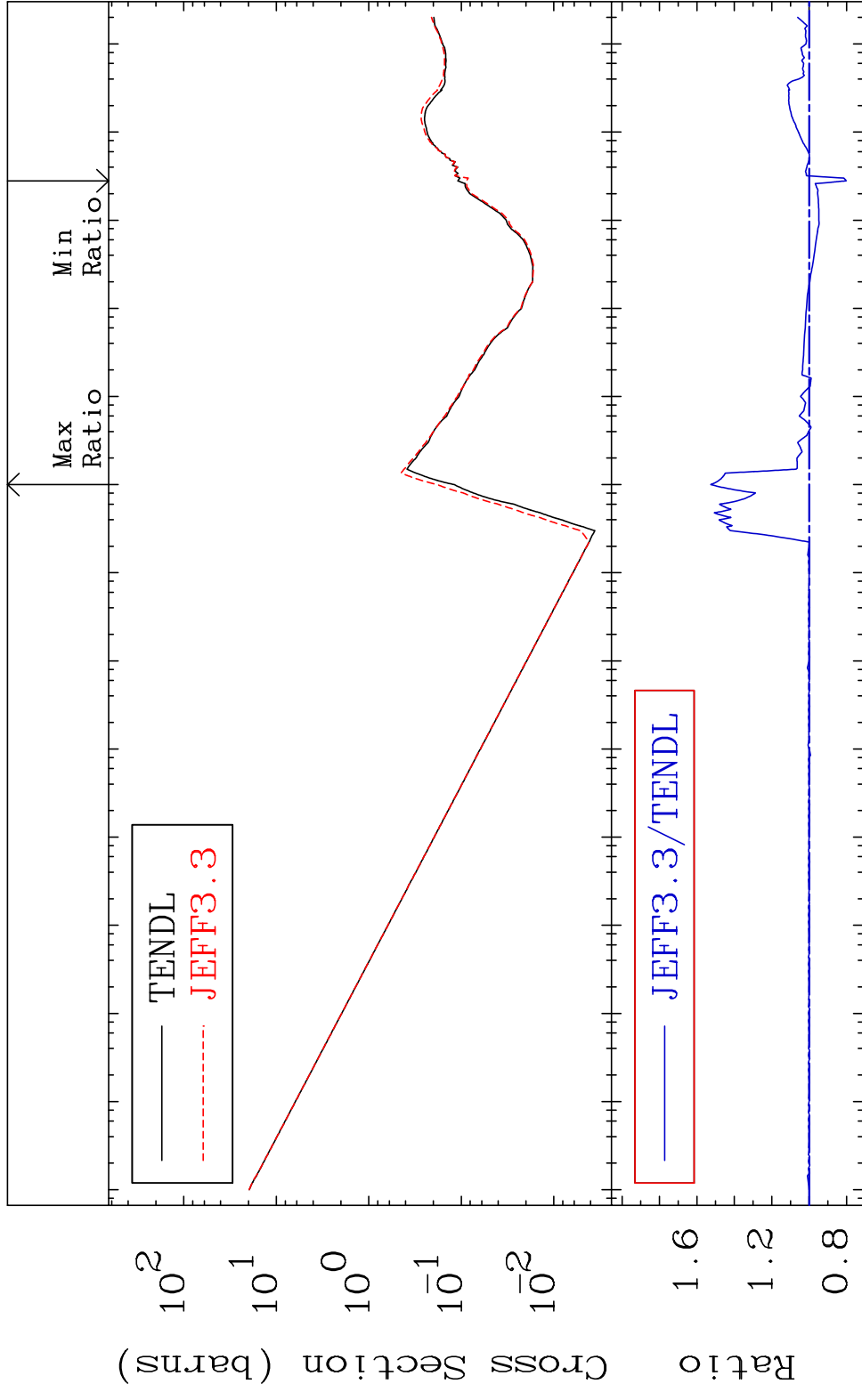
MAT 1928 He-3 Production 19-K -40
 Cross Section -100.0 To 31.14 %



MAT 1928

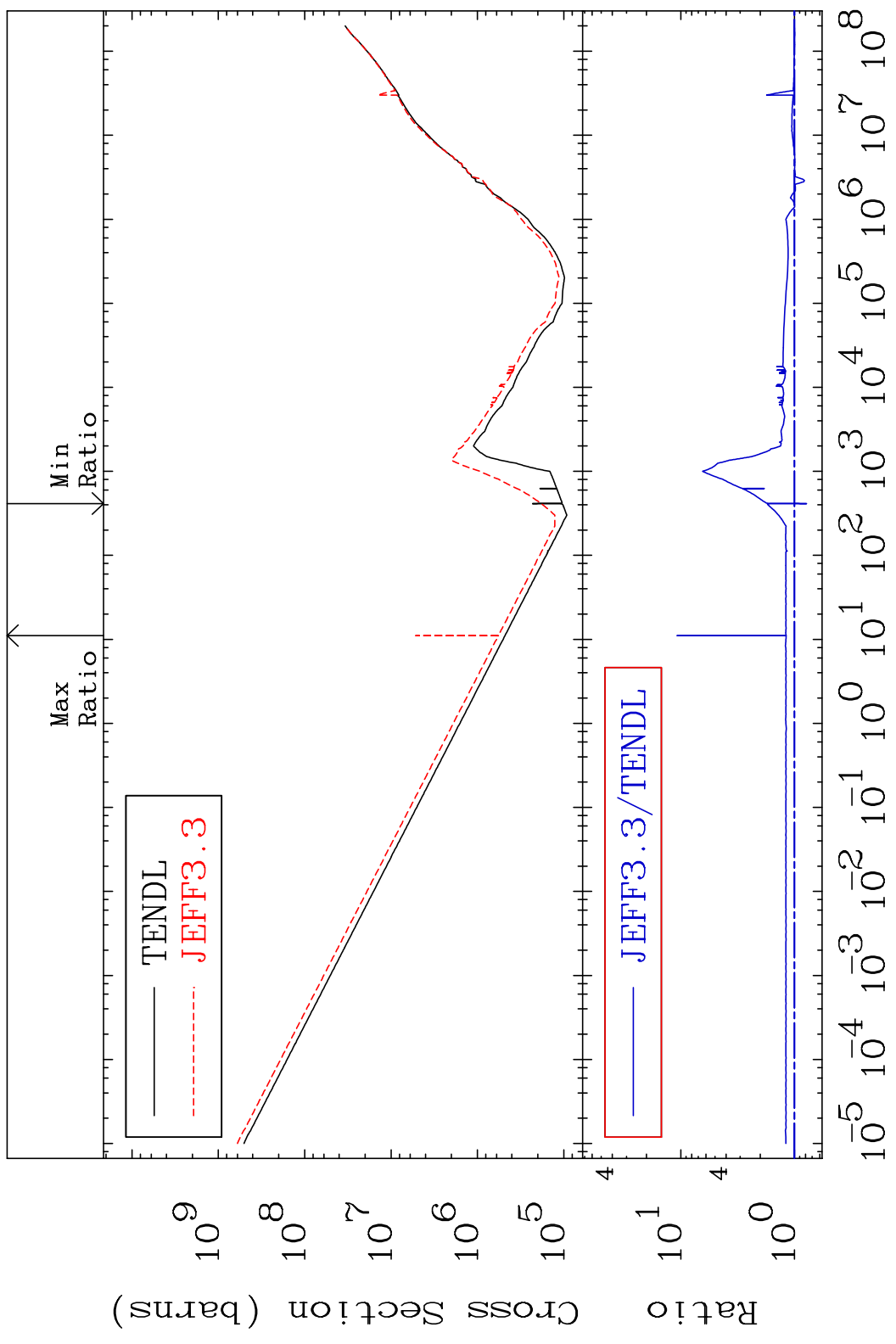
He-4 Production
Cross Section -19.85 To 52.62 %

