

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

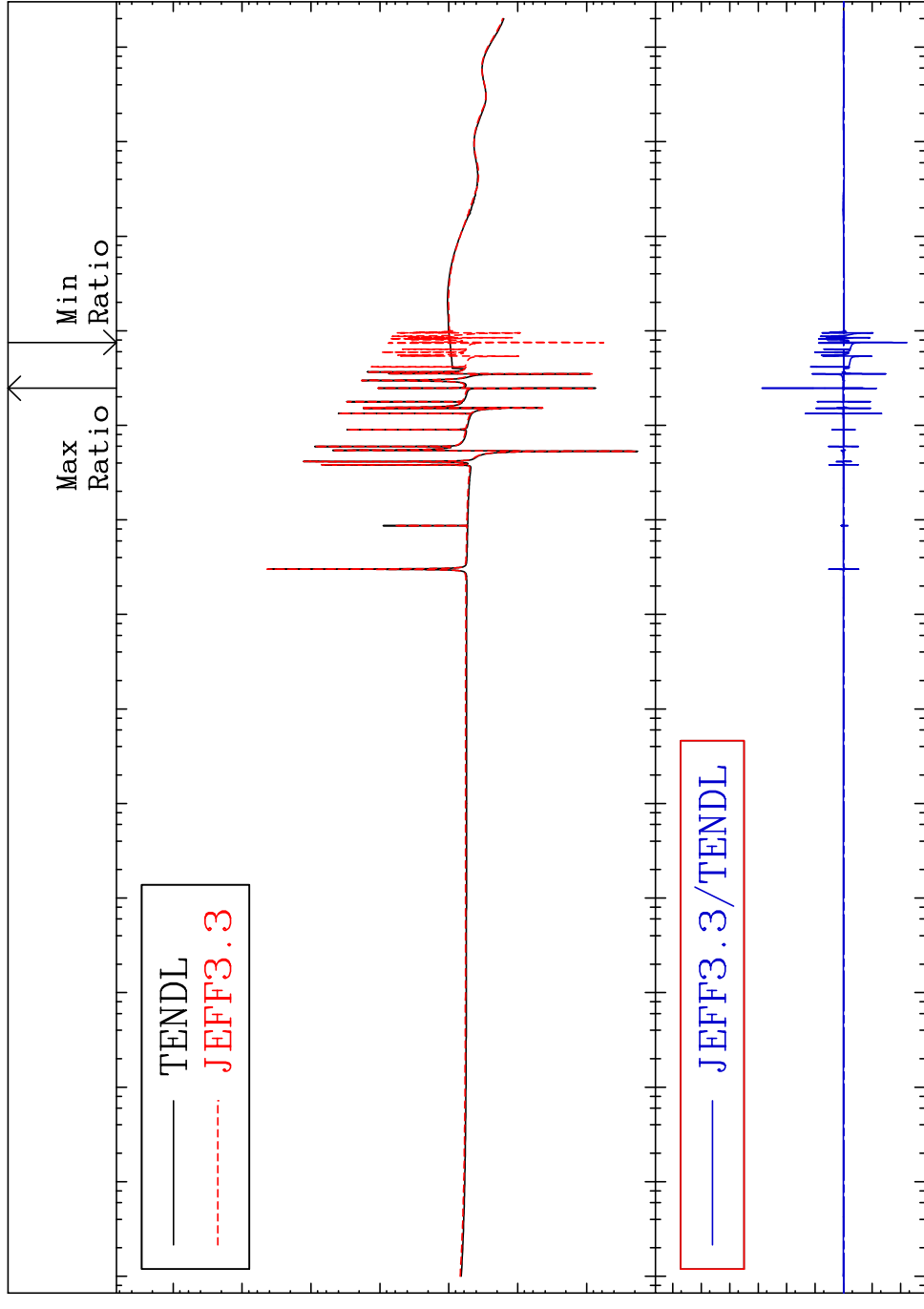
MAT 4043

Total

40-Zr-96

Cross Section

-99.41 To 9999. %



10^5
 10^4
 10^3
 10^2
 10^1
 10^0
 10^{-1}

Cross Section (barns)

10^3
 10^0

Ratio

10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8

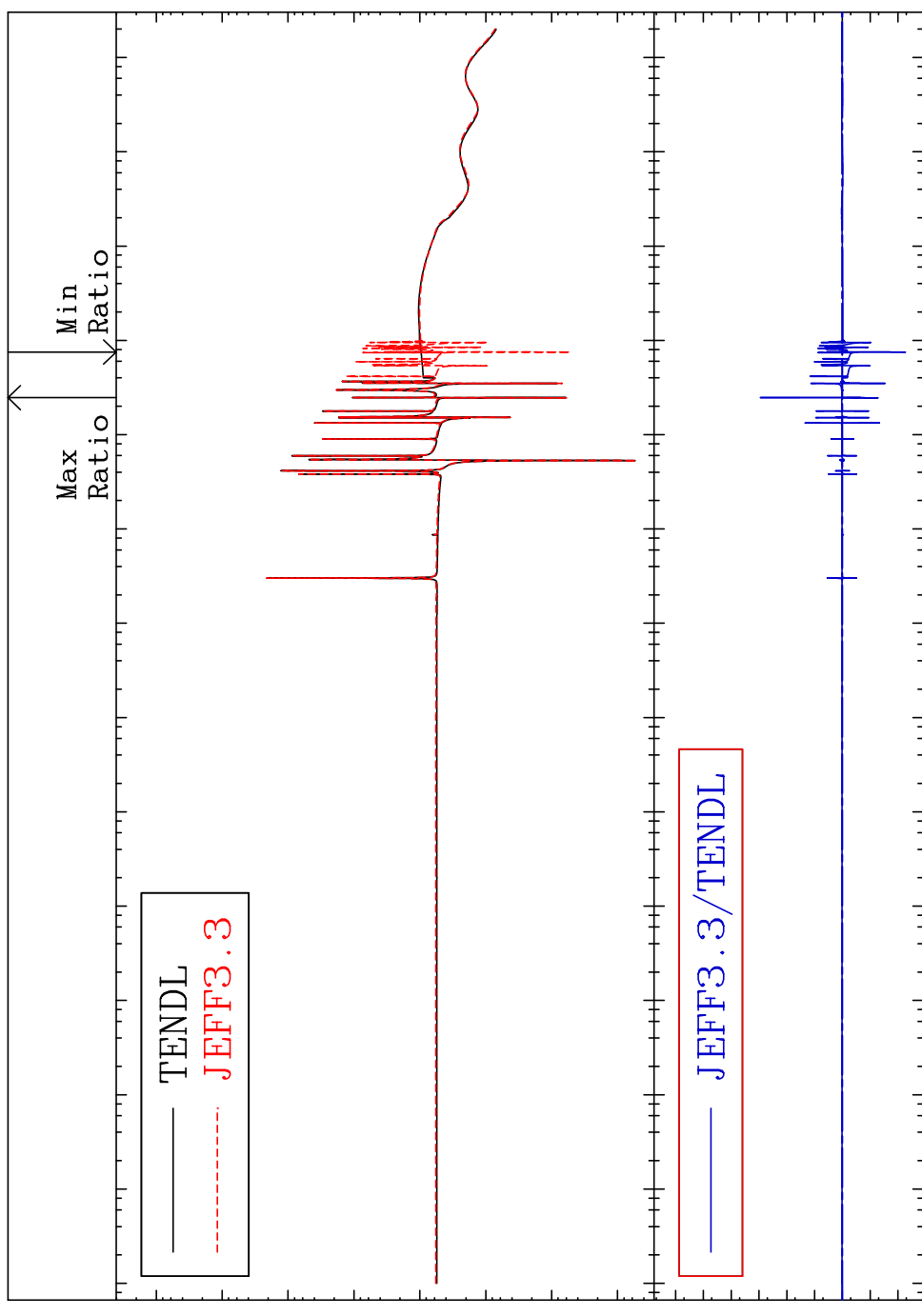
1

Incident Energy (eV)