19-K -40



MAT 1928

Kerma total (eV-barns) 19-K -40
Cross Section -21.35 To 974.6 %



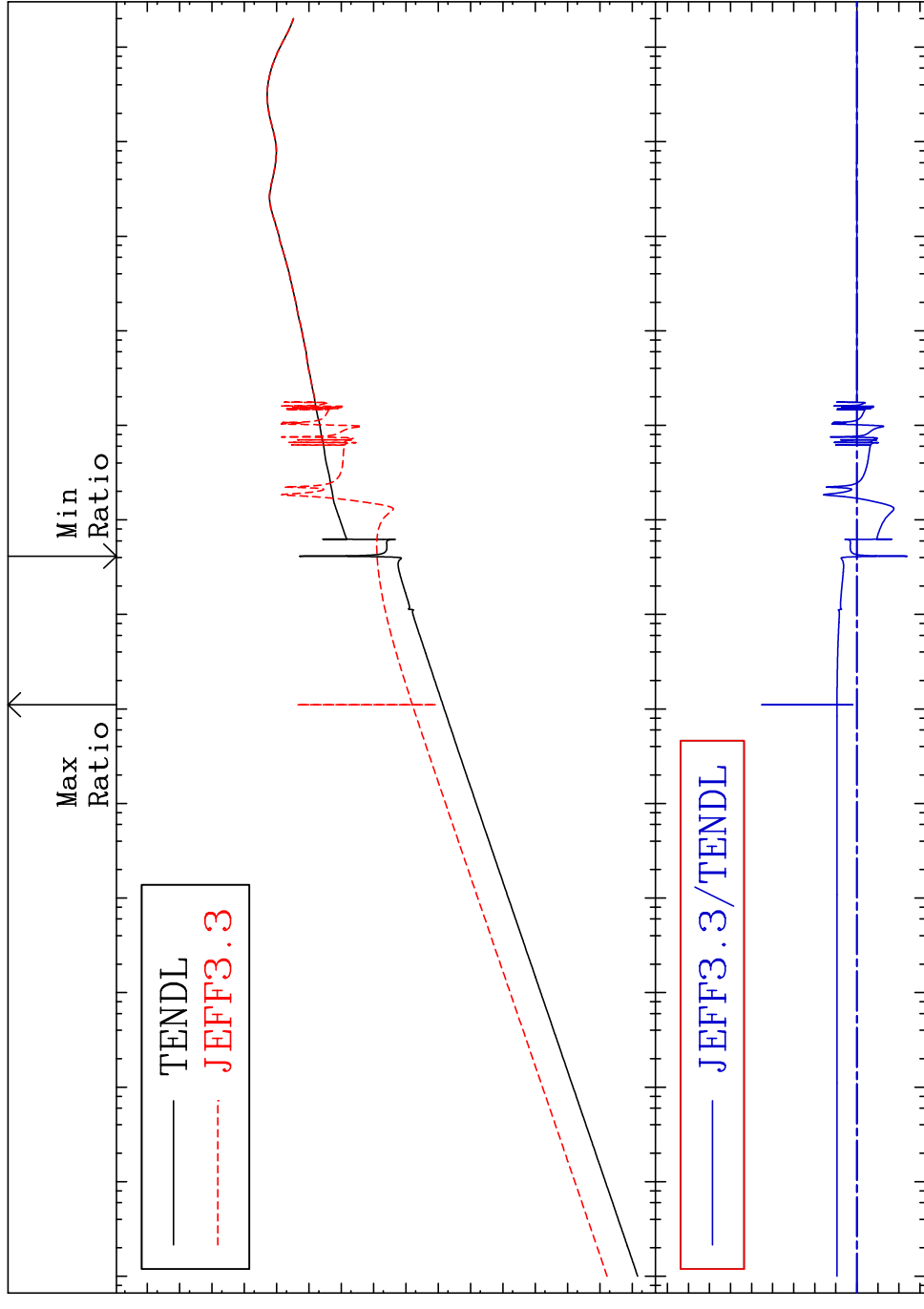
55

Incident Energy (eV) 19-K -40

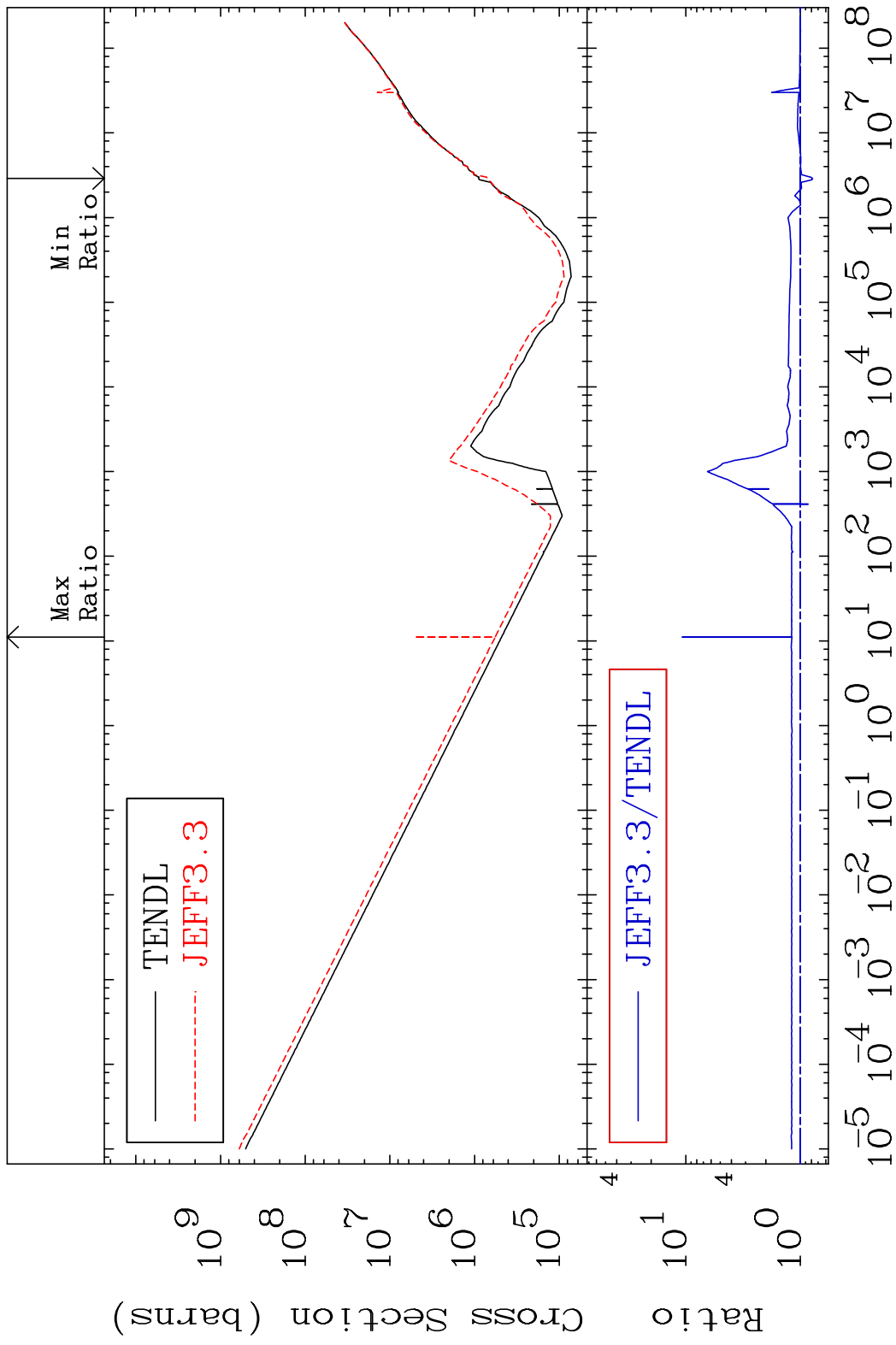
MAT 1928

Kerma elastic Cross Section -99.60 To 9999. %

19-K -40

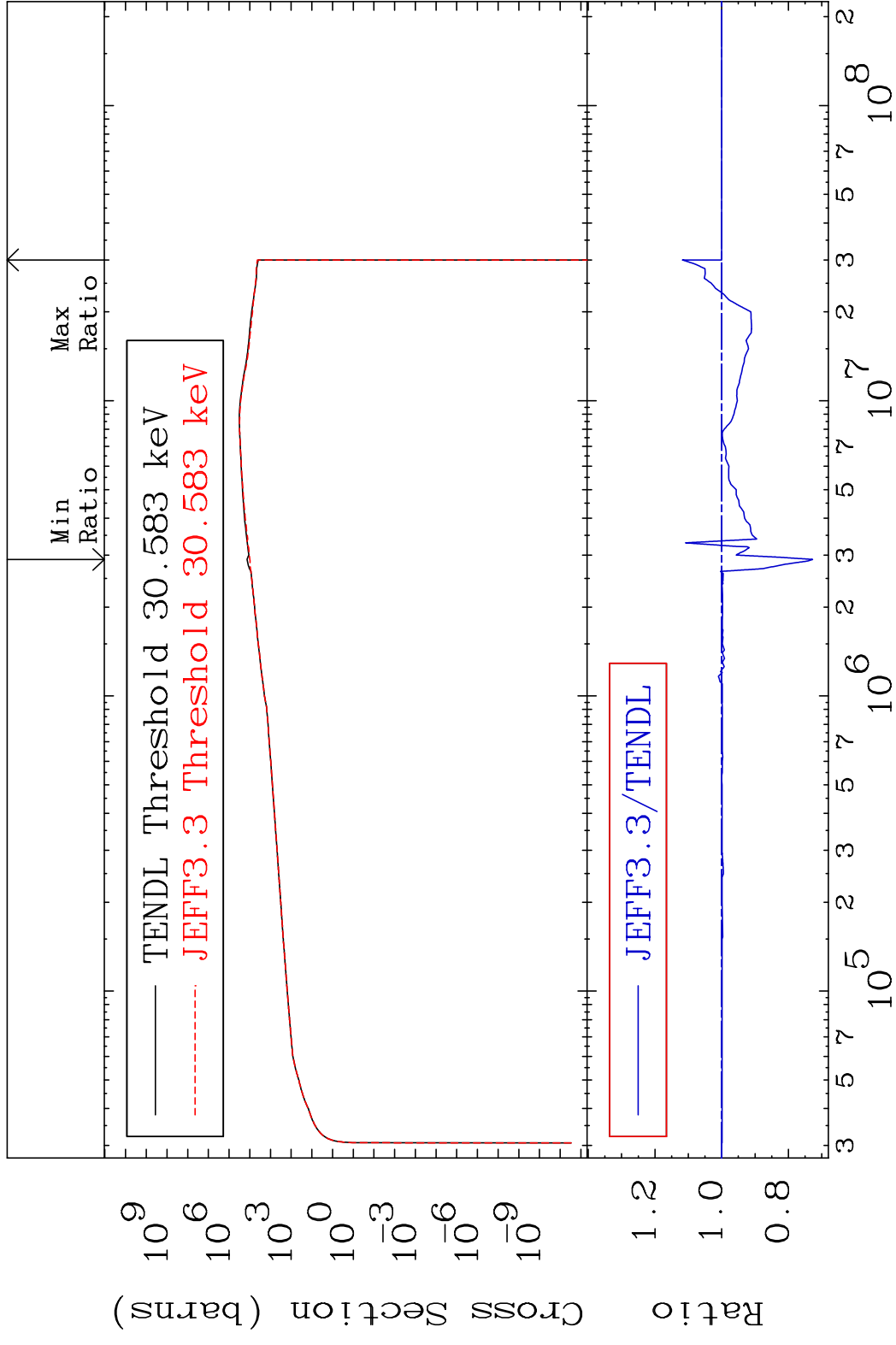


MAT 1928 Kerma non-elastic (all but mt2) 19-K -40
 Cross Section -21.74 To 969.7 %