40-Zr-96

MAT 4043

Elastic Cross Section 40-Zr-96
-99.45 To 9999. %

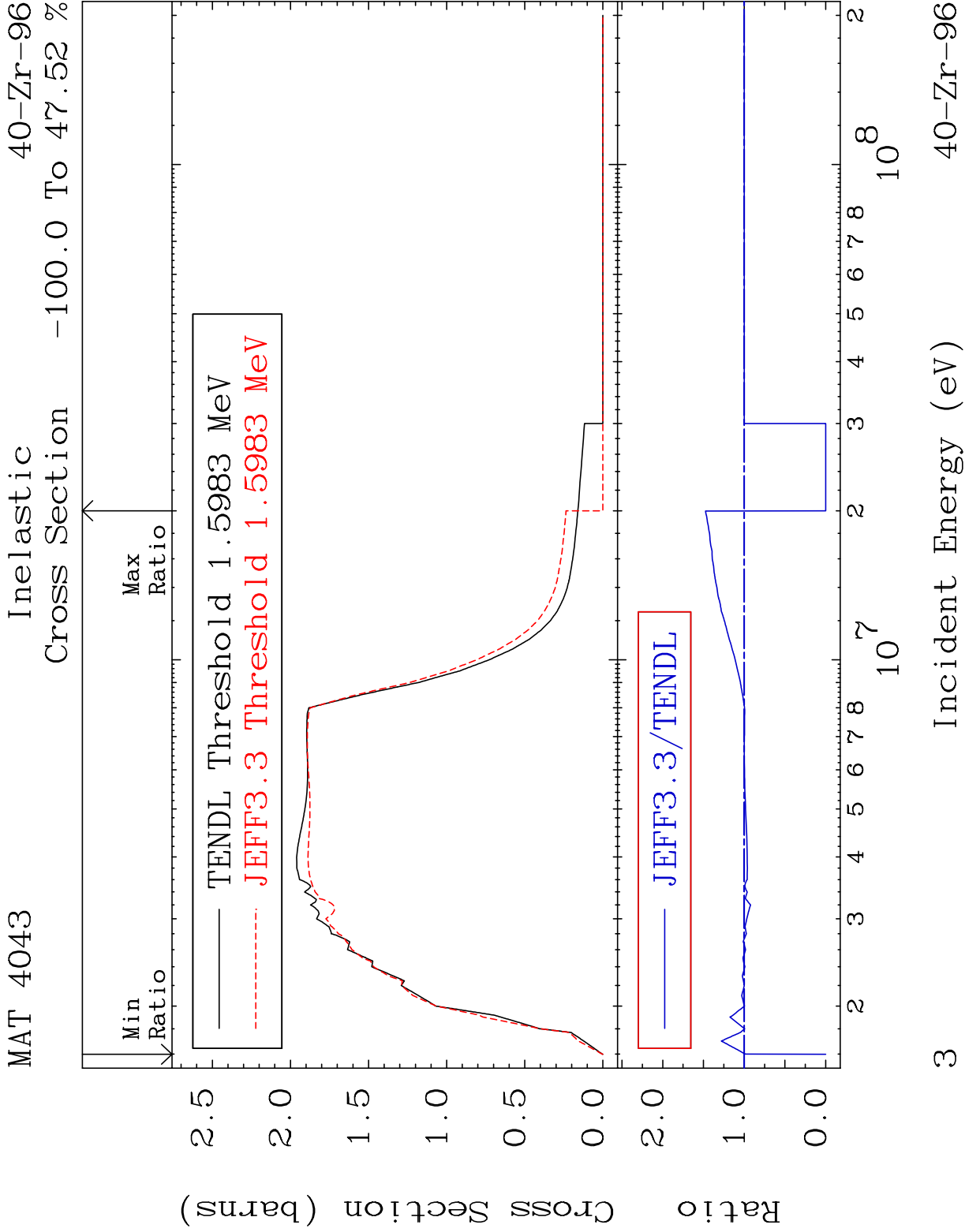


Cross Section (barns)
 10^4
 10^3
 10^2
 10^1
 10^0
 10^{-1}
 10^{-2}

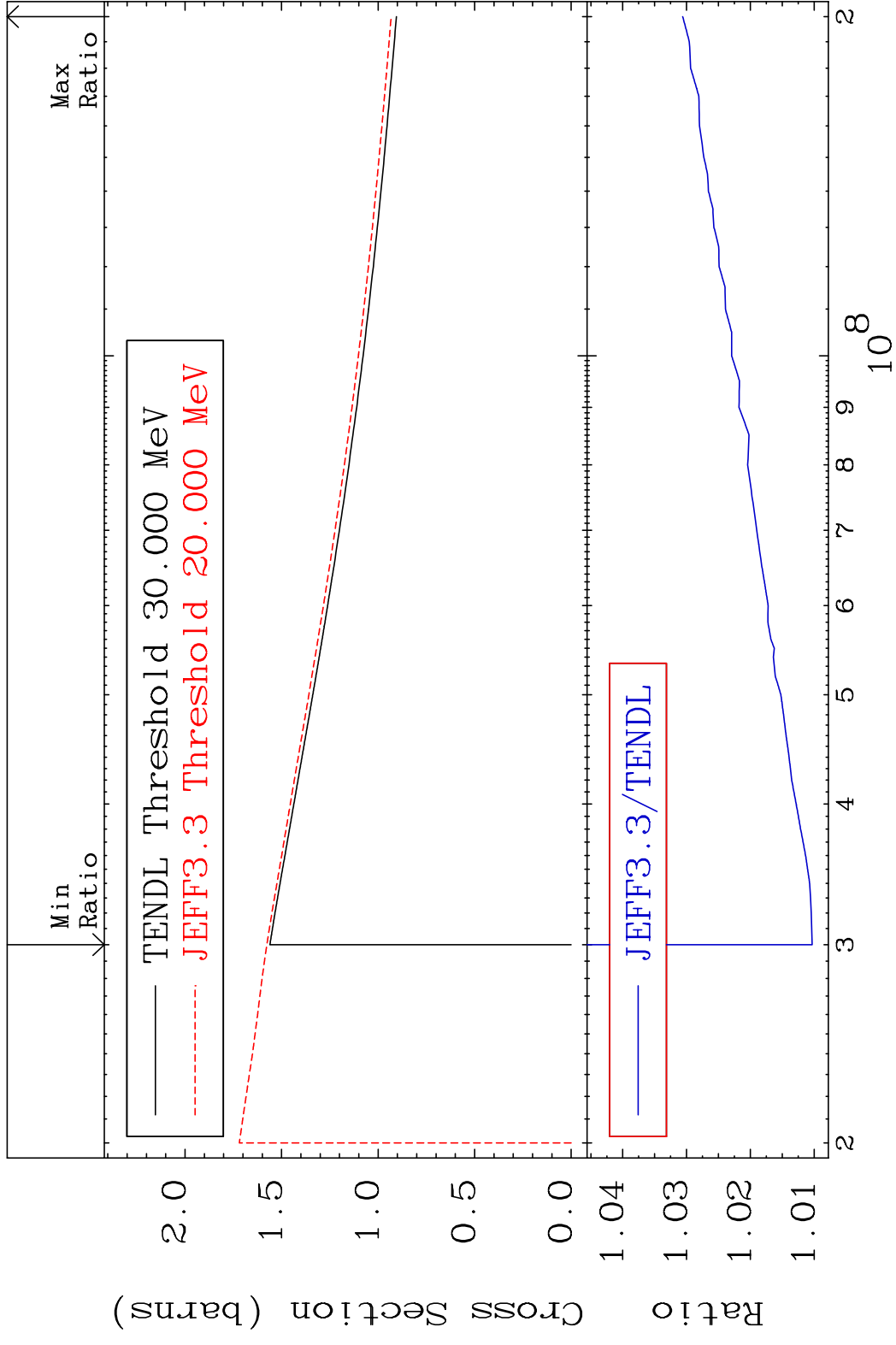
Ratio
 10^3
 10^0

Incident Energy (eV)
 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8

2 Incident Energy (eV) 40-Zr-96

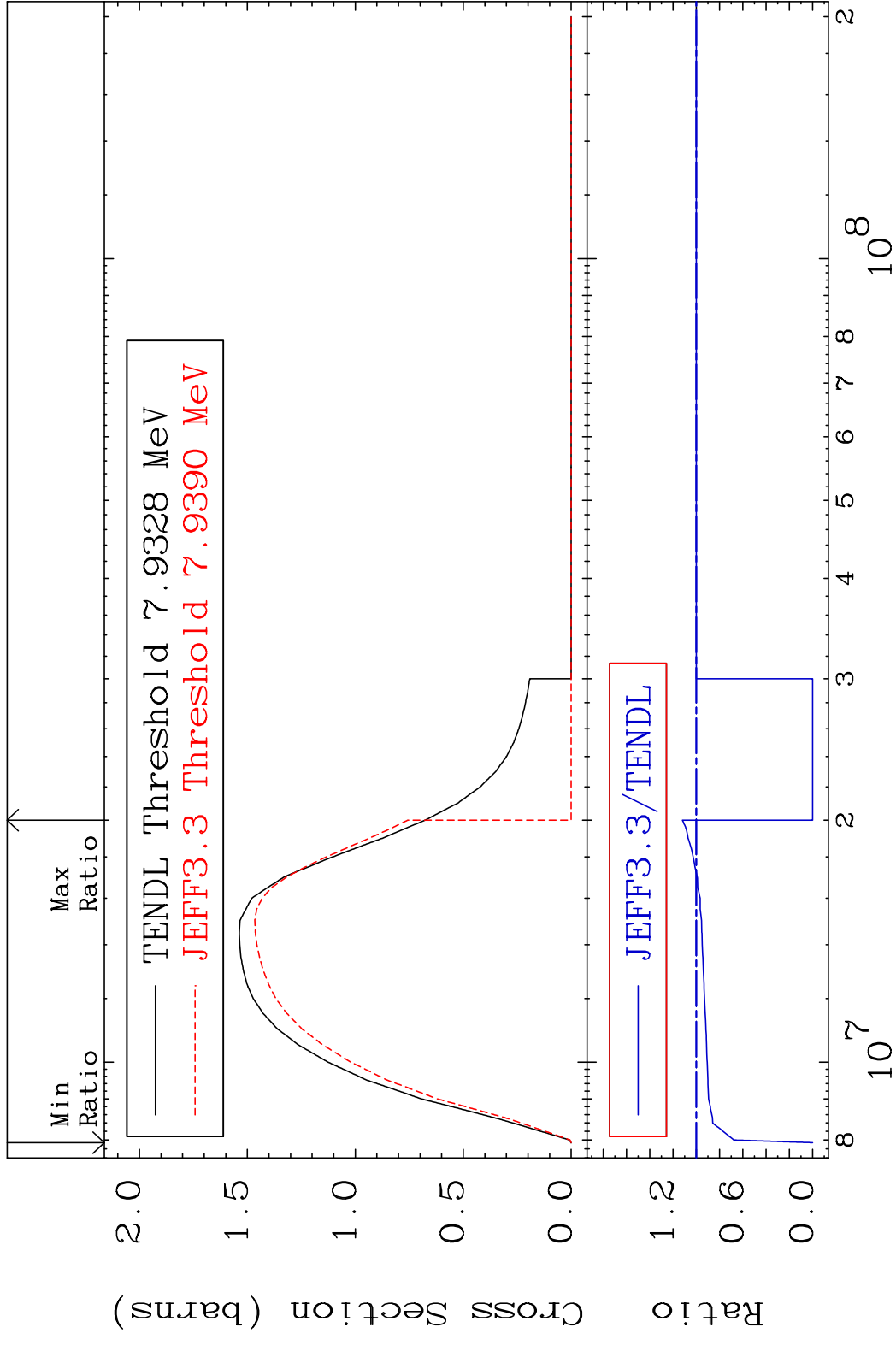


MAT 4043 (n, remainder) 40-Zr-96
 Cross Section 1.030 To 3.060 %



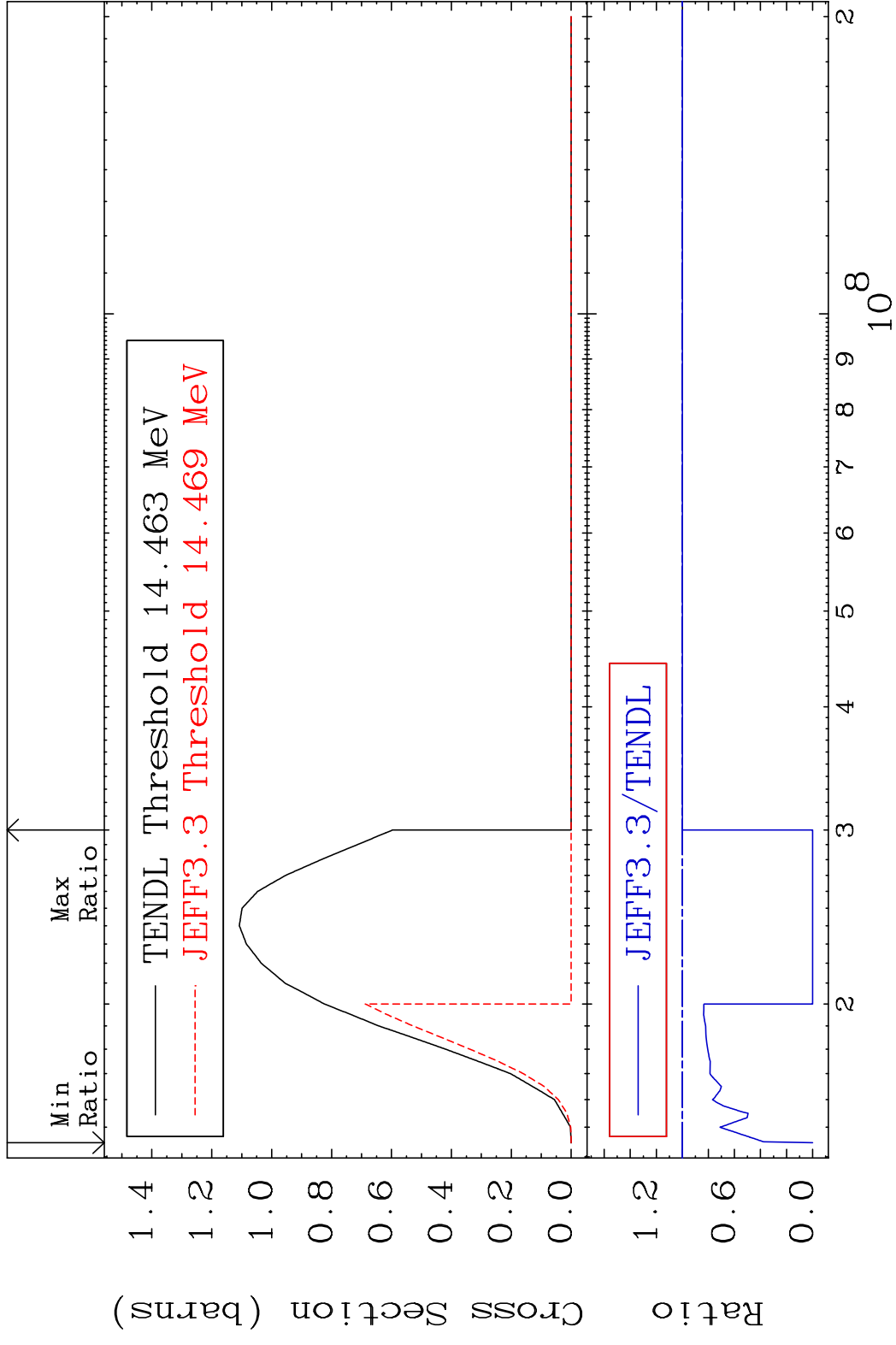
4 Incident Energy (eV) 40-Zr-96

MAT 4043 (n,2n) 40-Zr-96
 Cross Section -100.0 To 11.96 %

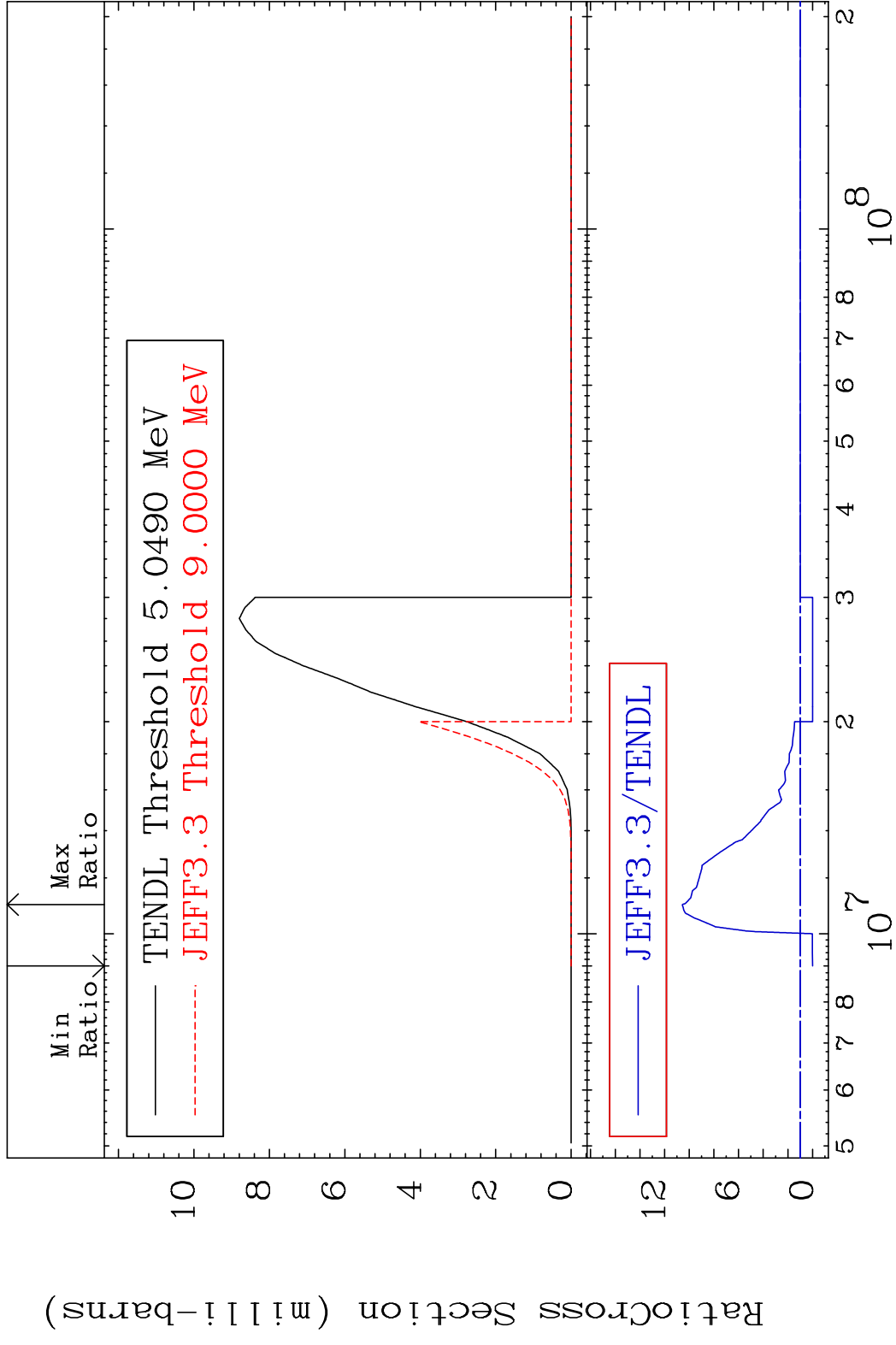


5 Incident Energy (eV) 40-Zr-96

MAT 4043 (n,3n) 40-Zr-96
 Cross Section -100.0 To 0.000 %

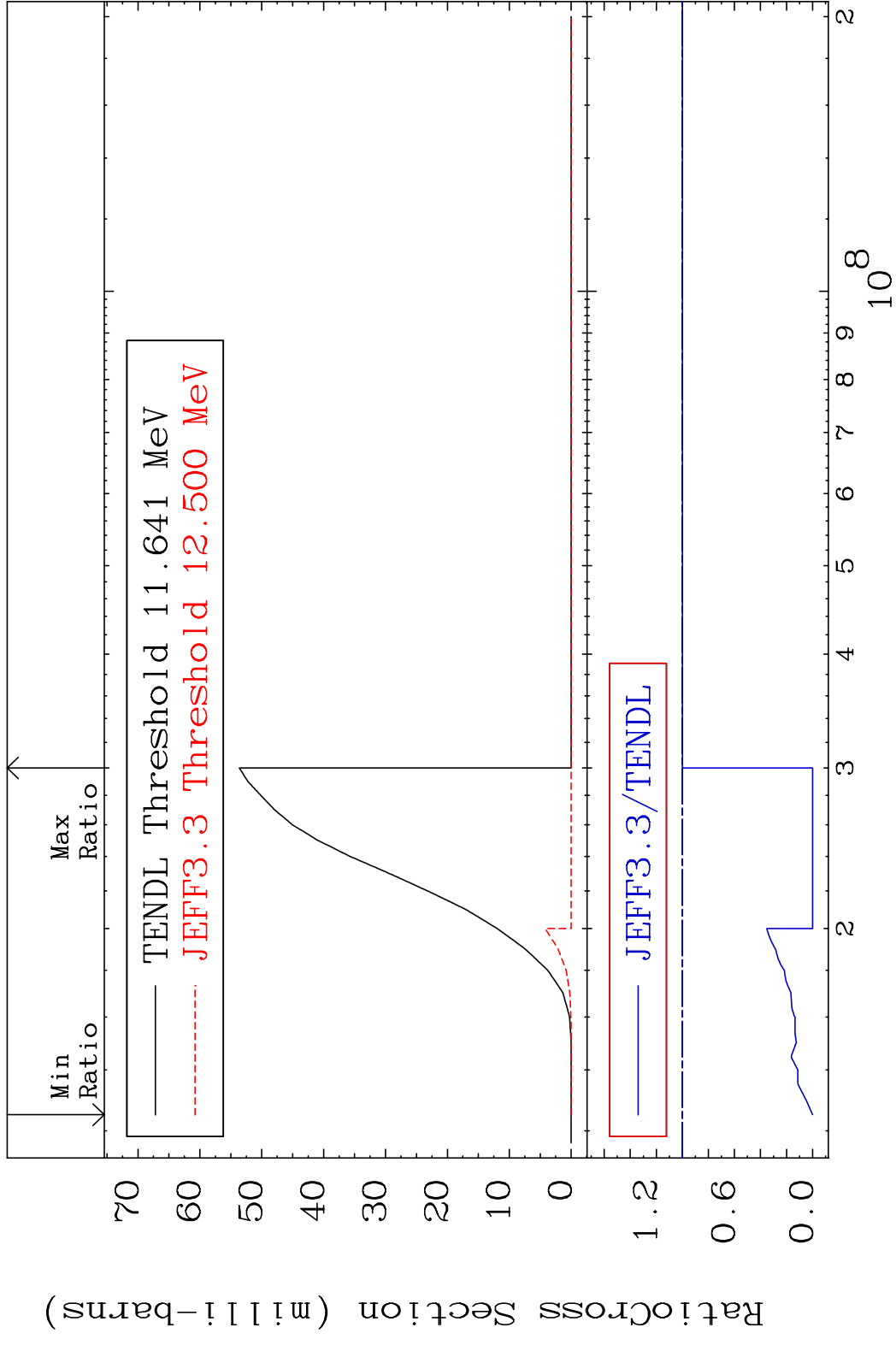


MAT 4043 $(n, n') \alpha$ 40-Zr-96
 Cross Section -100.0 To 955.8 %

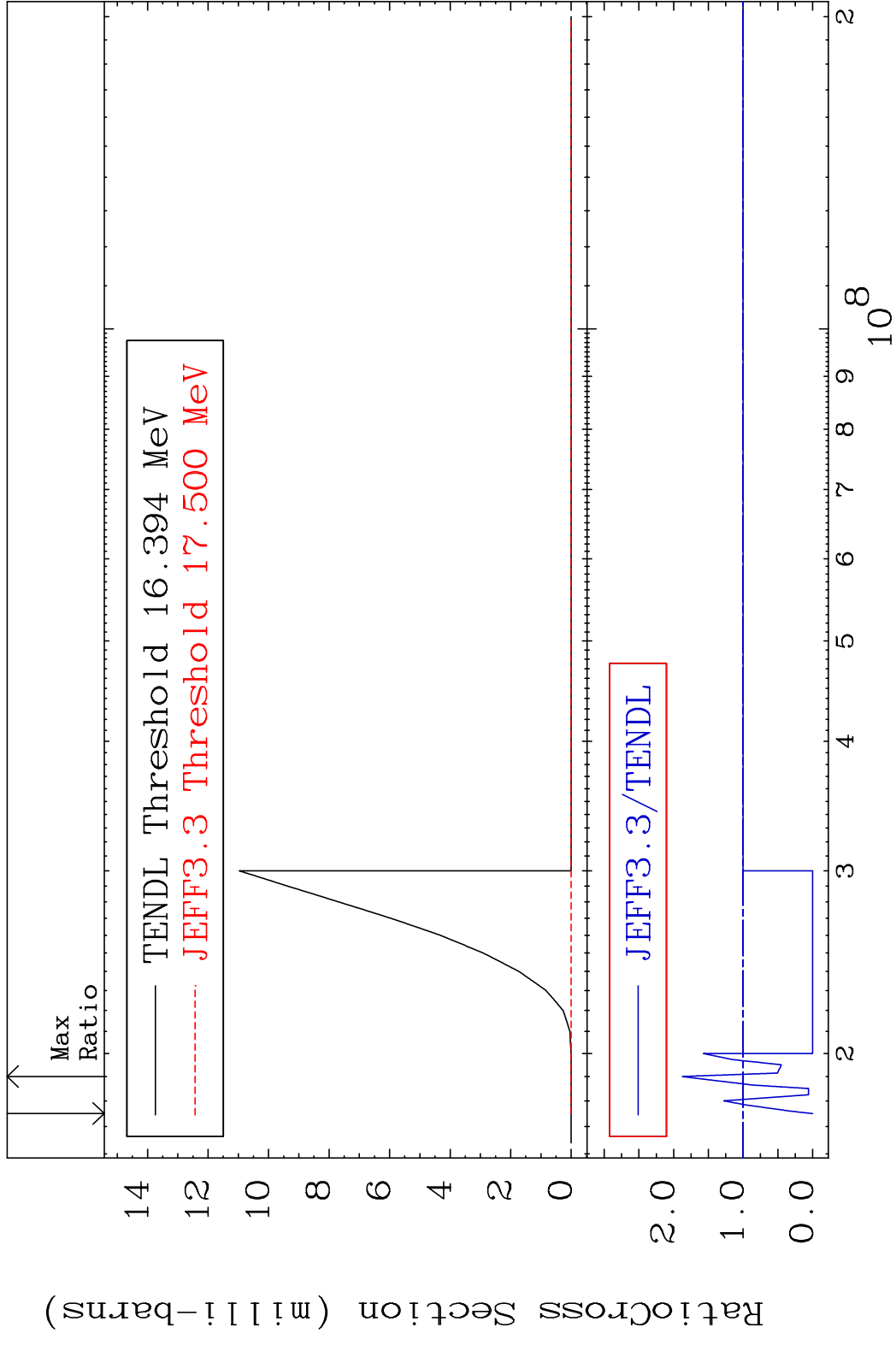


7 40-Zr-96

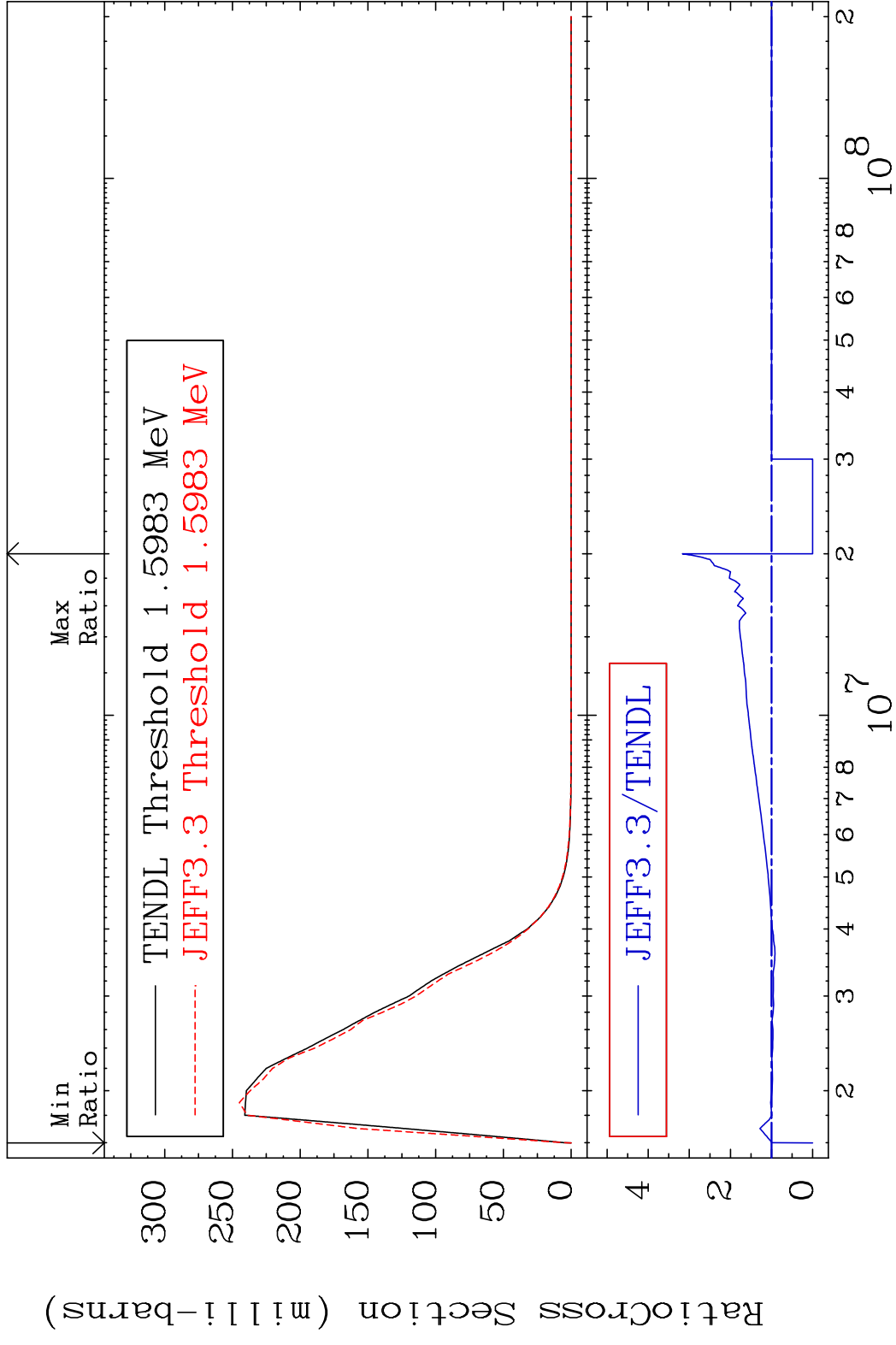
MAT 4043 (n, n') p 40-Zr-96
 Cross Section -100.0 To 0.000 %