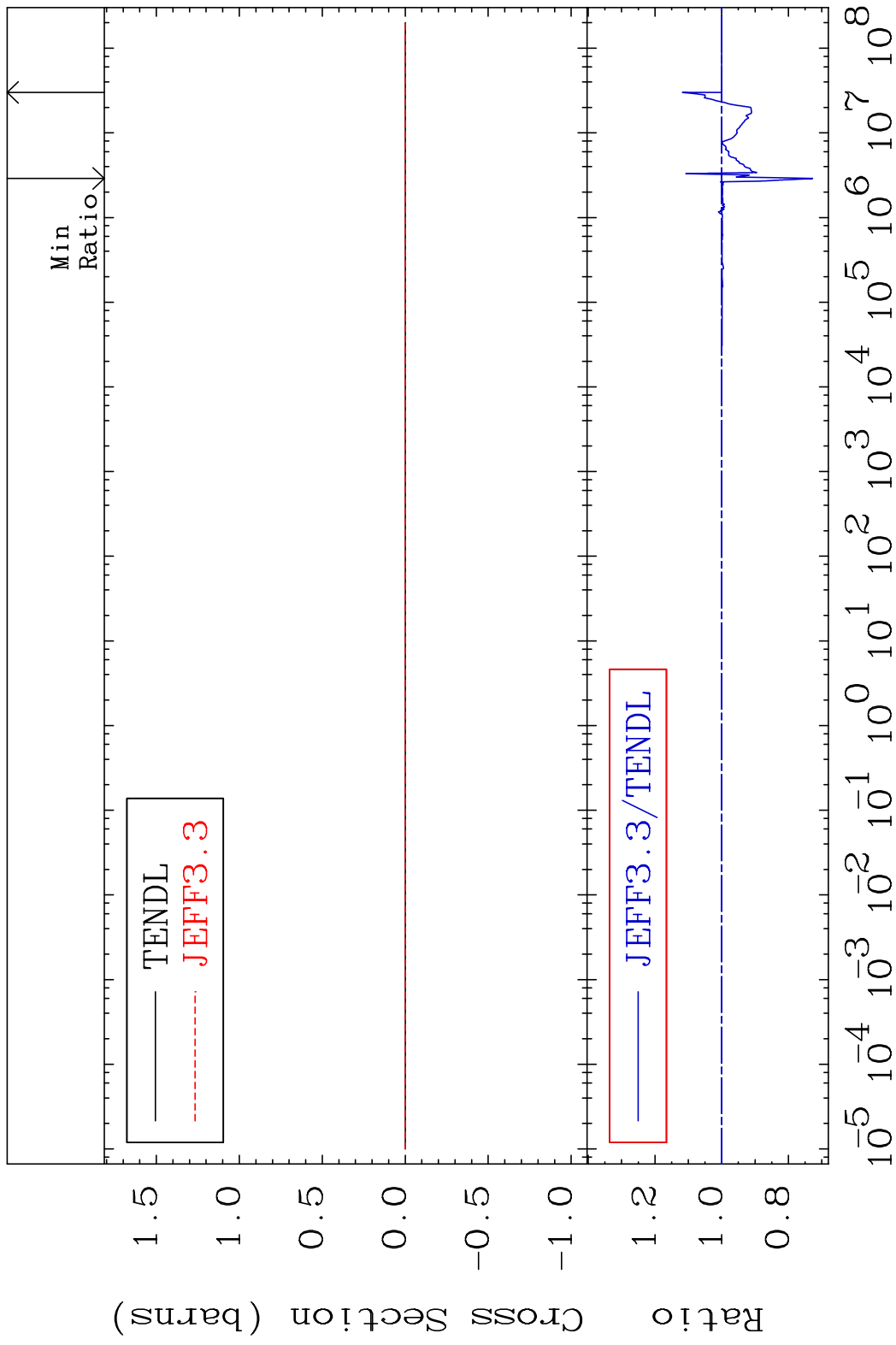


57 Incident Energy (eV) 19-K -40

MAT 1928 Kerma inelastic (mt51-91) 19-K -40
 Cross Section -27.23 To 11.79 %

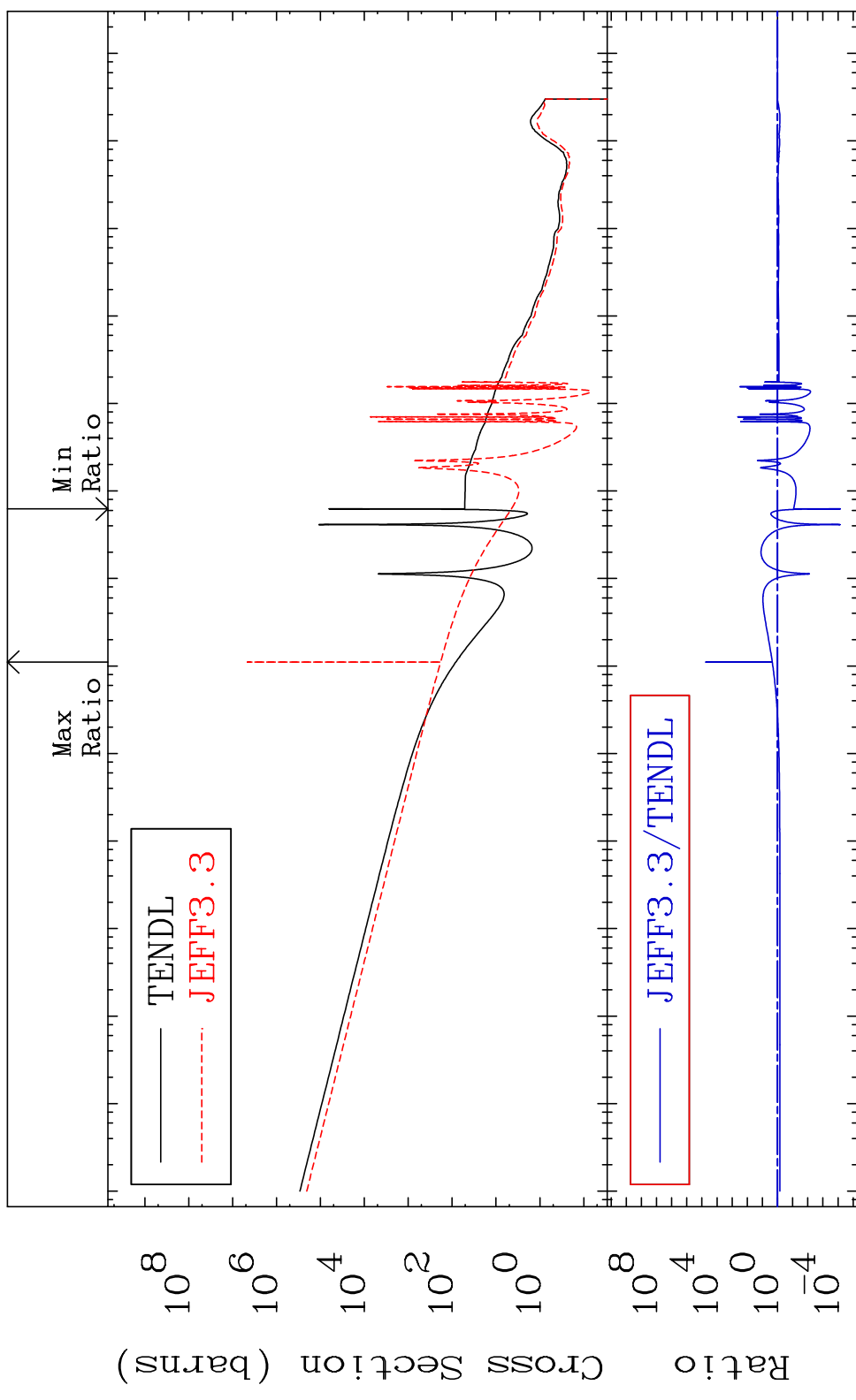


MAT 1928 Kerma fission (mt18 or mt19-20-21-38) 19-K -40
 Cross Section -27.23 To 11.79 %