MAT 4043 (n, n') d 40-Zr-96
 Cross Section -100.0 To 87.47 %



MAT 4043 MT= 51 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 217.0 %

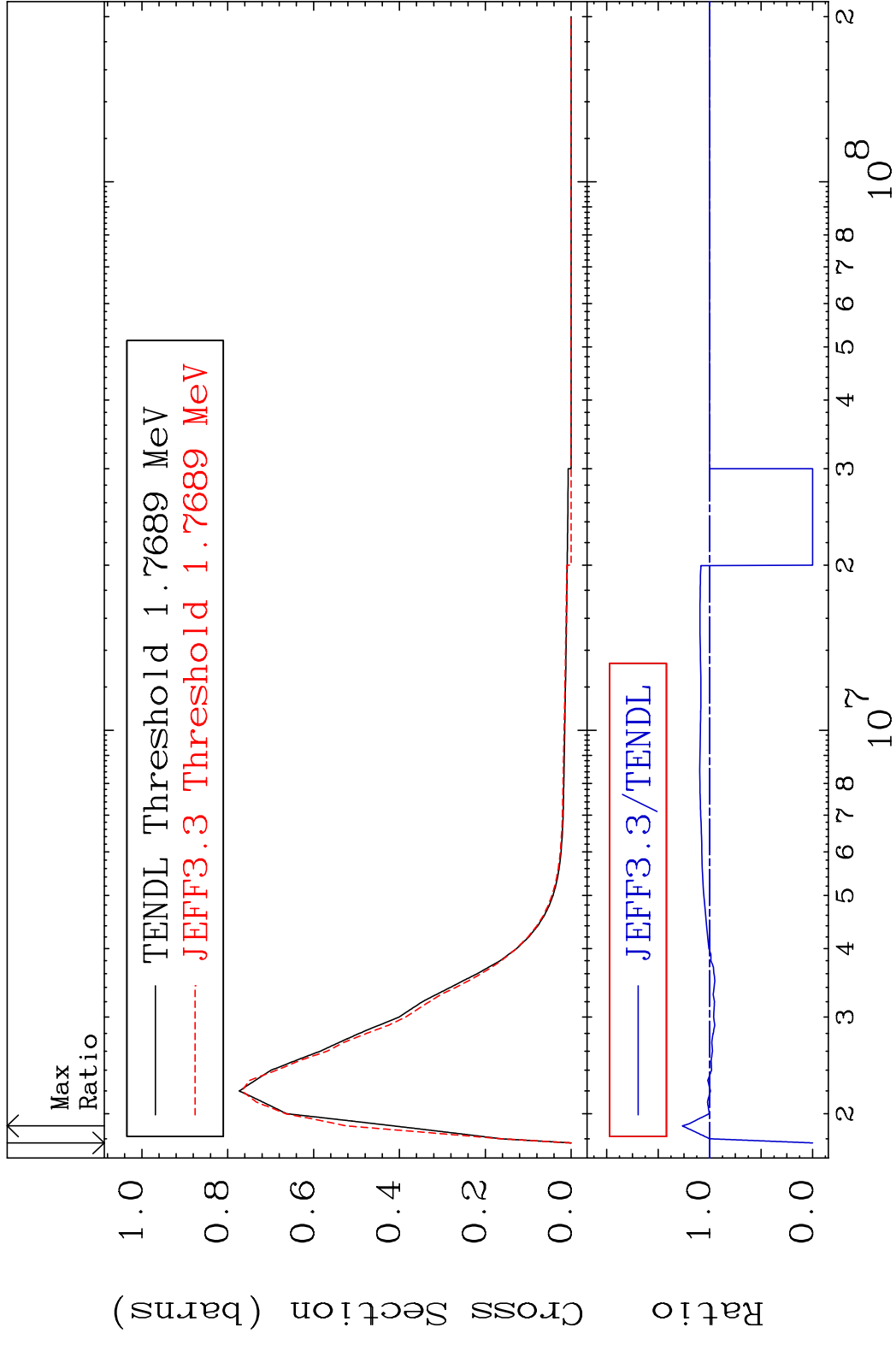


10

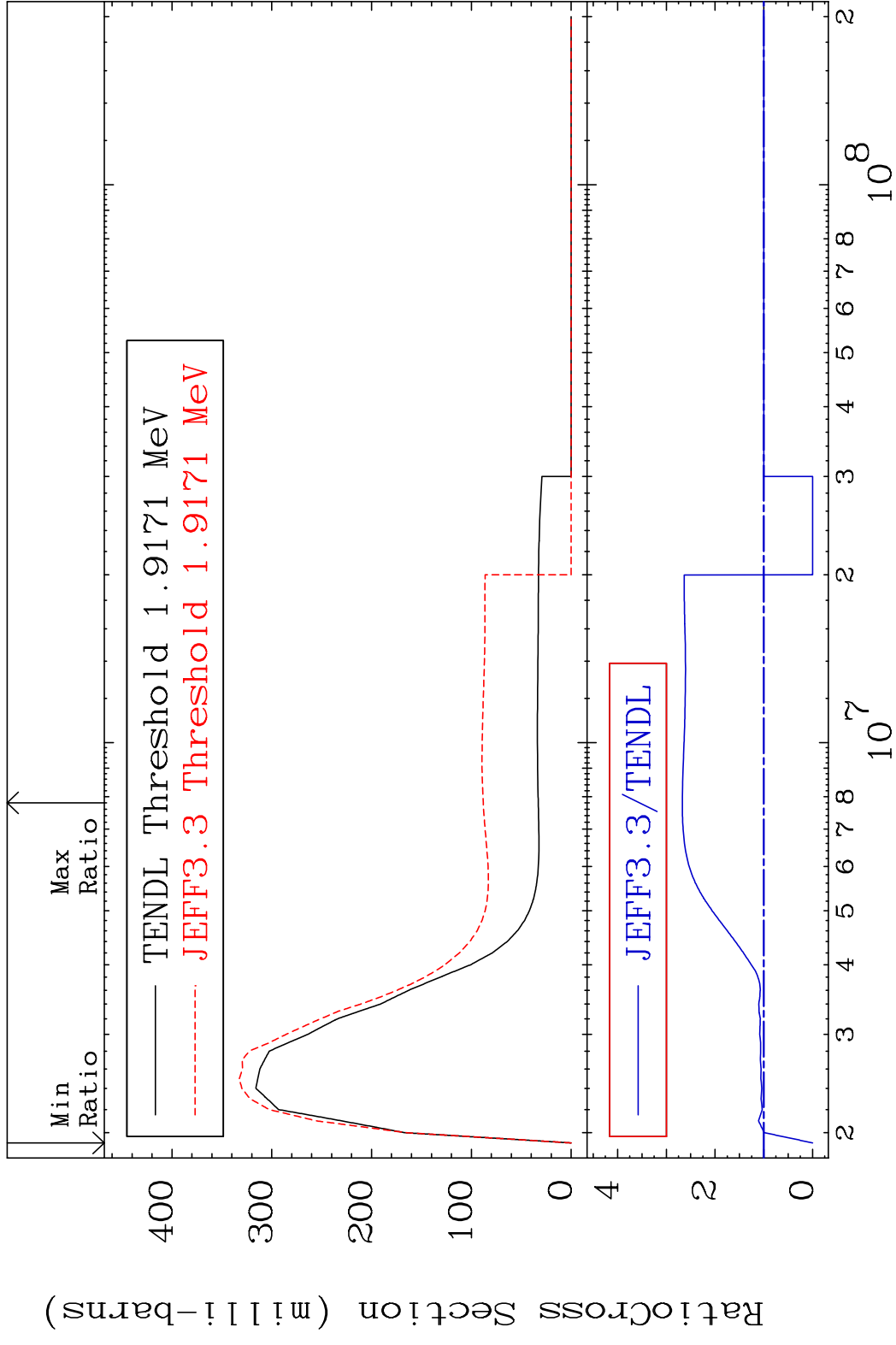
Incident Energy (eV)

40-Zr-96

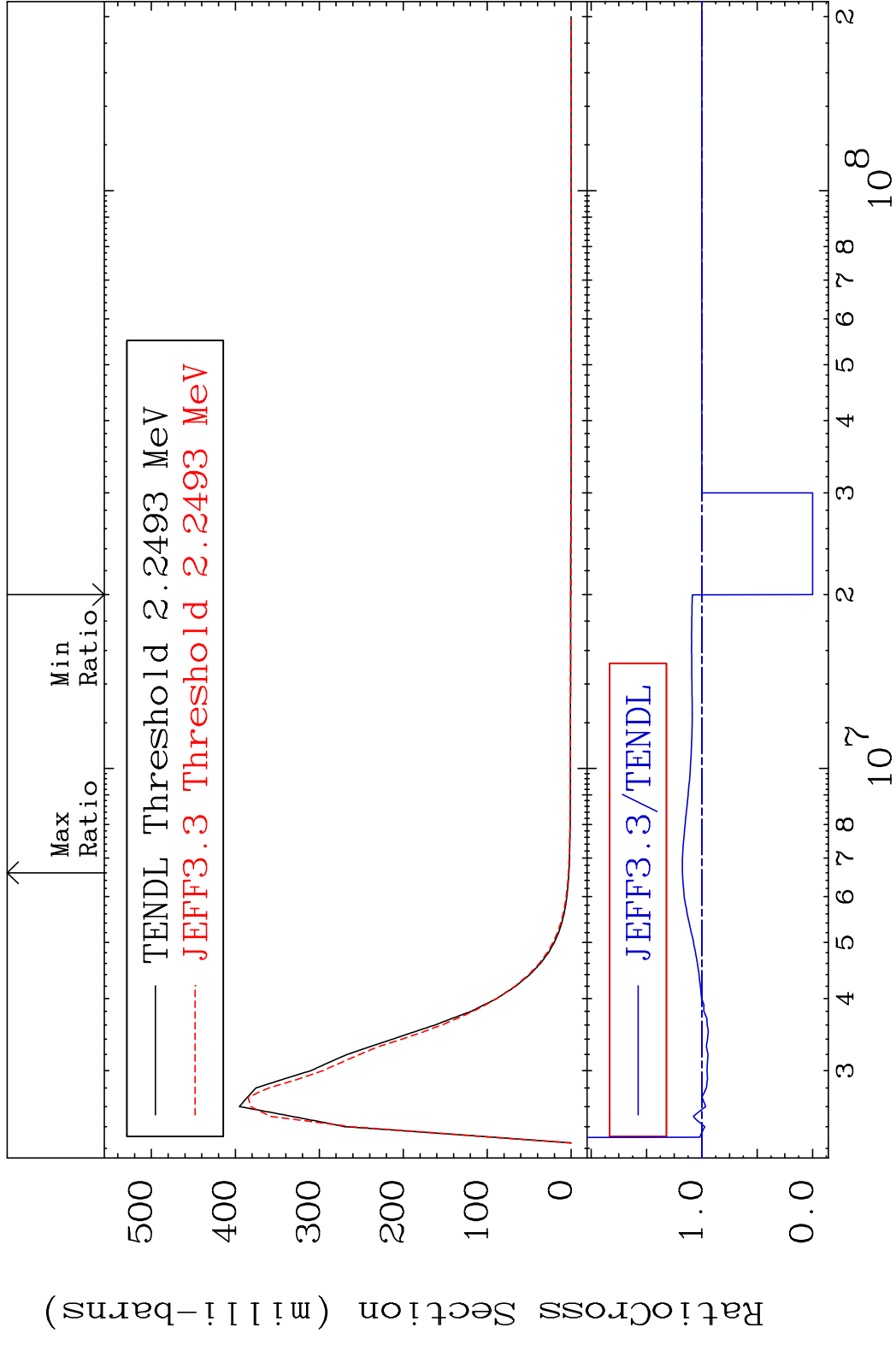
MAT 4043 MT= 52 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 26.49 %



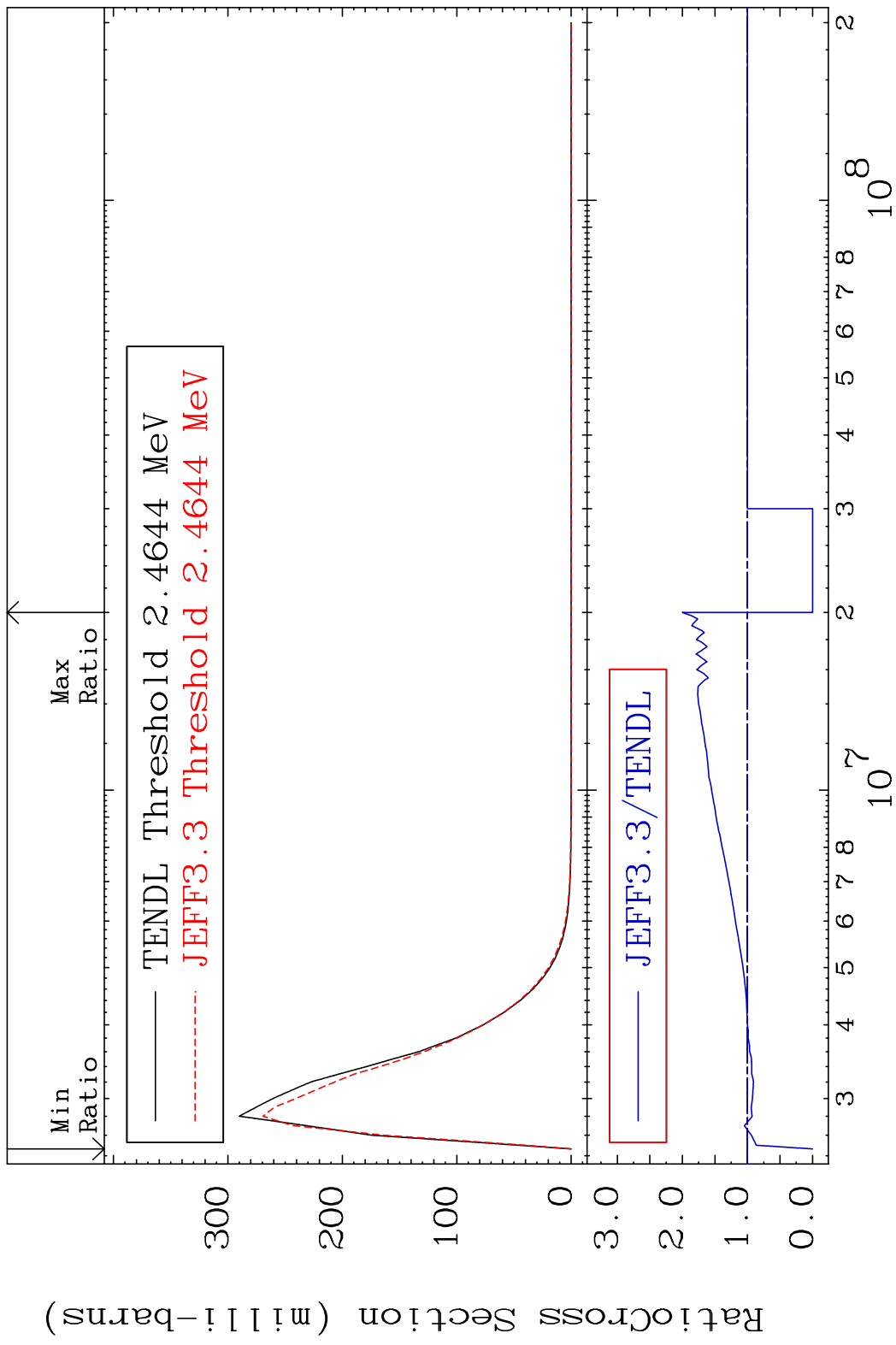
MAT 4043 MT= 53 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 167.1 %



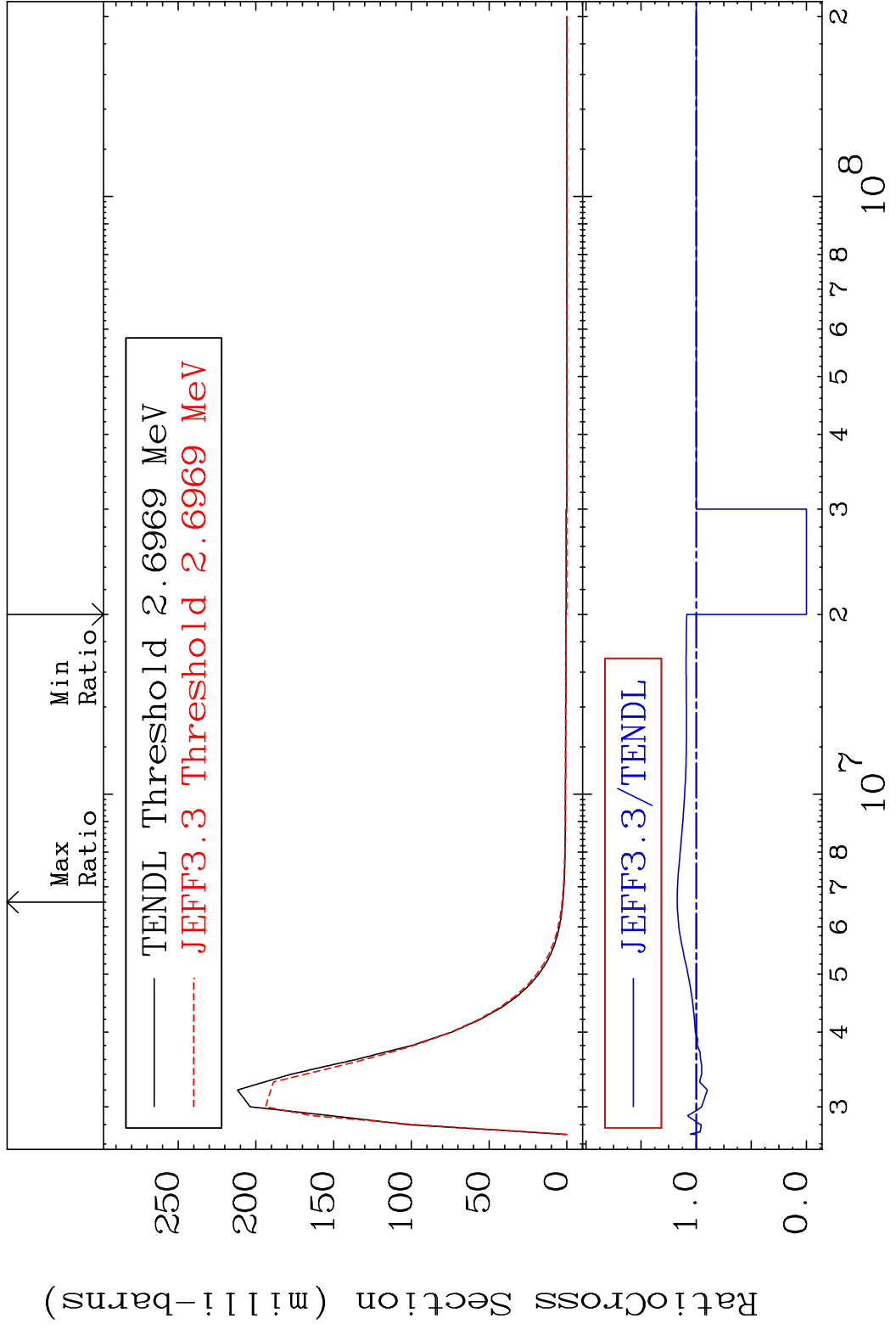
MAT 4043 MT= 54 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 17.61 %