MAT 1928

Kerma capture (mt102) 19-K -40
Cross Section -99.99 To 9999. %

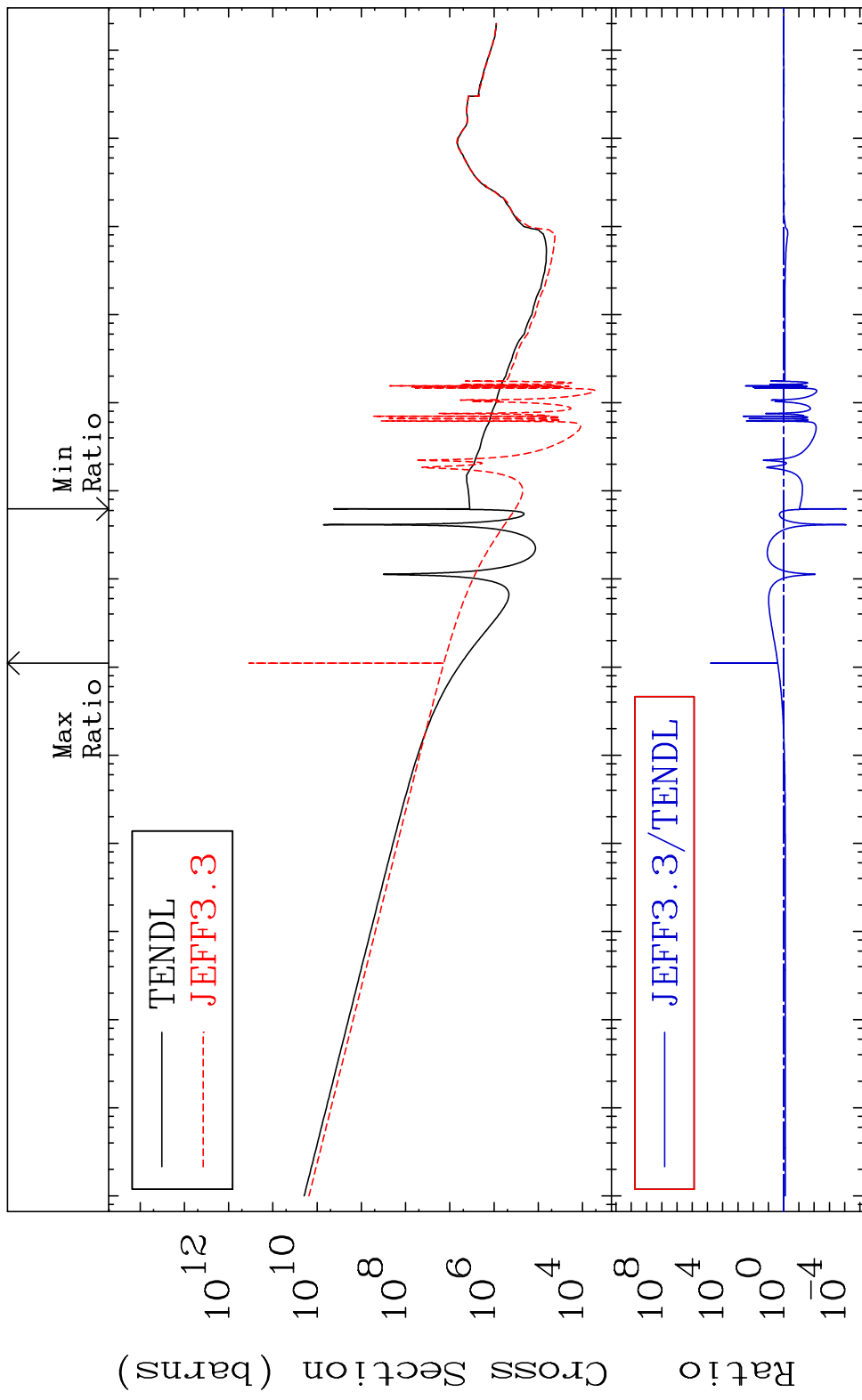


60

Incident Energy (eV)

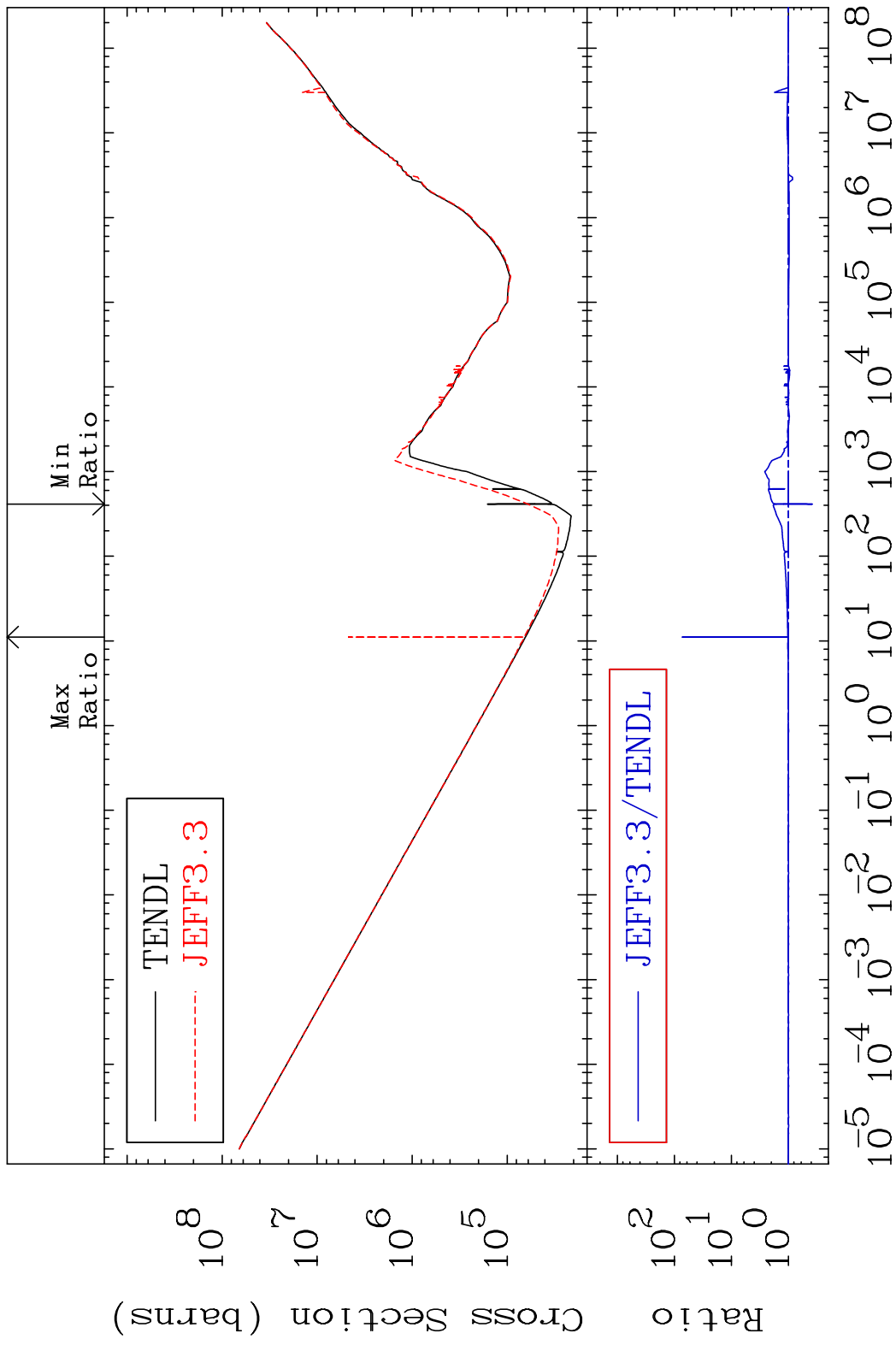
19-K -40

MAT 1928 Total photon (eV-barns) 19-K -40
 Cross Section -99.99 To 9999. %



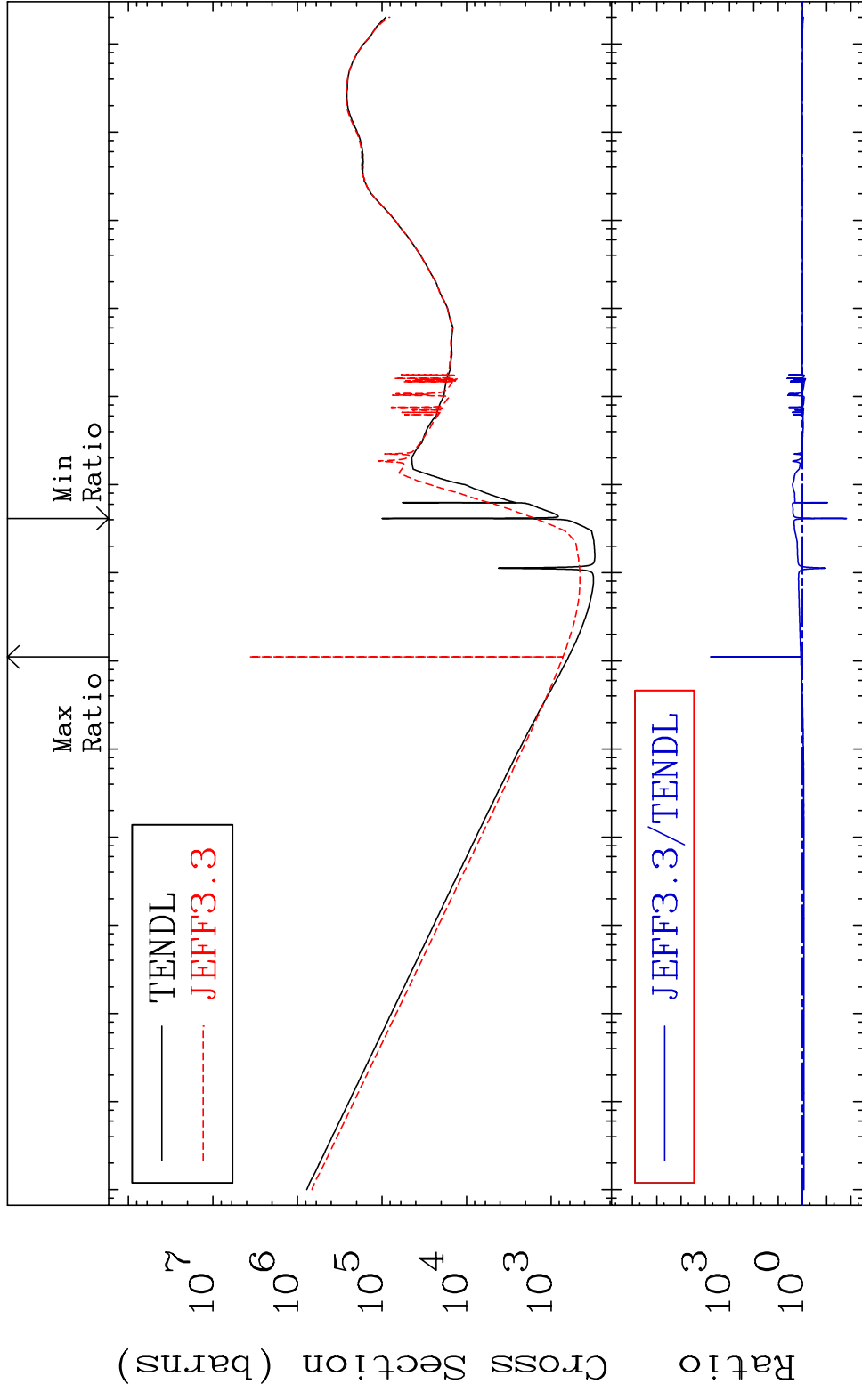
61 Incident Energy (eV) 19-K -40

MAT 1928 Total kinematic kerma (high limit) 19-K -40
 Cross Section -62.17 To 7138. %