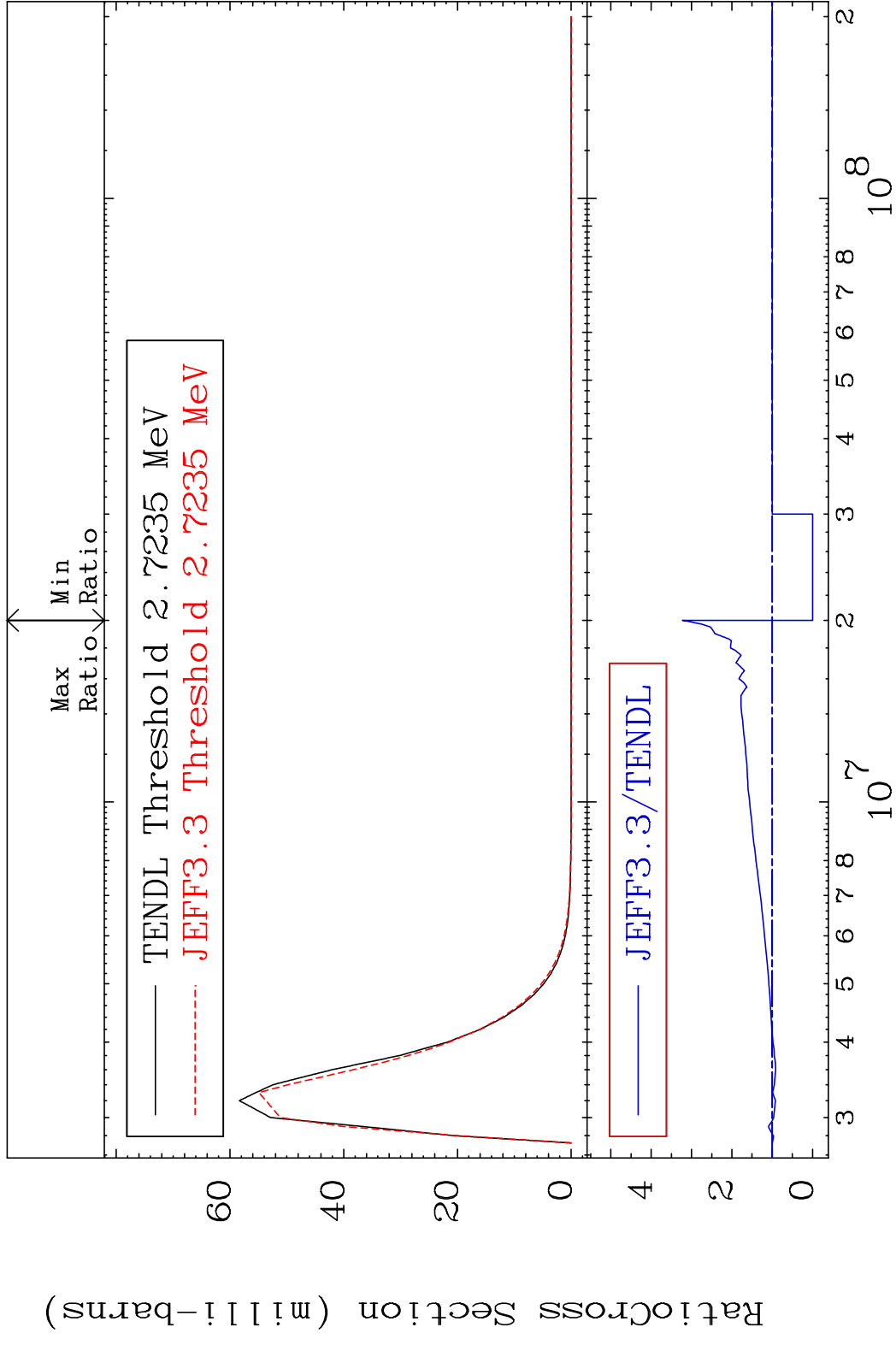
MAT 4043 MT= 55 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 100.0 %



MAT 4043 MT= 56 (n,n') Level 40-Zr-96
 Cross Section -100.0 To 17.26 %

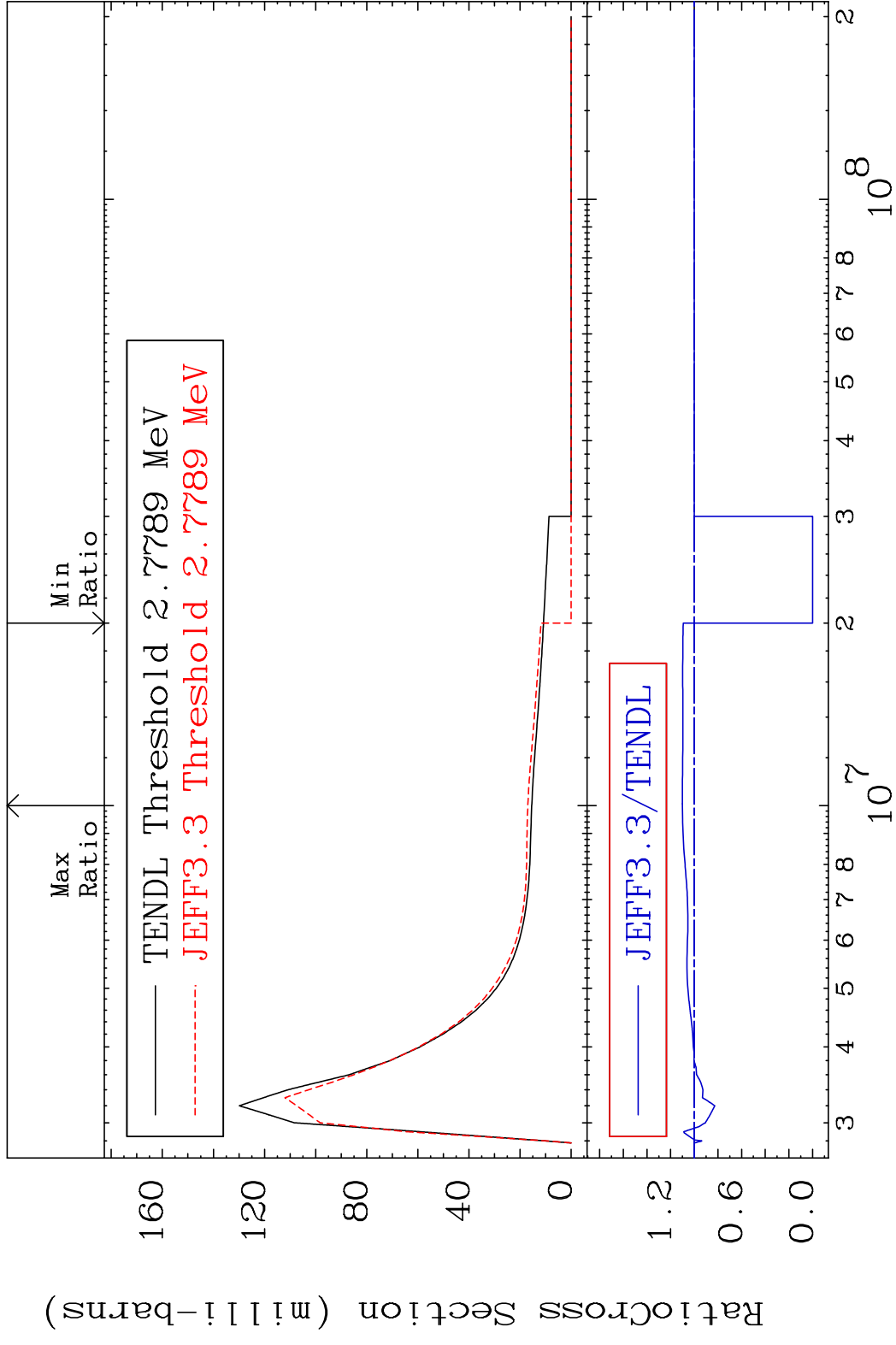


MAT 4043 MT= 57 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 222.7 %



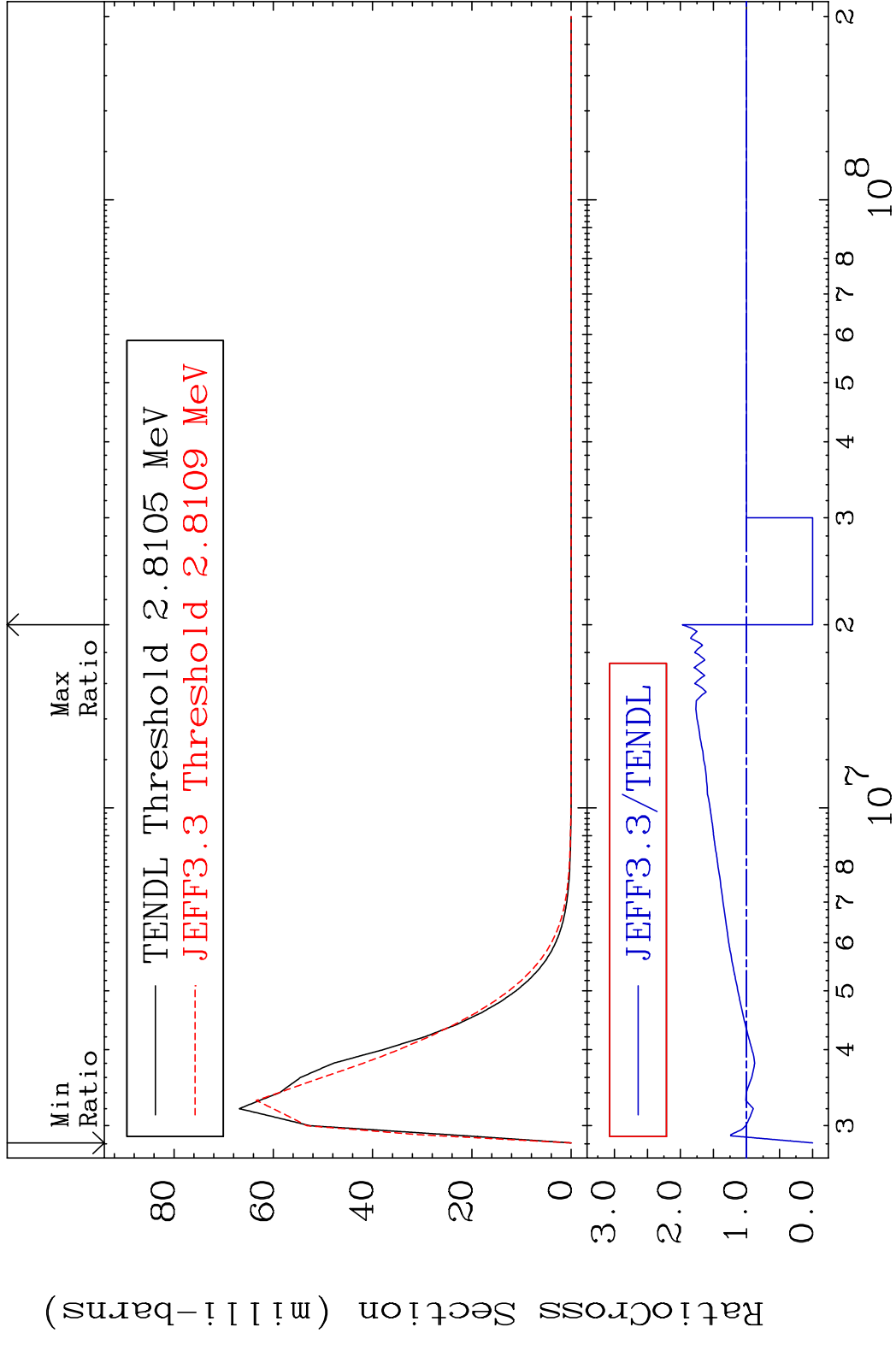
16 Incident Energy (eV) 40-Zr-96

MAT 4043 MT= 58 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 10.08 %

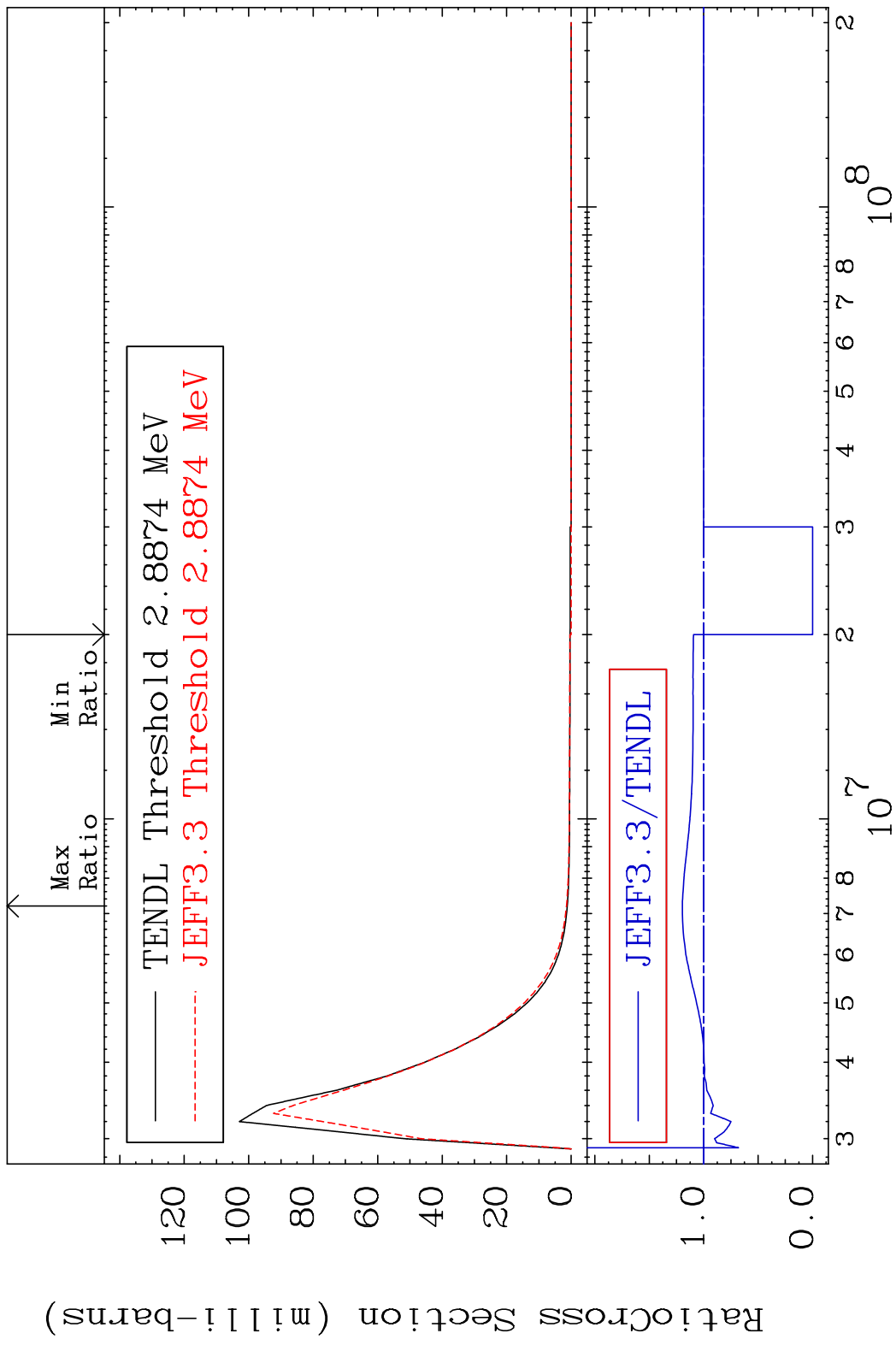


17 Incident Energy (eV) 40-Zr-96

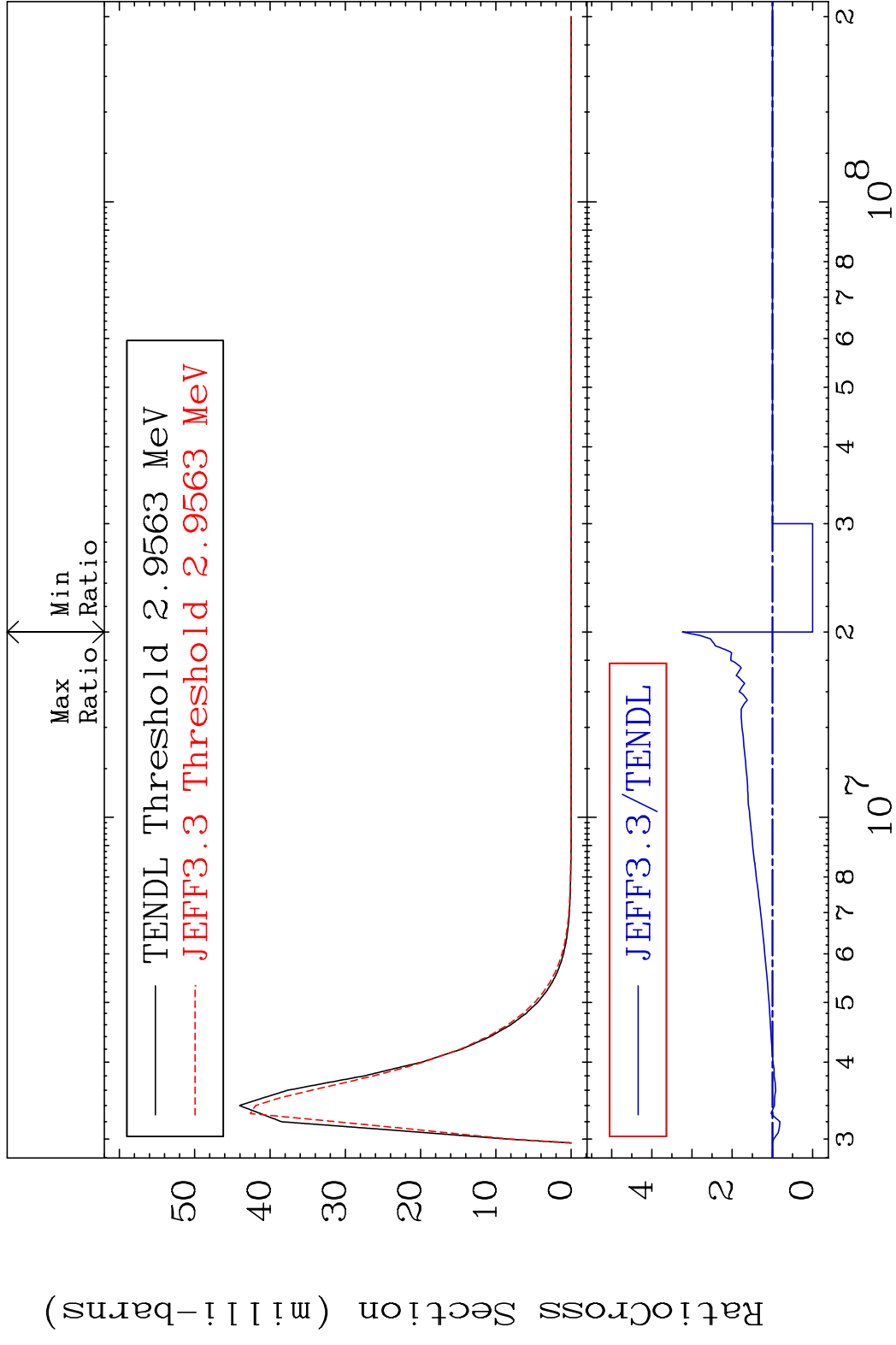
MAT 4043 MT= 59 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 97.11 %



MAT 4043 MT= 60 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 19.59 %

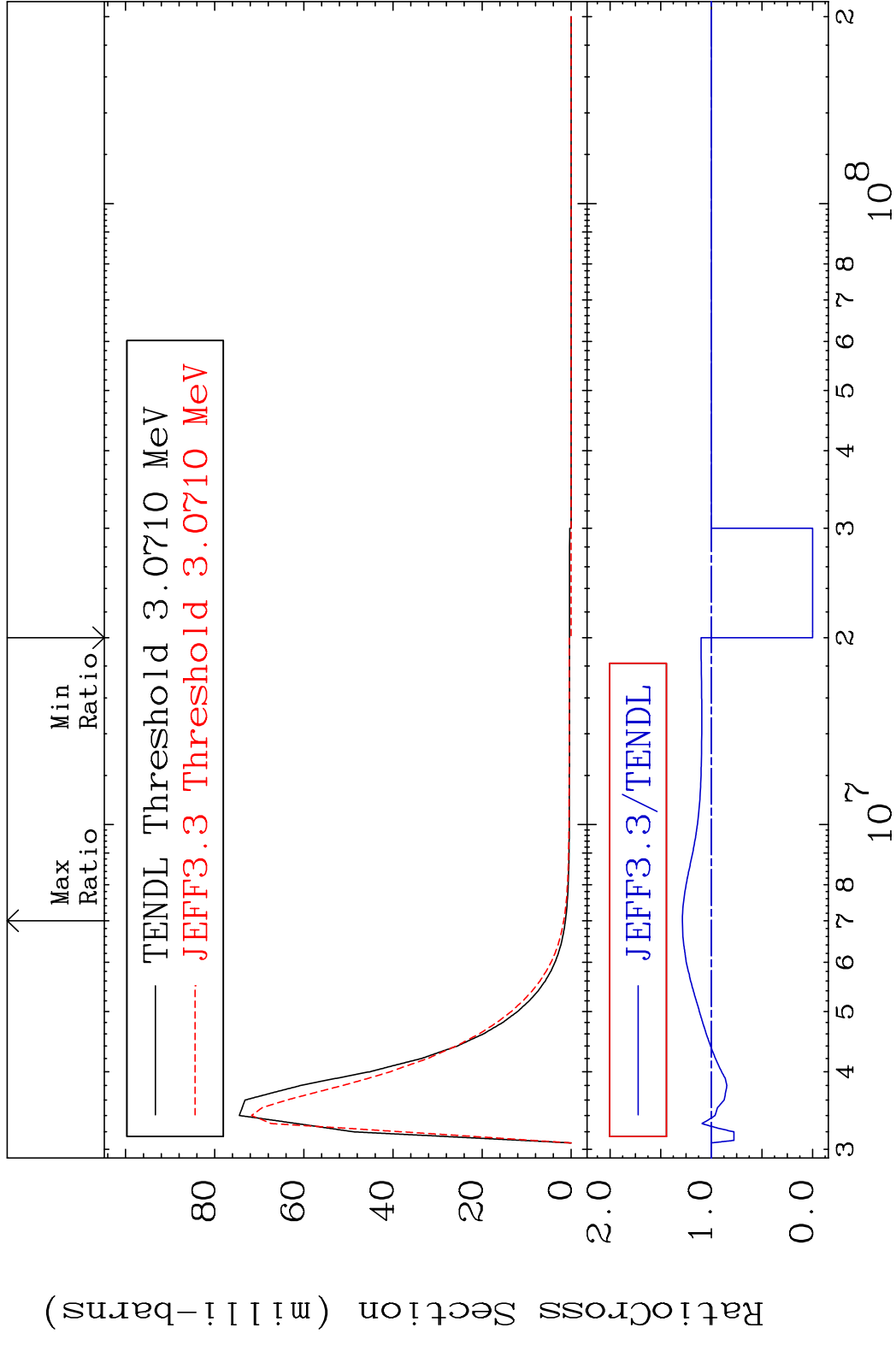


MAT 4043 MT= 61 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 224.1 %

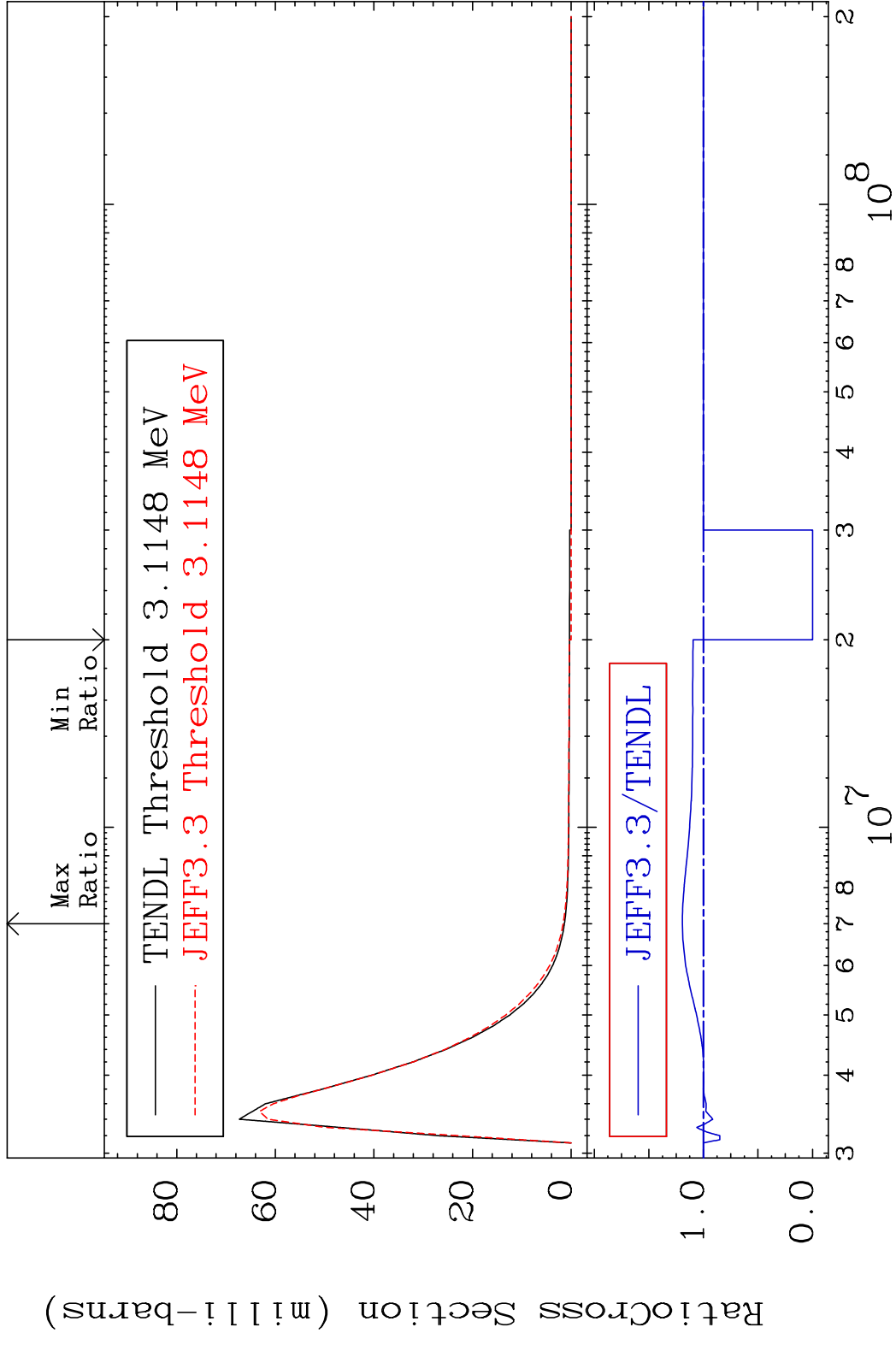


20 Incident Energy (eV) 40-Zr-96

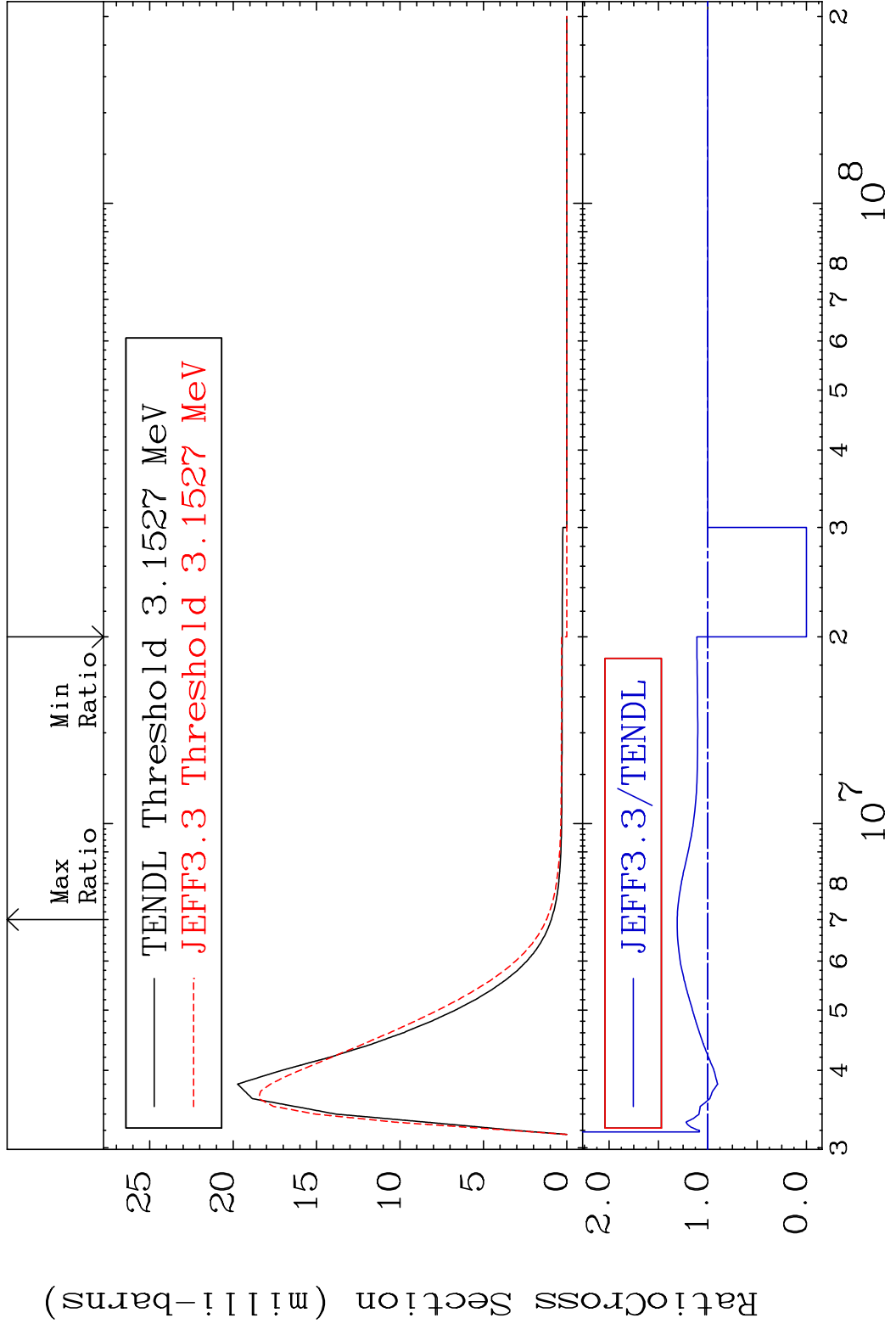
MAT 4043 MT= 62 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 28.59 %



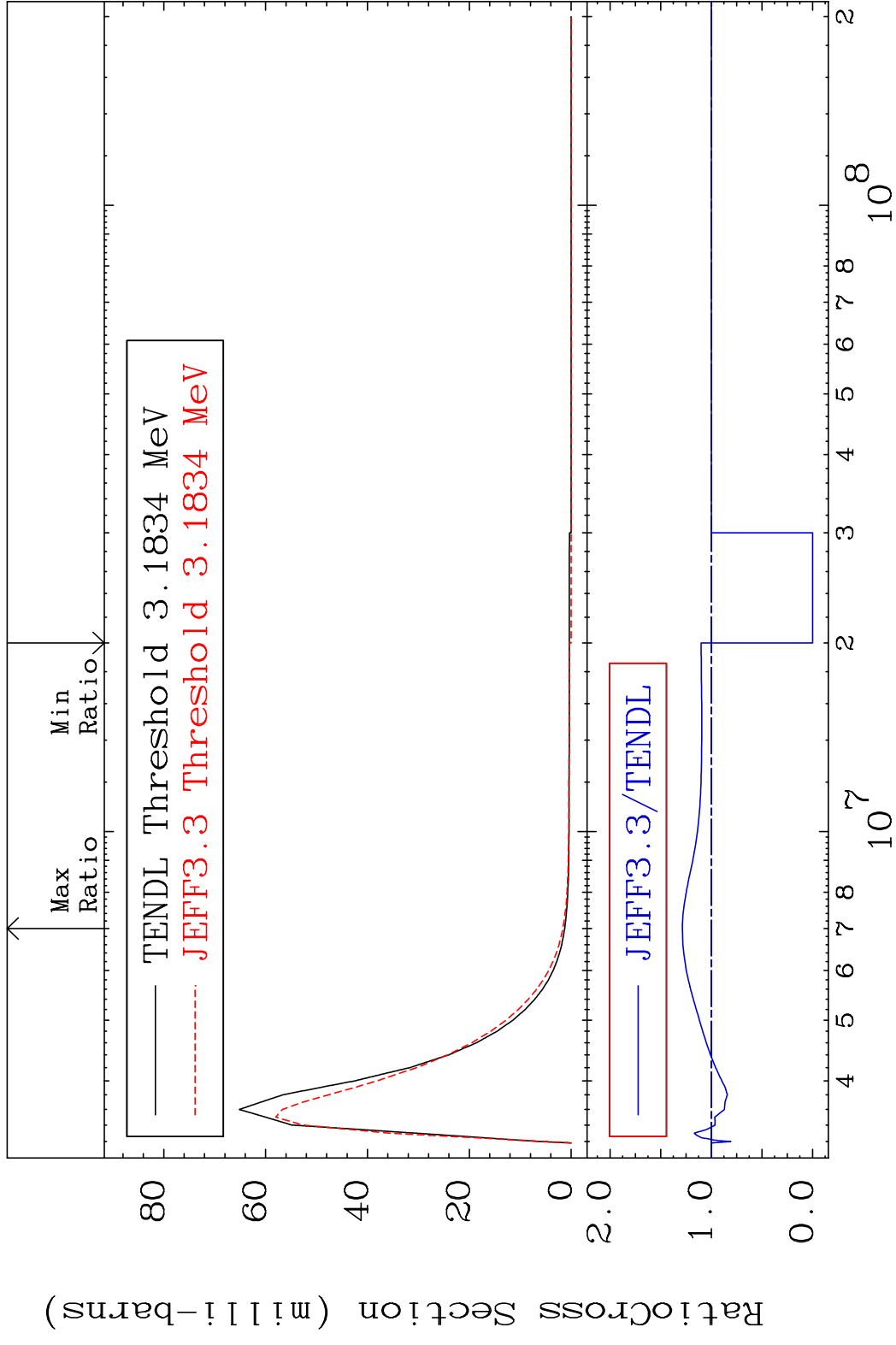
MAT 4043 MT= 63 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 19.29 %



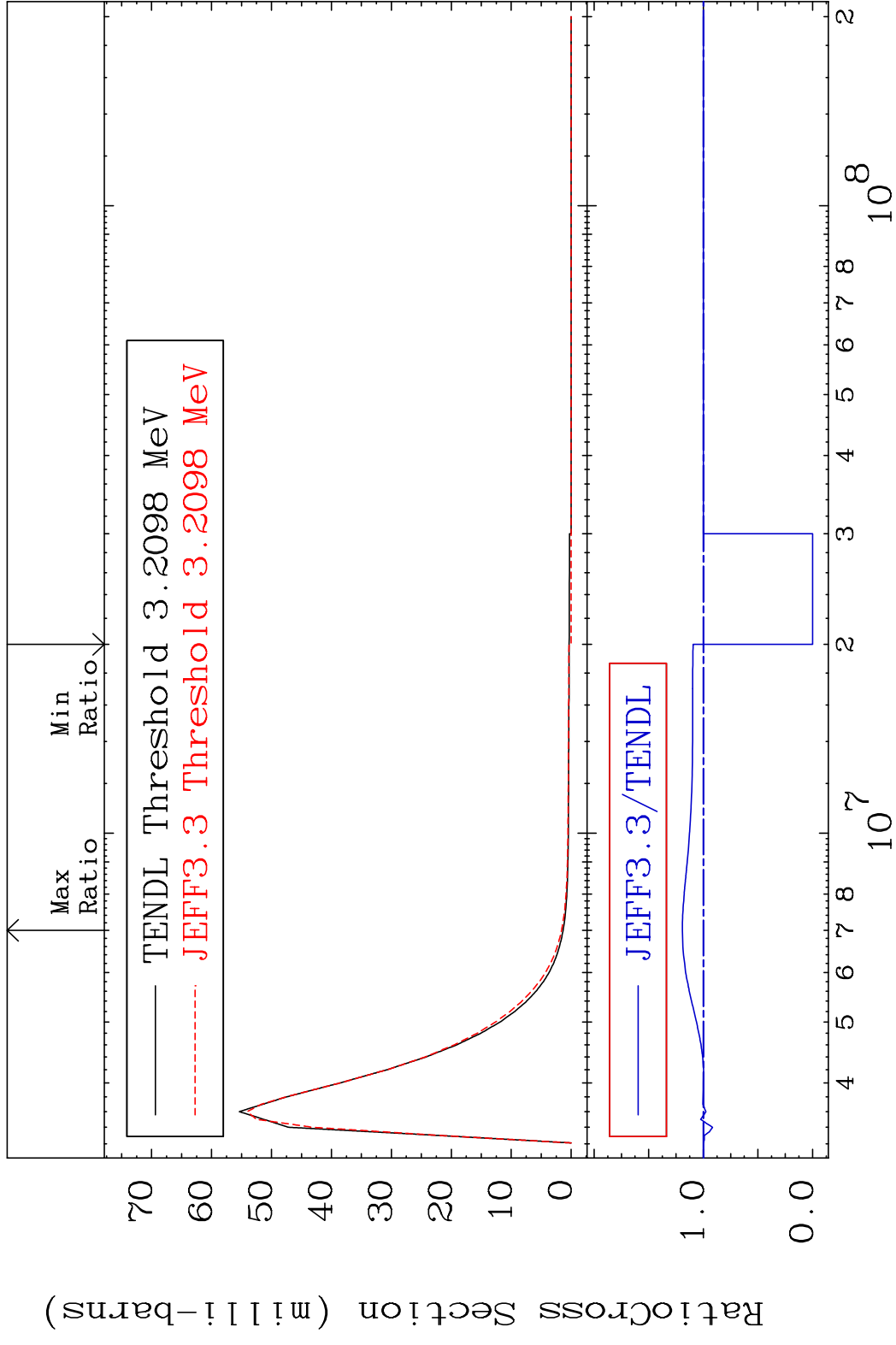
MAT 4043 MT= 64 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 30.98 %