62 Incident Energy (eV) 19-K -40

MAT 1928 Dpa total (eV-barns) 19-K -40
 Cross Section -98.44 To 9999. %



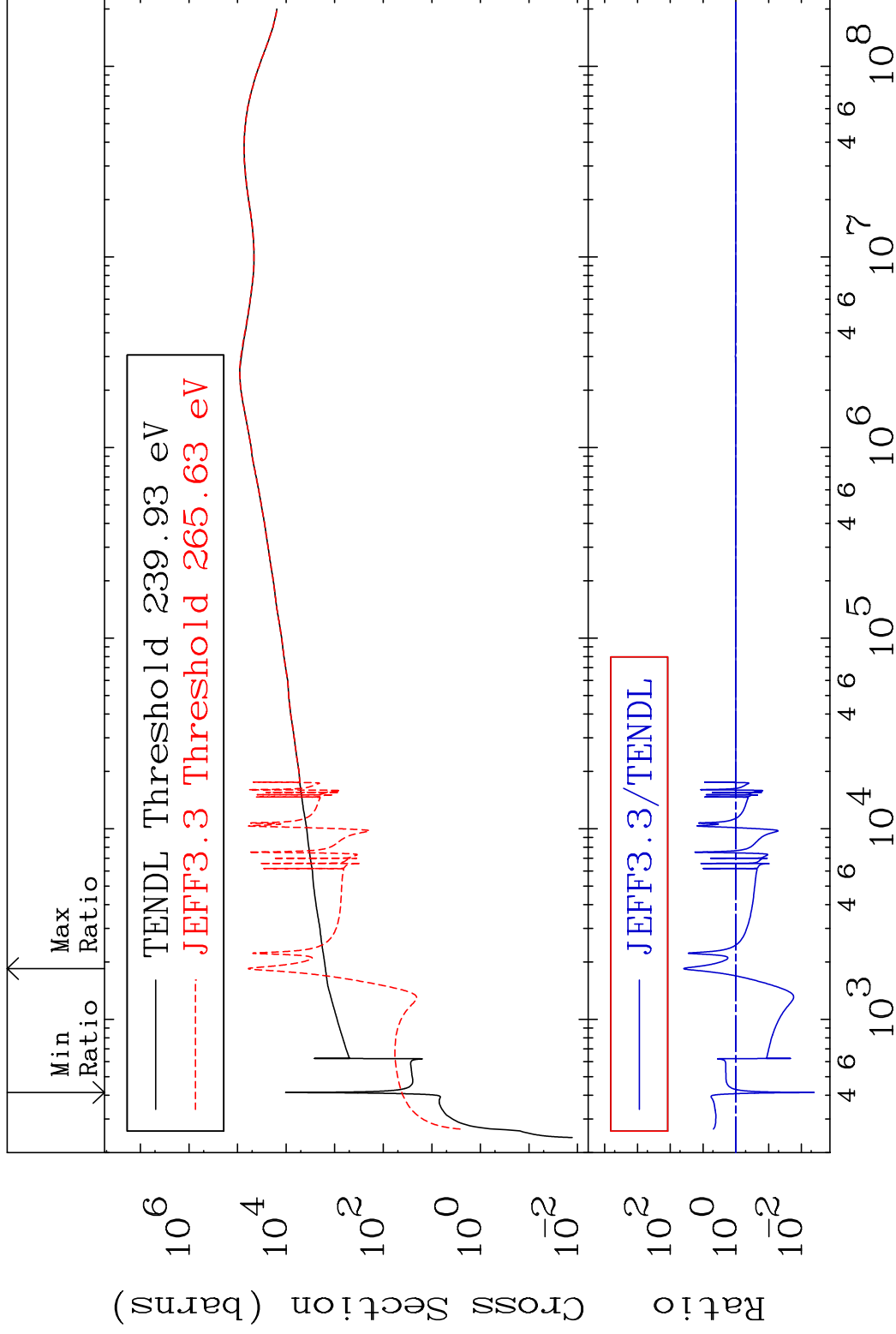
63 Incident Energy (eV) 19-K -40

MAT 1928

Dpa elastic (mt2)

19-K -40

Cross Section -99.59 To 3804. %

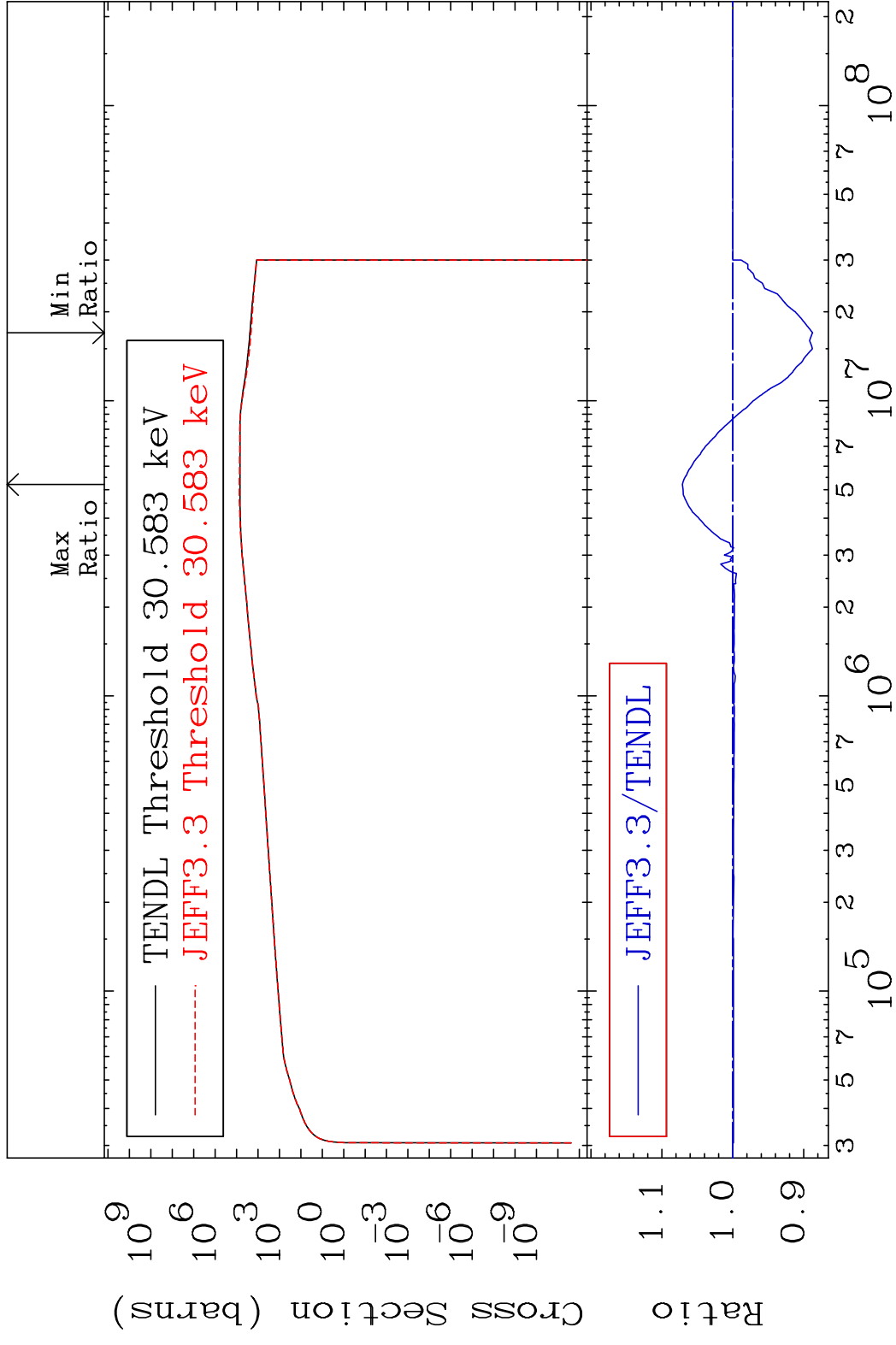


64

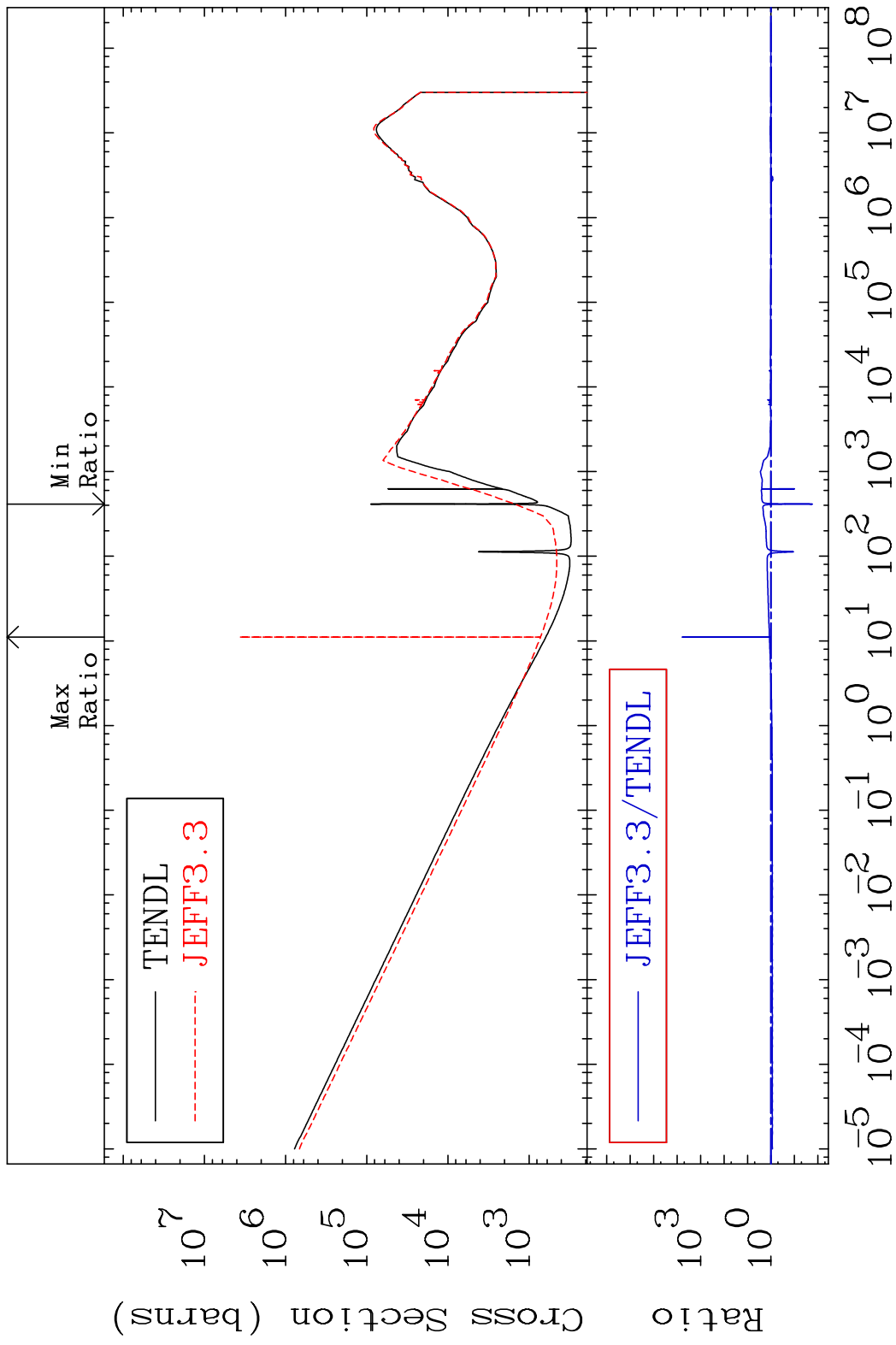
Incident Energy (eV)