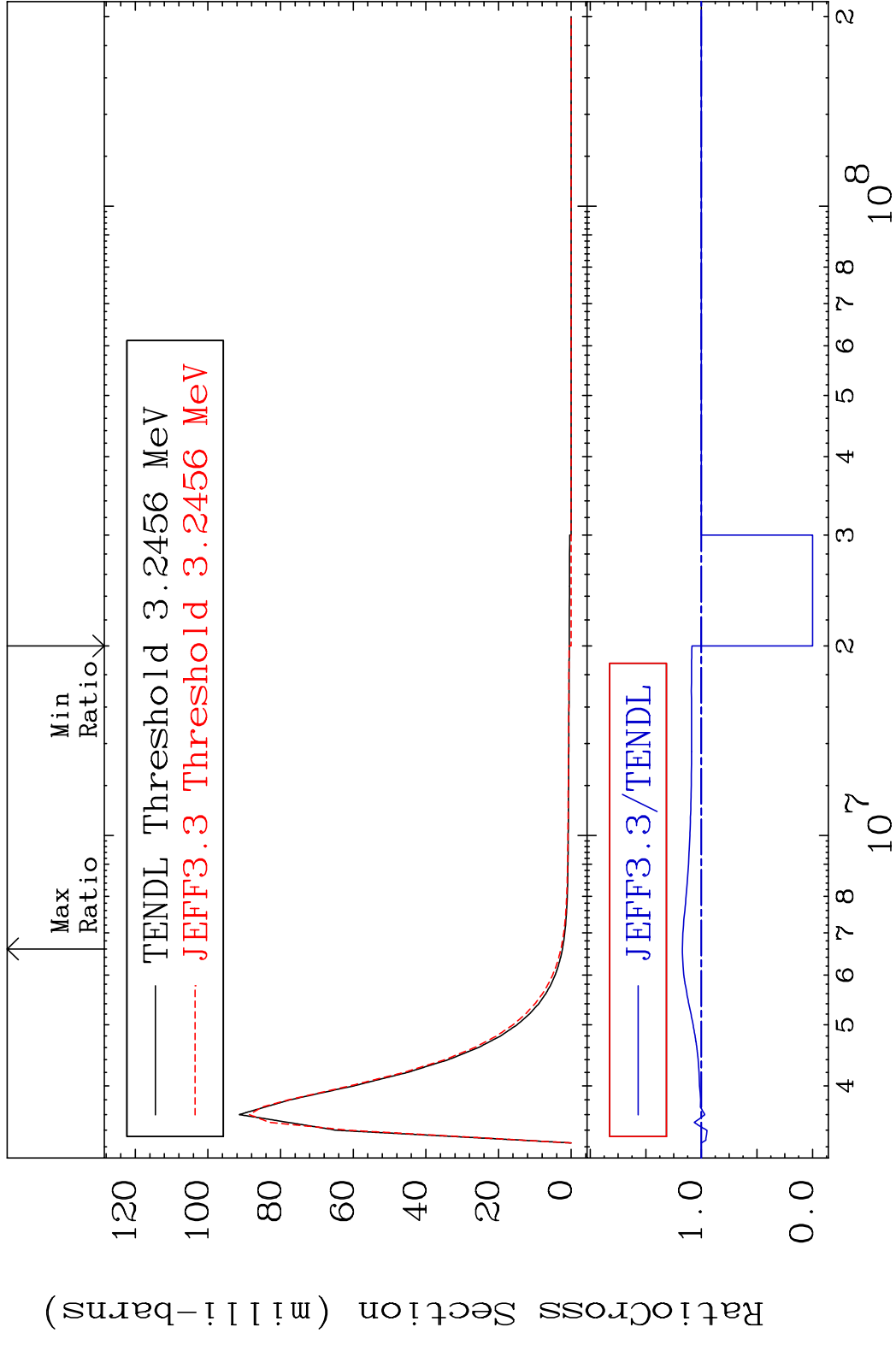
MAT 4043 MT= 65 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 28.61 %



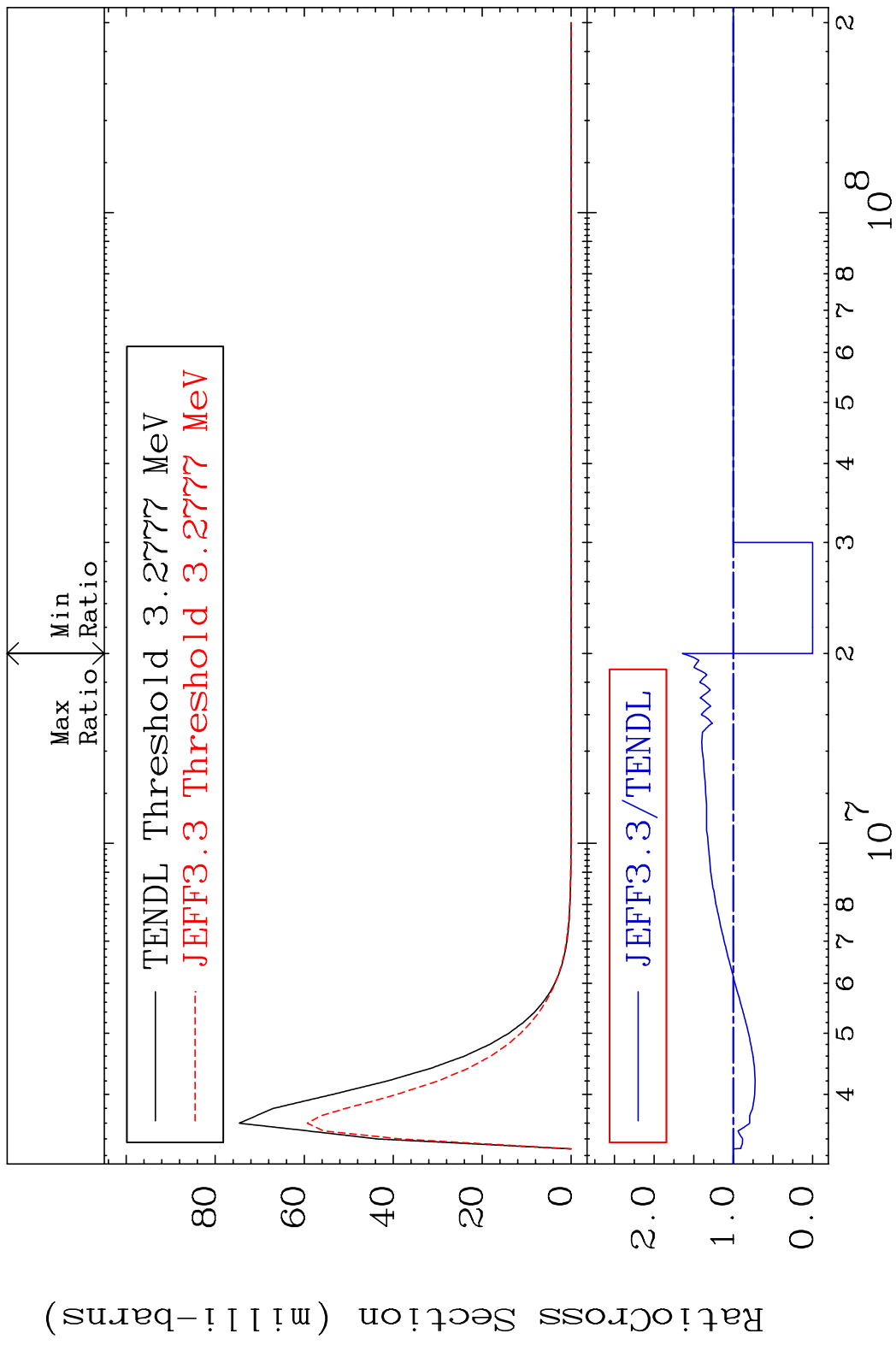
MAT 4043 MT= 66 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 19.21 %



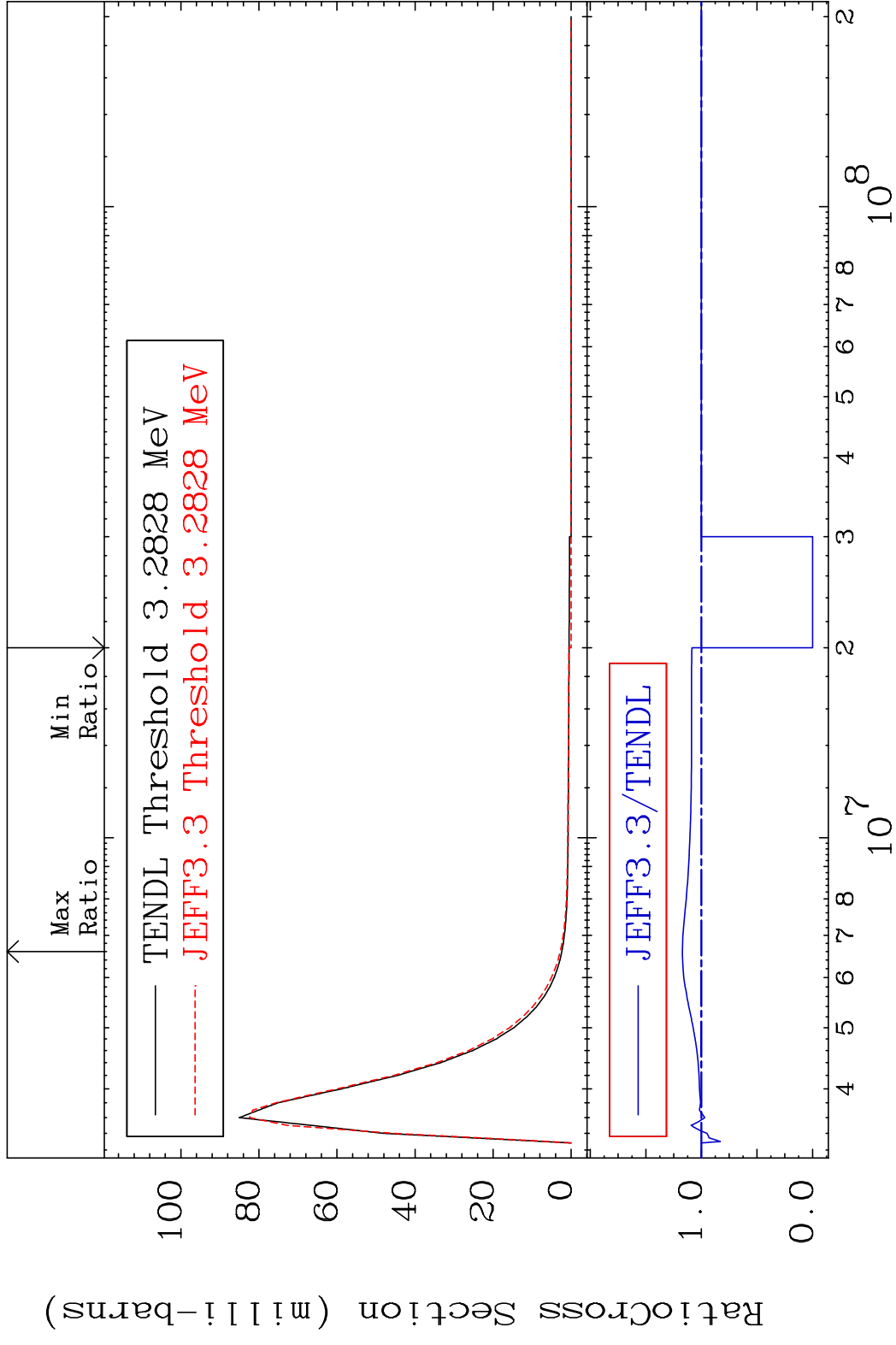
MAT 4043 MT= 67 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 17.15 %



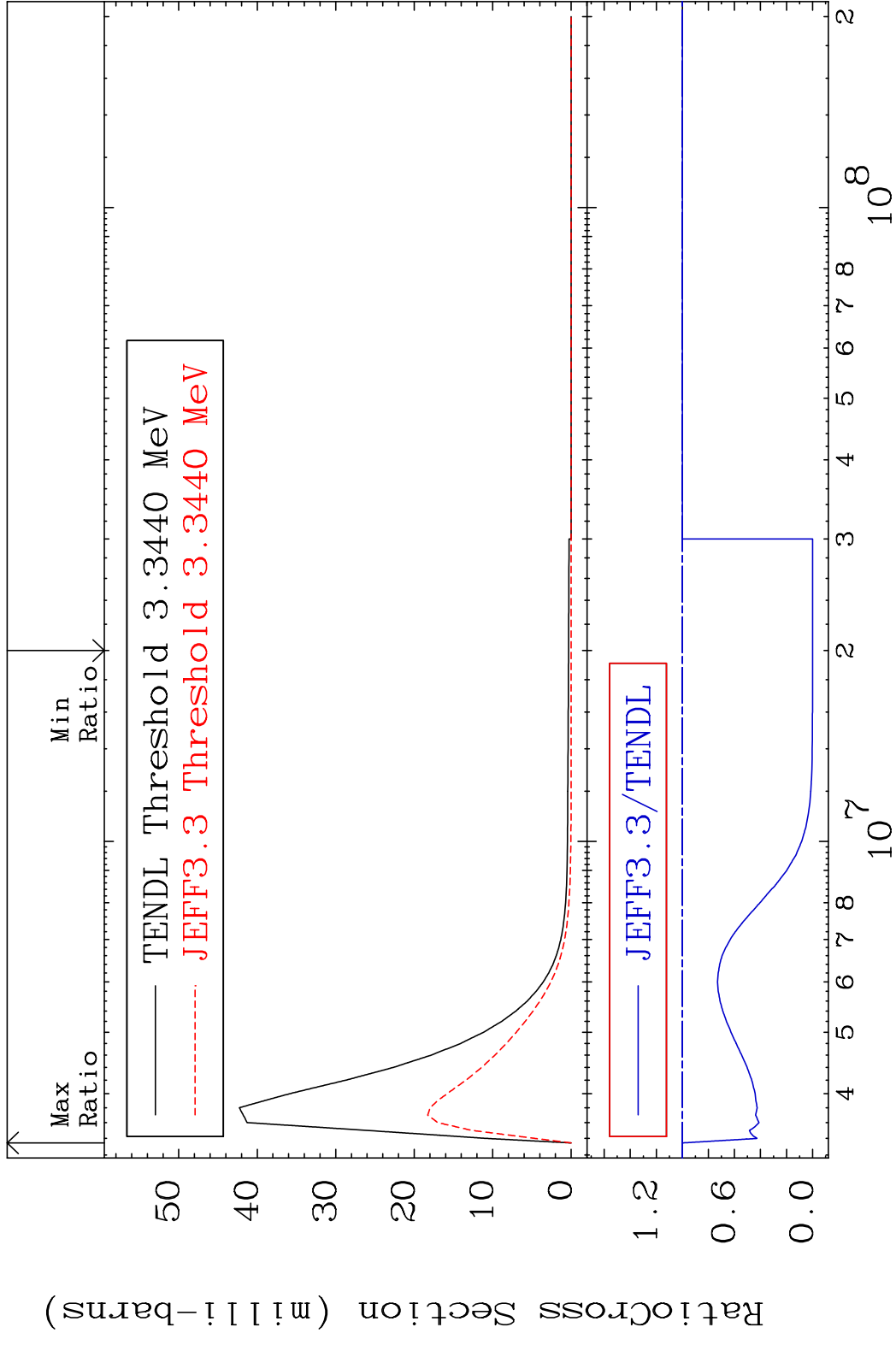
MAT 4043 MT= 68 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 64.37 %



MAT 4043 MT= 69 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 17.16 %



MAT 4043 MT= 70 (n,n') Level 40-Zr-96
 Cross Section -100.0 To 0.000 %

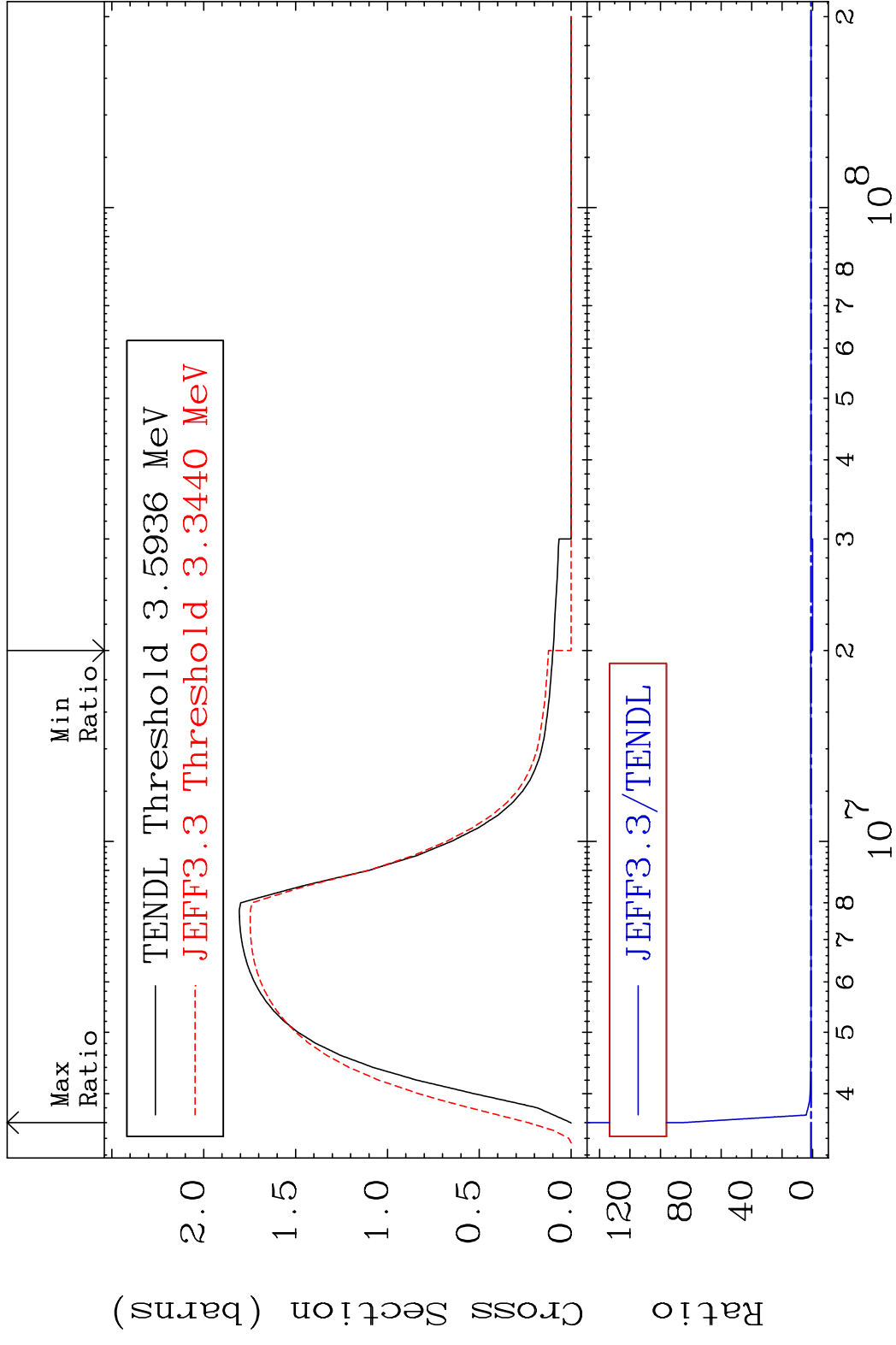


MAT 4043

(n,n') Continuum

40-Zr-96

Cross Section -100.0 To 8458. %



30

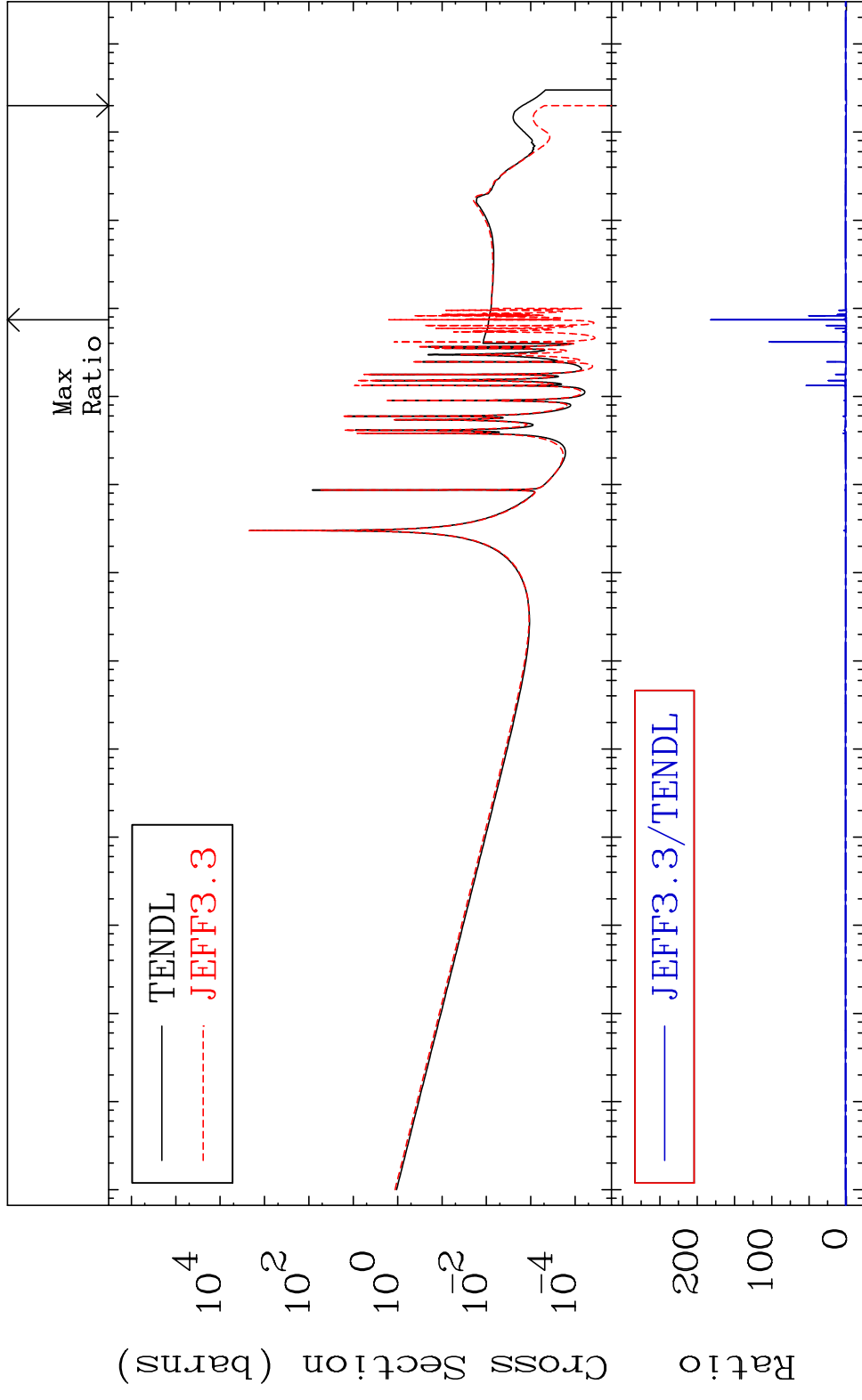
Incident Energy (eV) 40-Zr-96

MAT 4043

40-Zr-96

(n, γ)

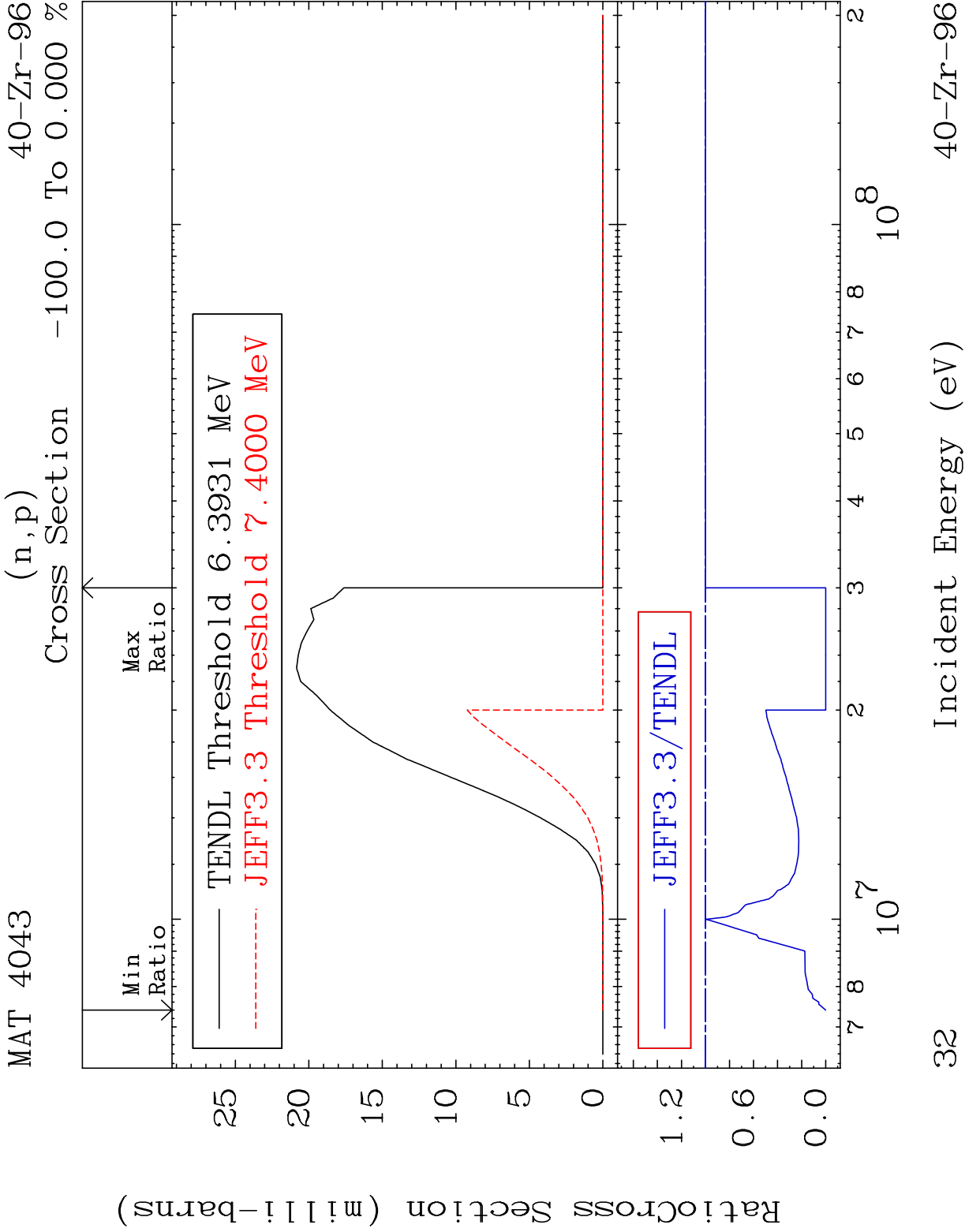
Cross Section -100.0 To 9999. %



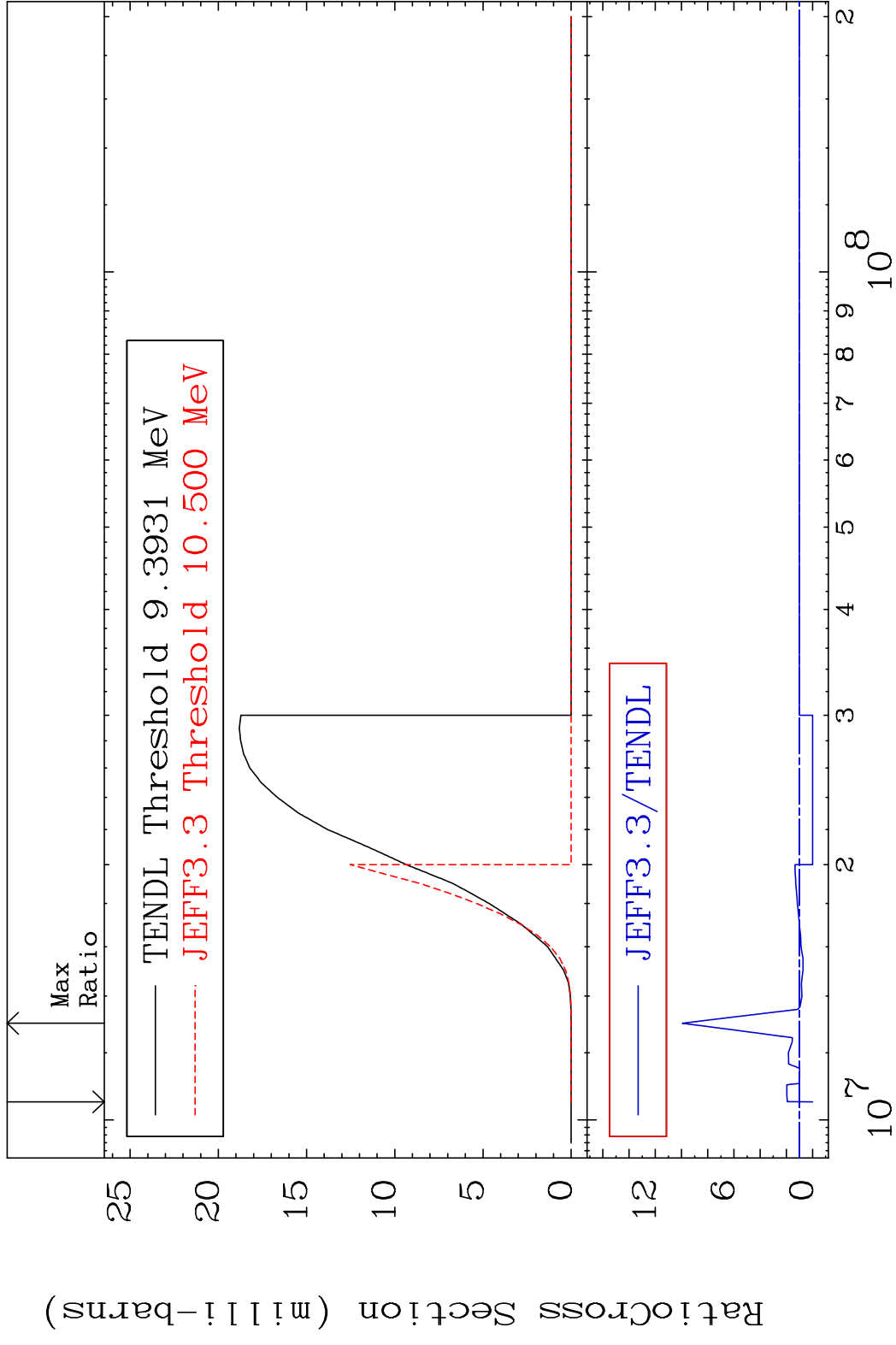
31

Incident Energy (eV)

40-Zr-96



MAT 4043 (n,d) 40-Zr-96
 Cross Section -100.0 To 893.7 %



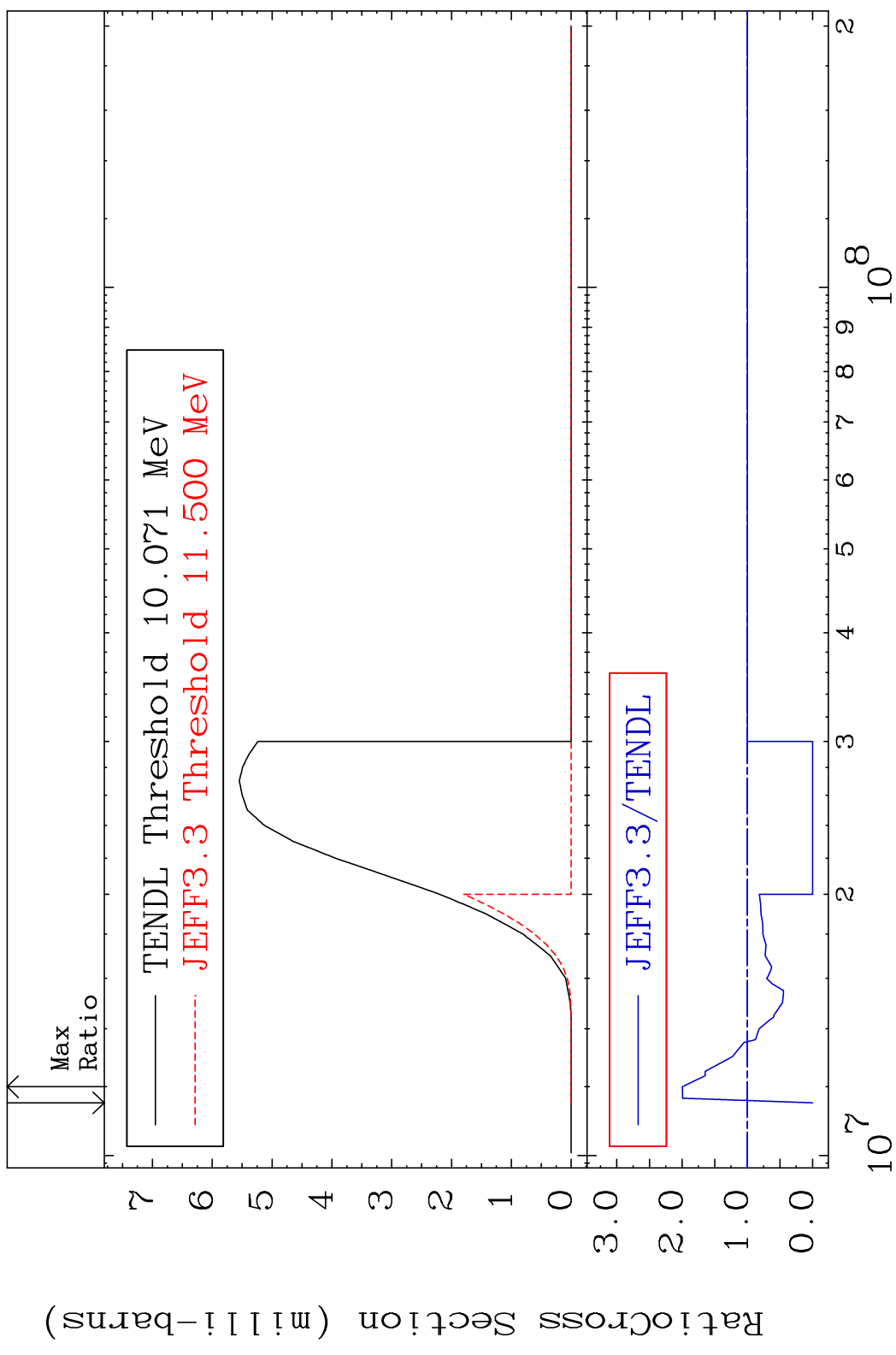
33 40-Zr-96

MAT 4043

(n, t)

40-Zr-96

Cross Section -100.0 To 99.55 %



34

Incident Energy (eV)

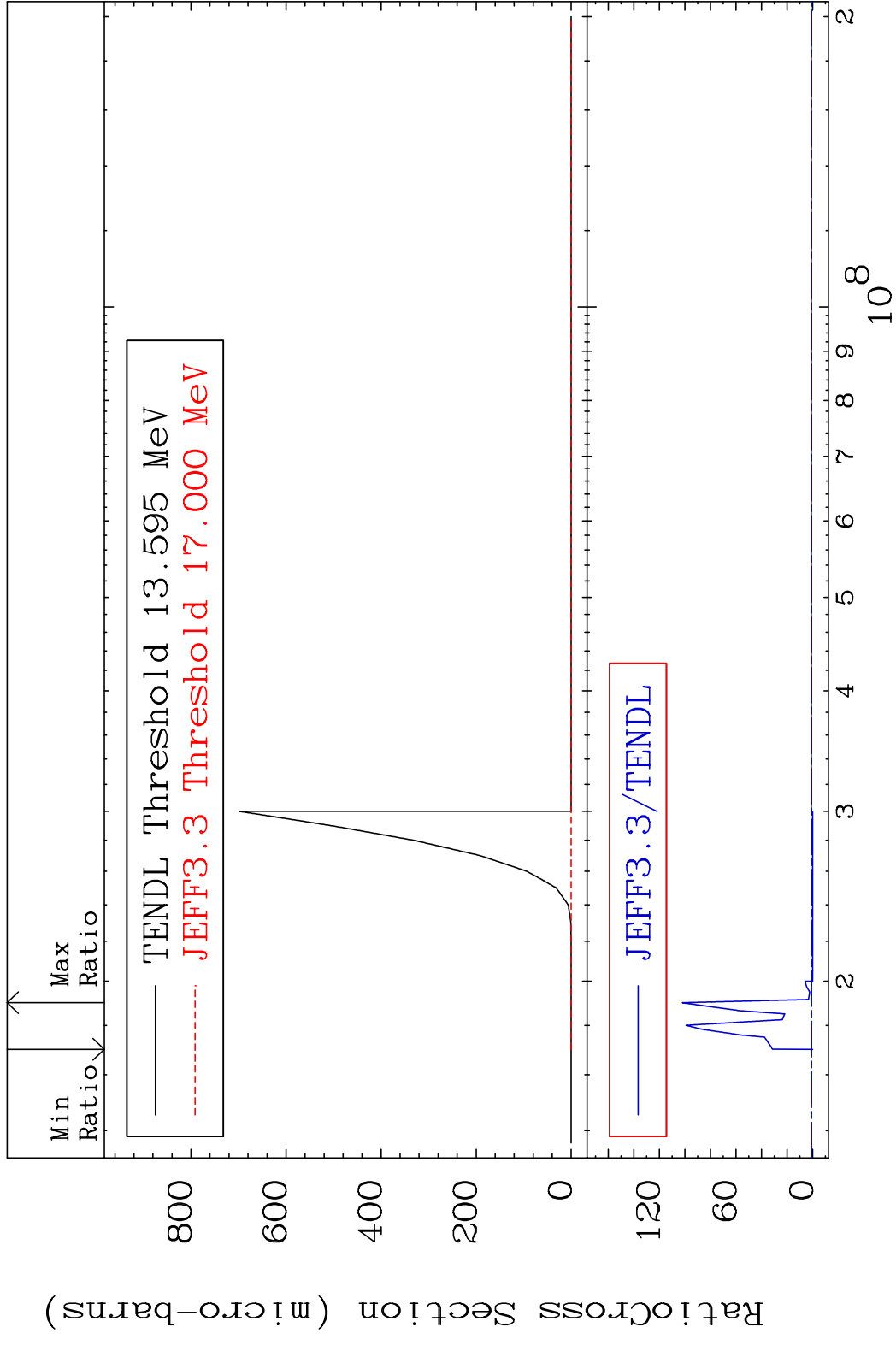
40-Zr-96

MAT 4043

(n, He-3)

40-Zr-96

Cross Section -100.0 To 9999. %



35

Incident Energy (eV)