19-K -40

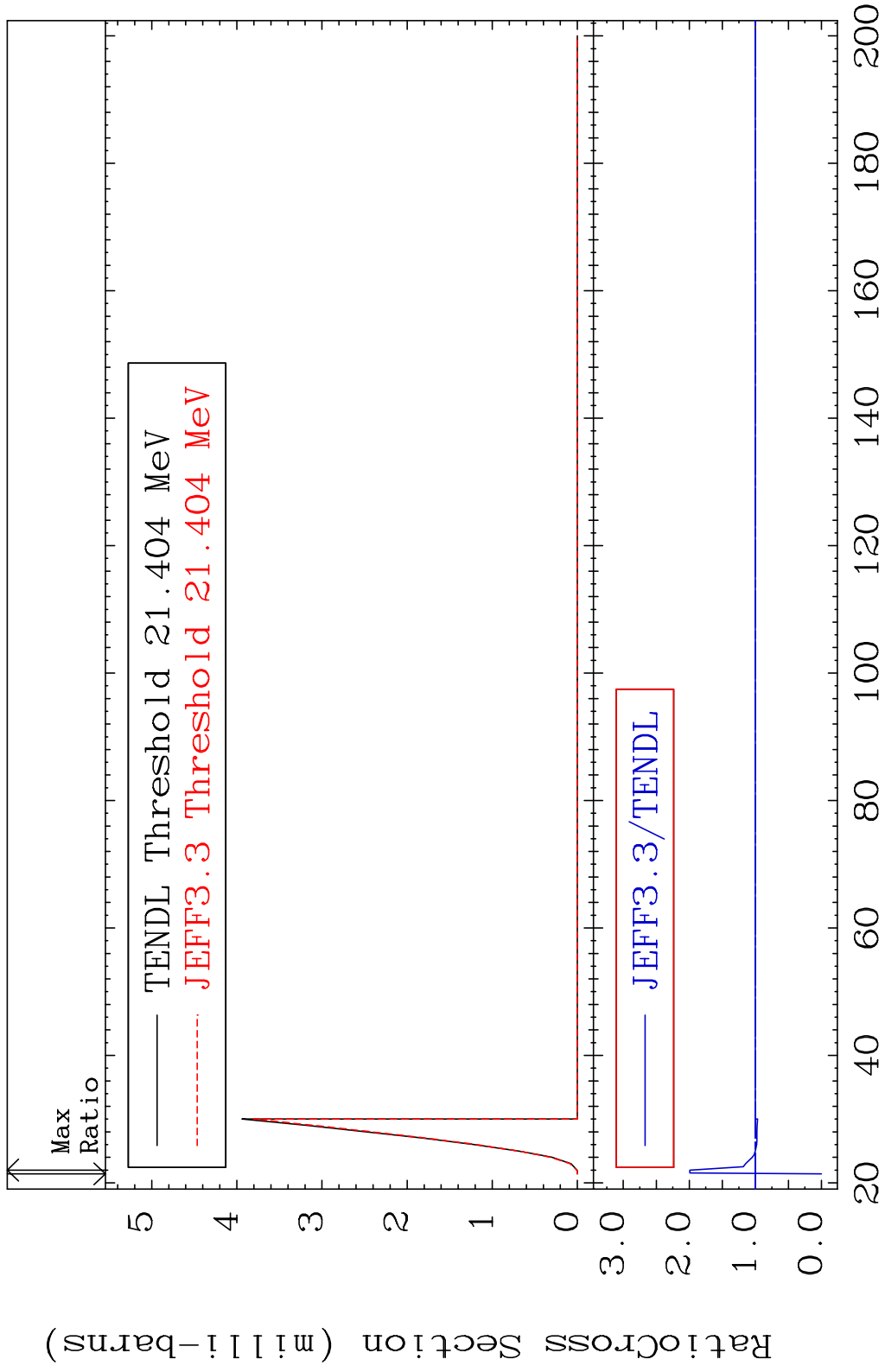
MAT 1928 Dpa inelastic (mt51-91) 19-K -40
 Cross Section -11.24 To 7.114 %



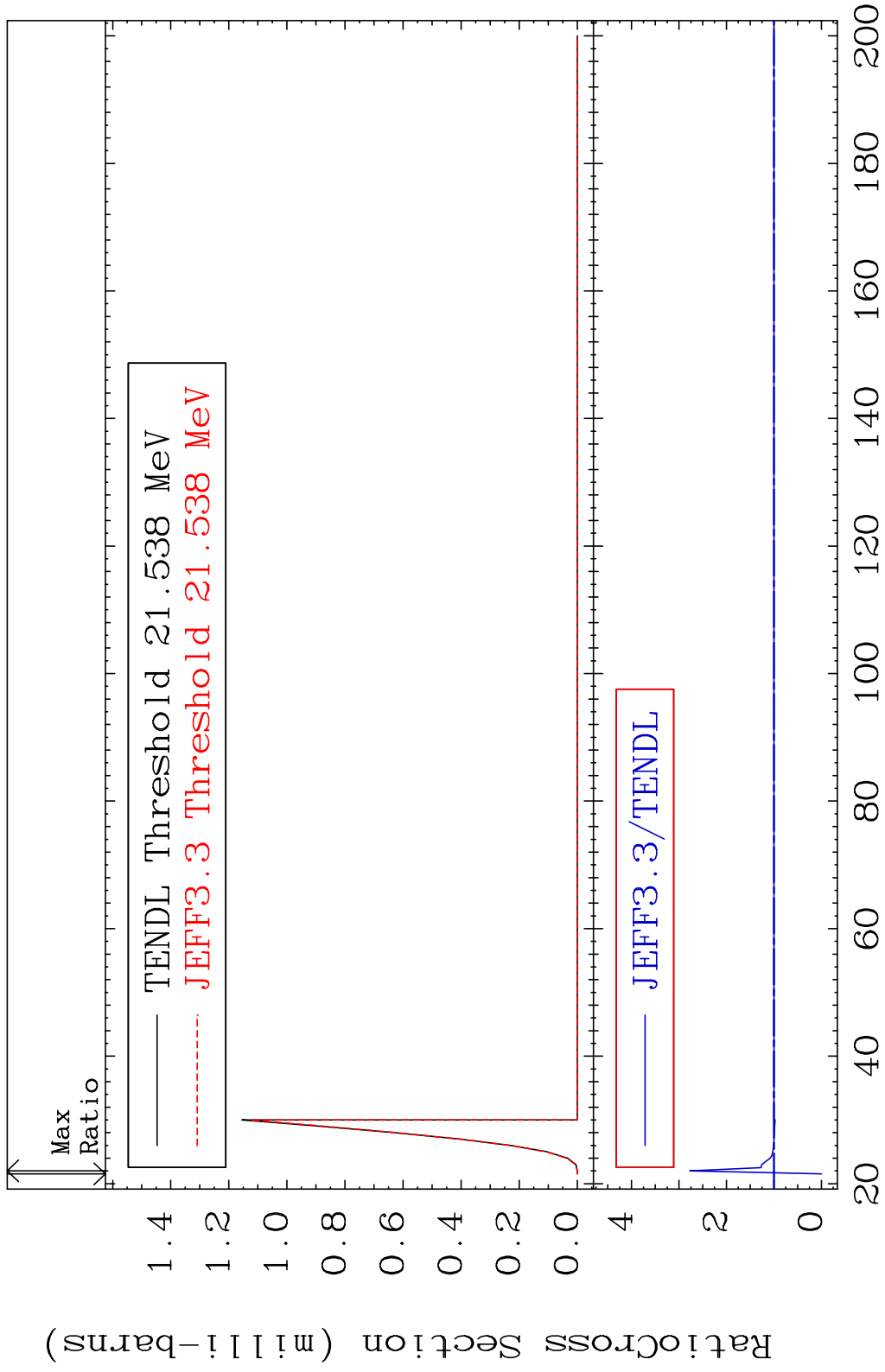
MAT 1928 Dpa disappearance (mt102 -120) 19-K -40
 Cross Section -98.31 To 9999. %

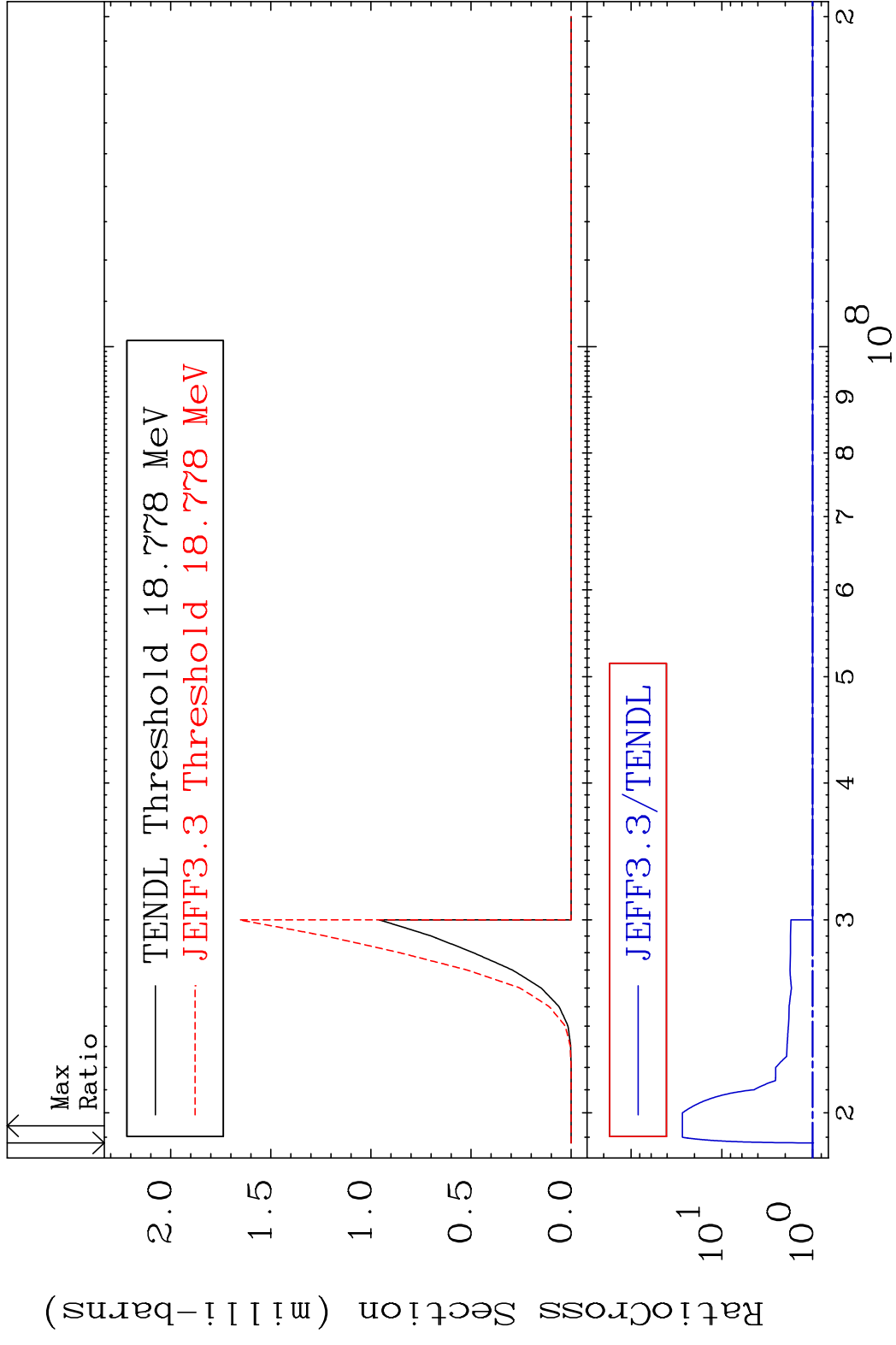


MAT 1928 (n,3n):19-K -38g 19-K -40
 Radionuclide Production Cross Section 1928 to 99.28 %

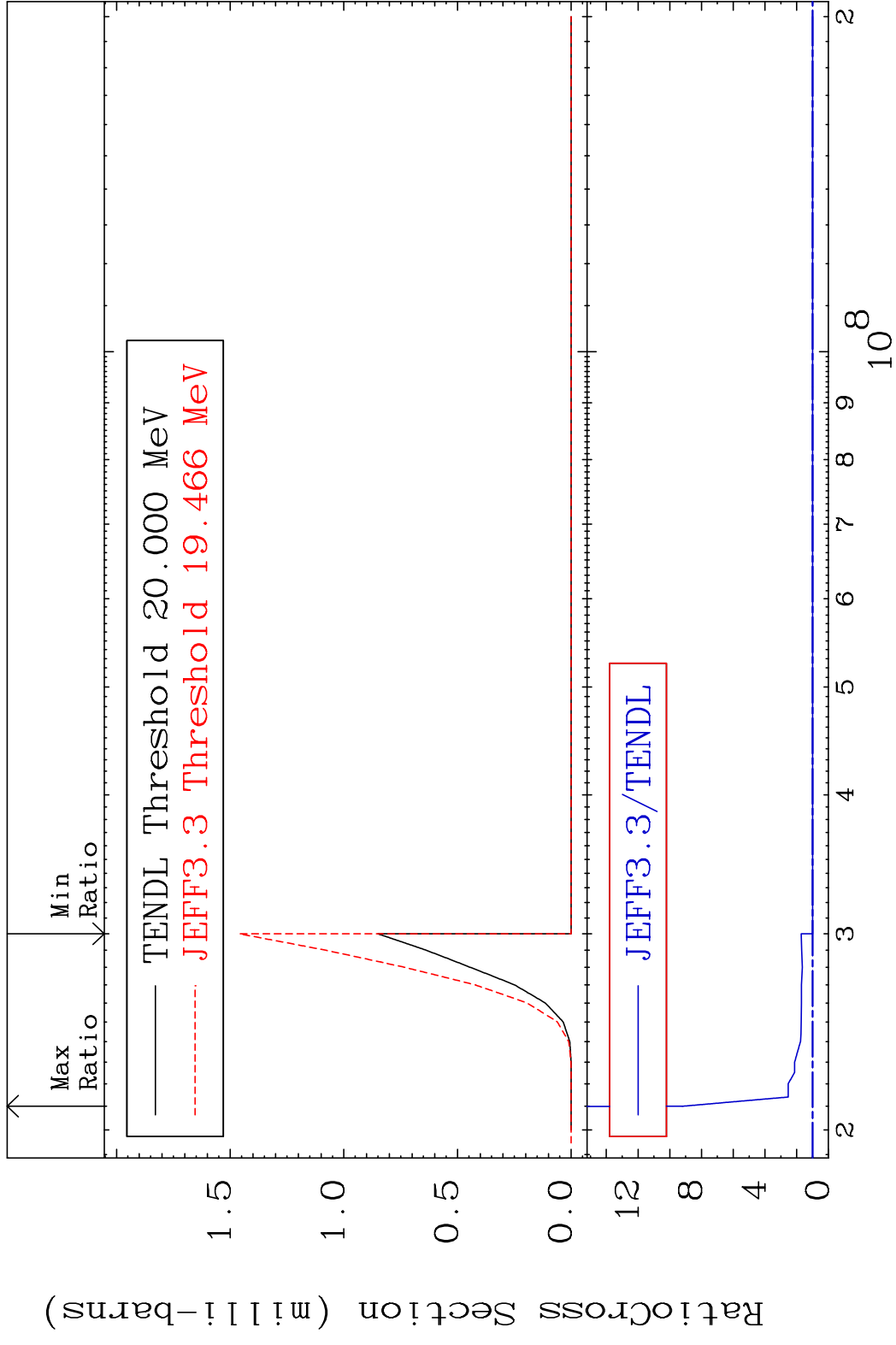


MAT 1928 (n,3n):19-K -38m1 19-K -40
 Radionuclide Production Cross Section Ratio 177.3 %



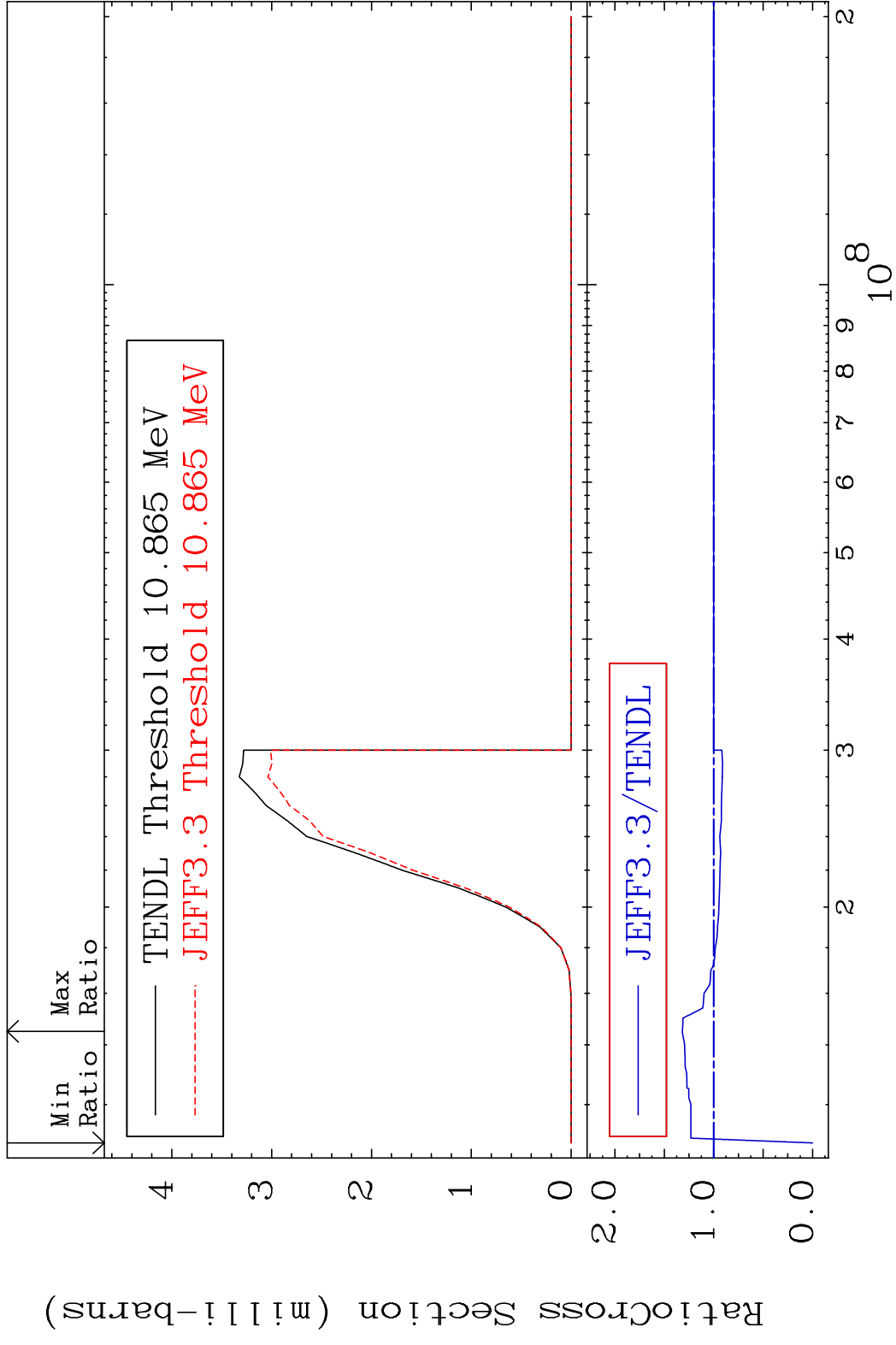


MAT 1928 (n,2n) p:17-Cl-38m1 19-K -40
 Radionuclide Production Cross Section 820.7 %

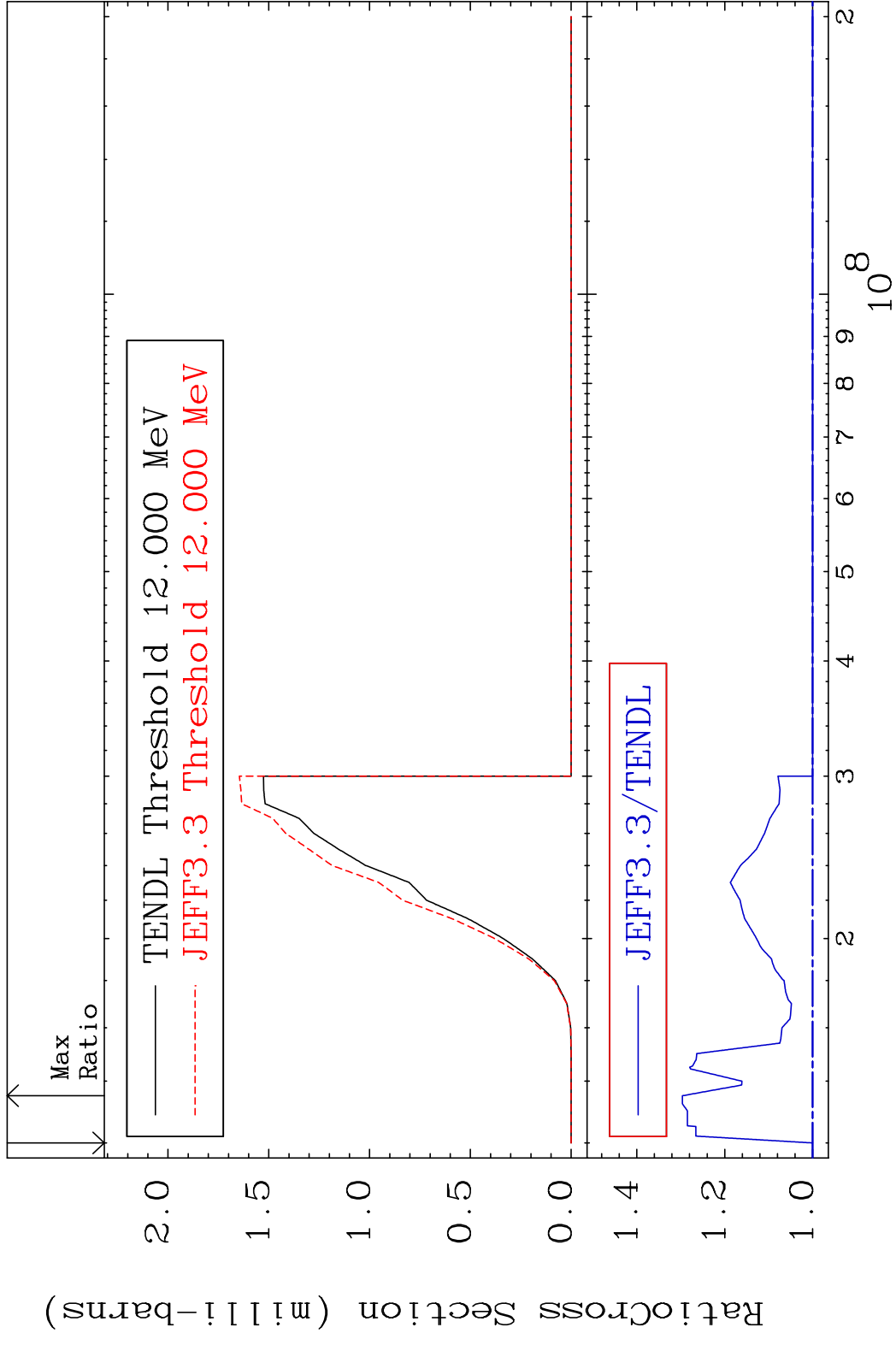


70 Incident Energy (eV) 19-K -40

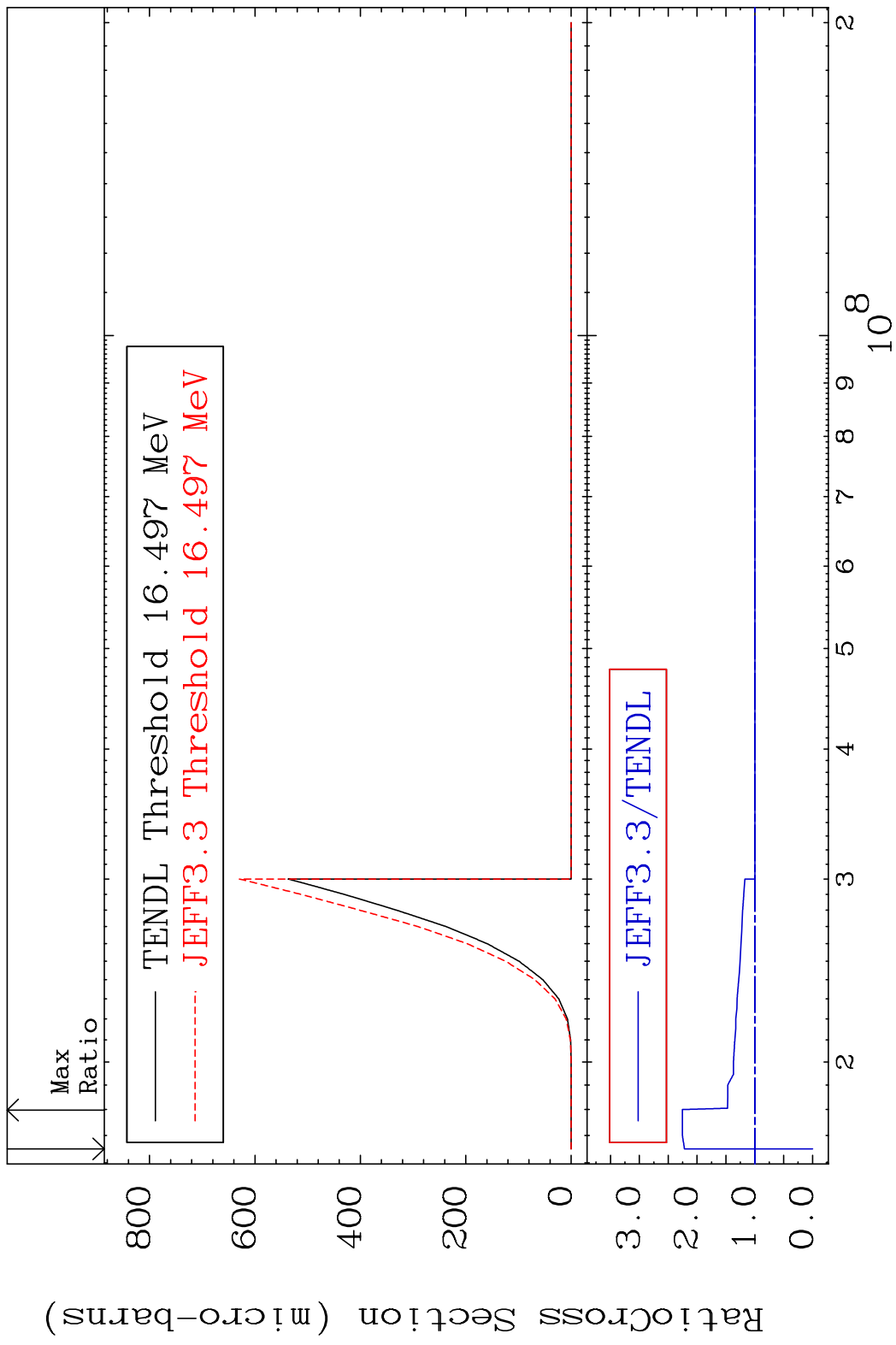
MAT 1928 (n, He-3): 17-Cl-38g 19-K -40
 Radionuclide Production Cross Section 31.71 %



MAT 1928 (n, He-3): 17-Cl-38m1 19-K -40
 Radionuclide Production Cross Section 29.64 %



MAT 1928 (n,p) d:17-Cl-38g 19-K -40
 Radionuclide Production Cross Section 180.0 d to 125.5 %



MAT 1928 (n,p) d:17-C1-38m1 19-K -40
 Radionuclide Production Cross Section 70.71 %