40-Zr-96

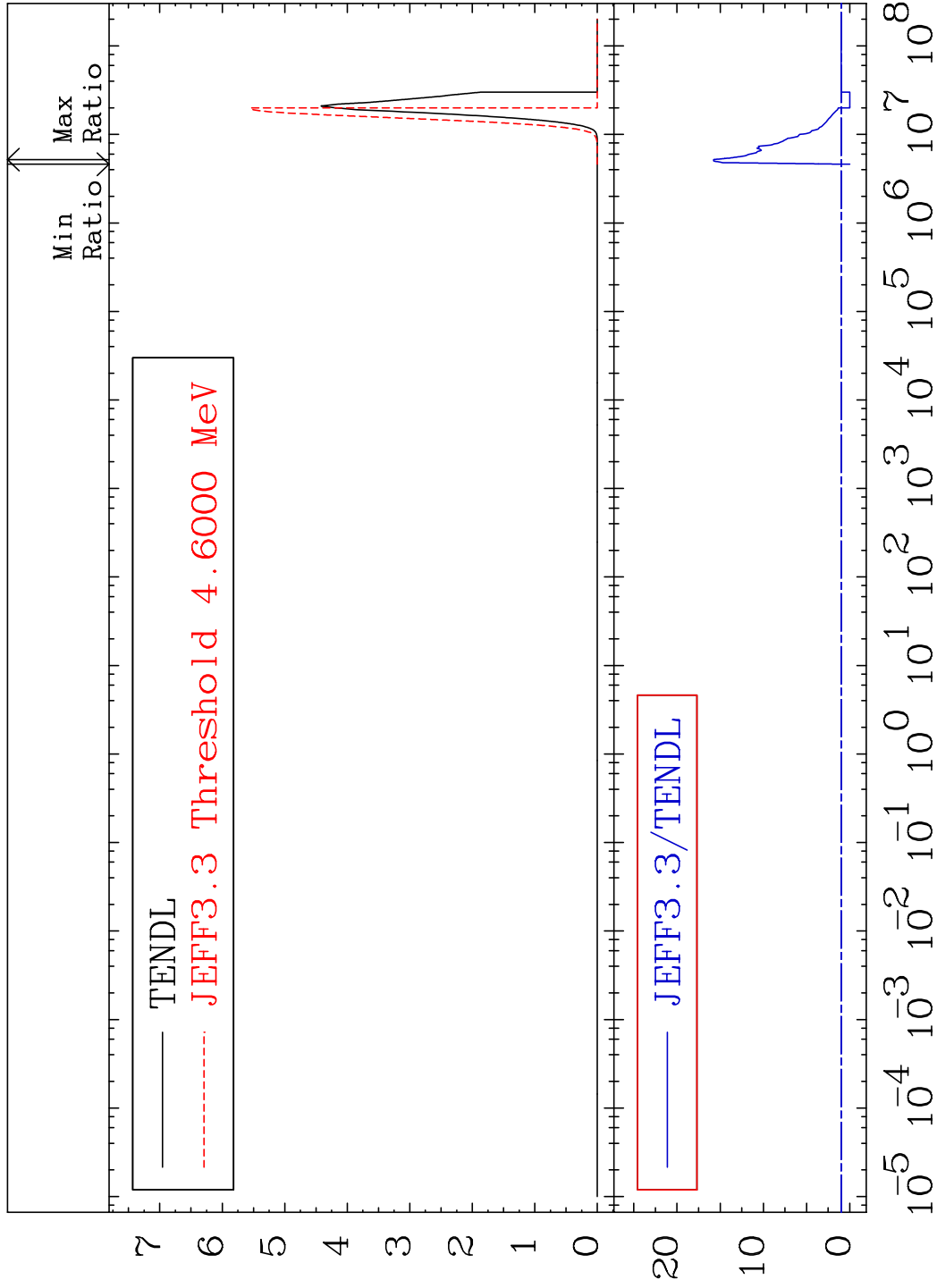
MAT 4043

(n, α)

40-Zr-96

Cross Section -100.0 To 1476. %

RatioCross Section (milli-barns)

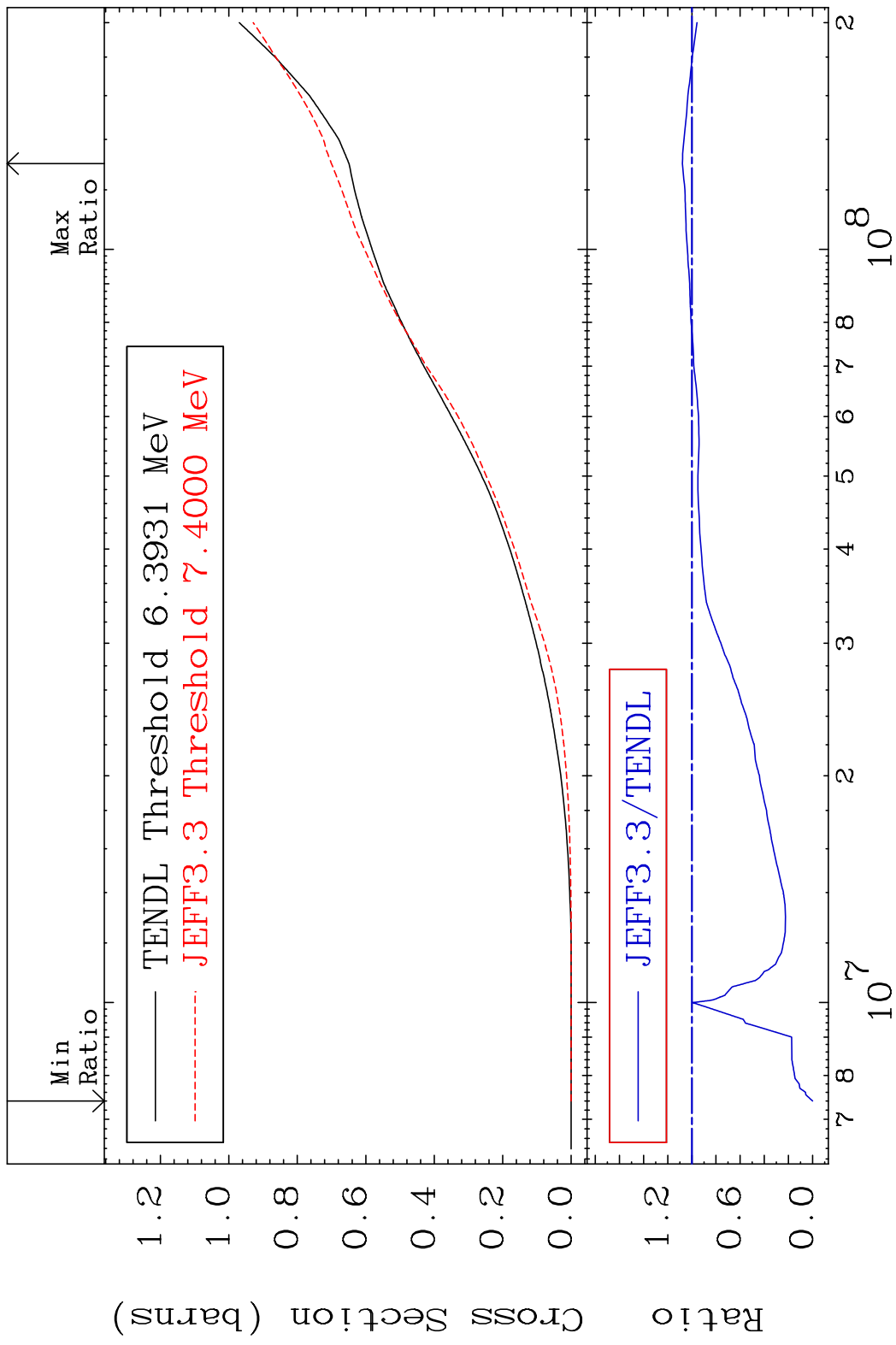


36

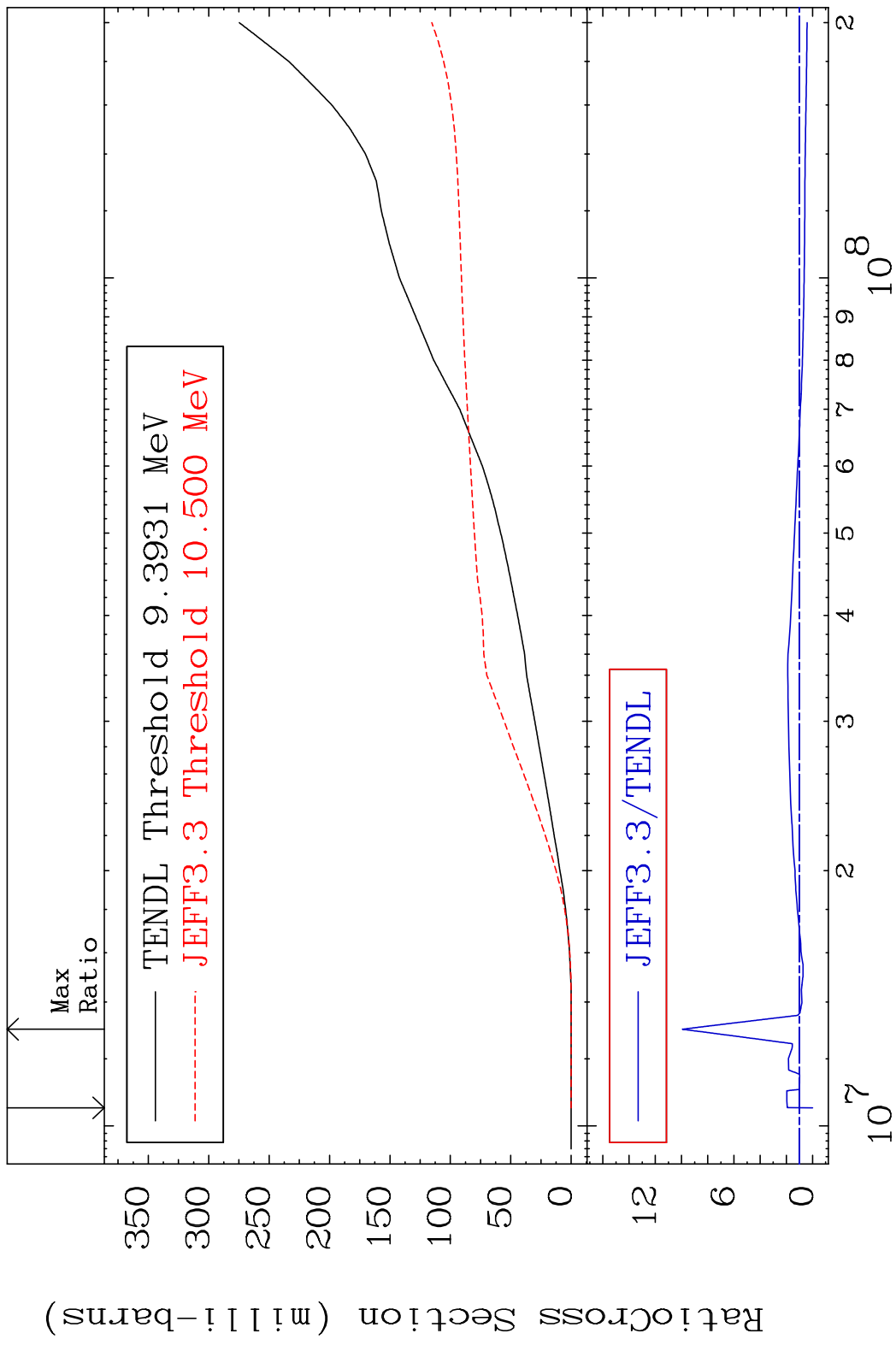
Incident Energy (eV)

40-Zr-96

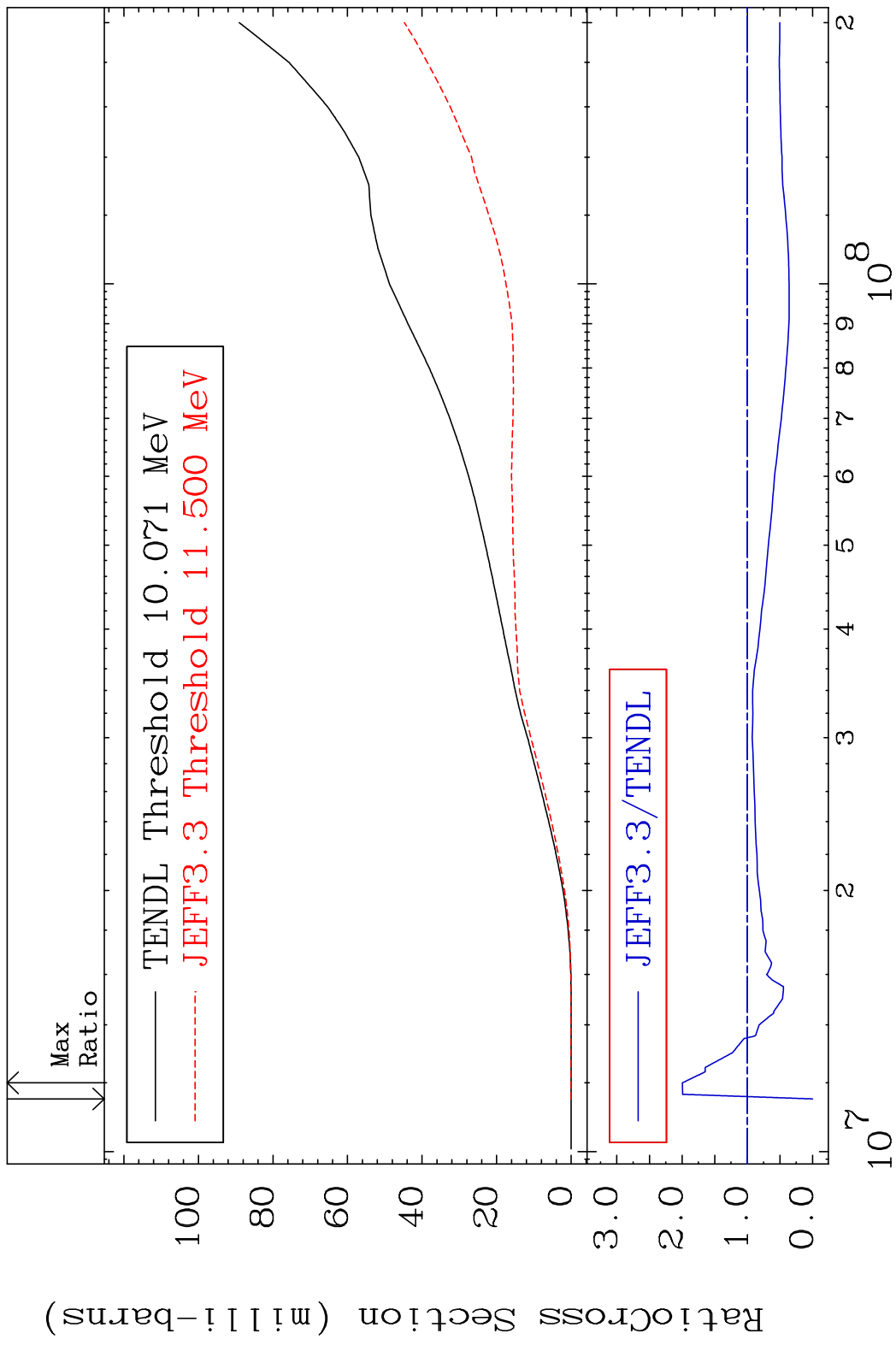
MAT 4043 Hydrogen Production 40-Zr-96
 Cross Section -100.0 To 7.901 %



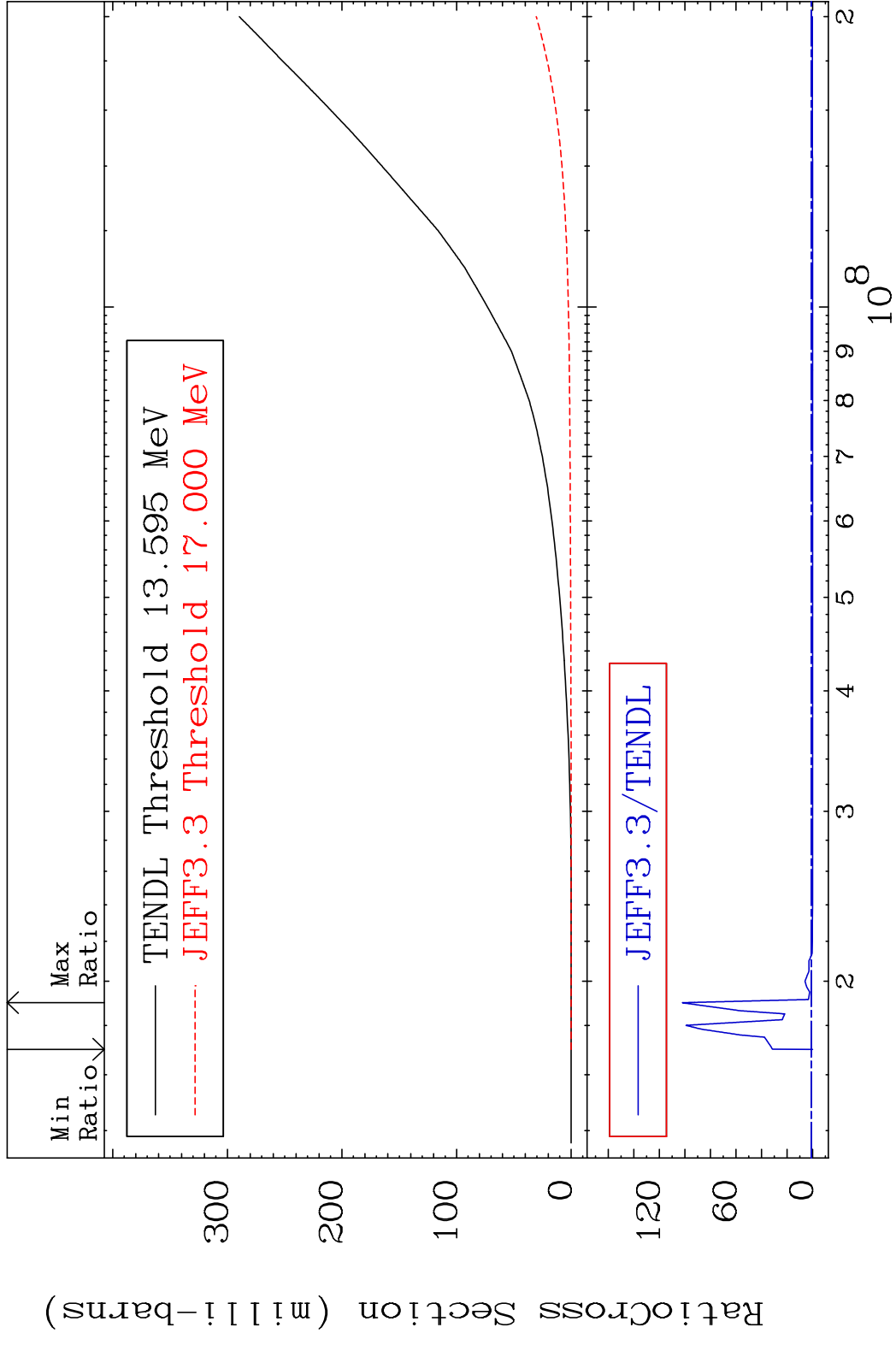
MAT 4043 Deuterium Production 40-Zr-96
 Cross Section -100.0 To 893.7 %



MAT 4043 Tritium Production 40-Zr-96
 Cross Section -100.0 To 99.55 %



MAT 4043 He-3 Production 40-Zr-96
 Cross Section -100.0 To 9999. %



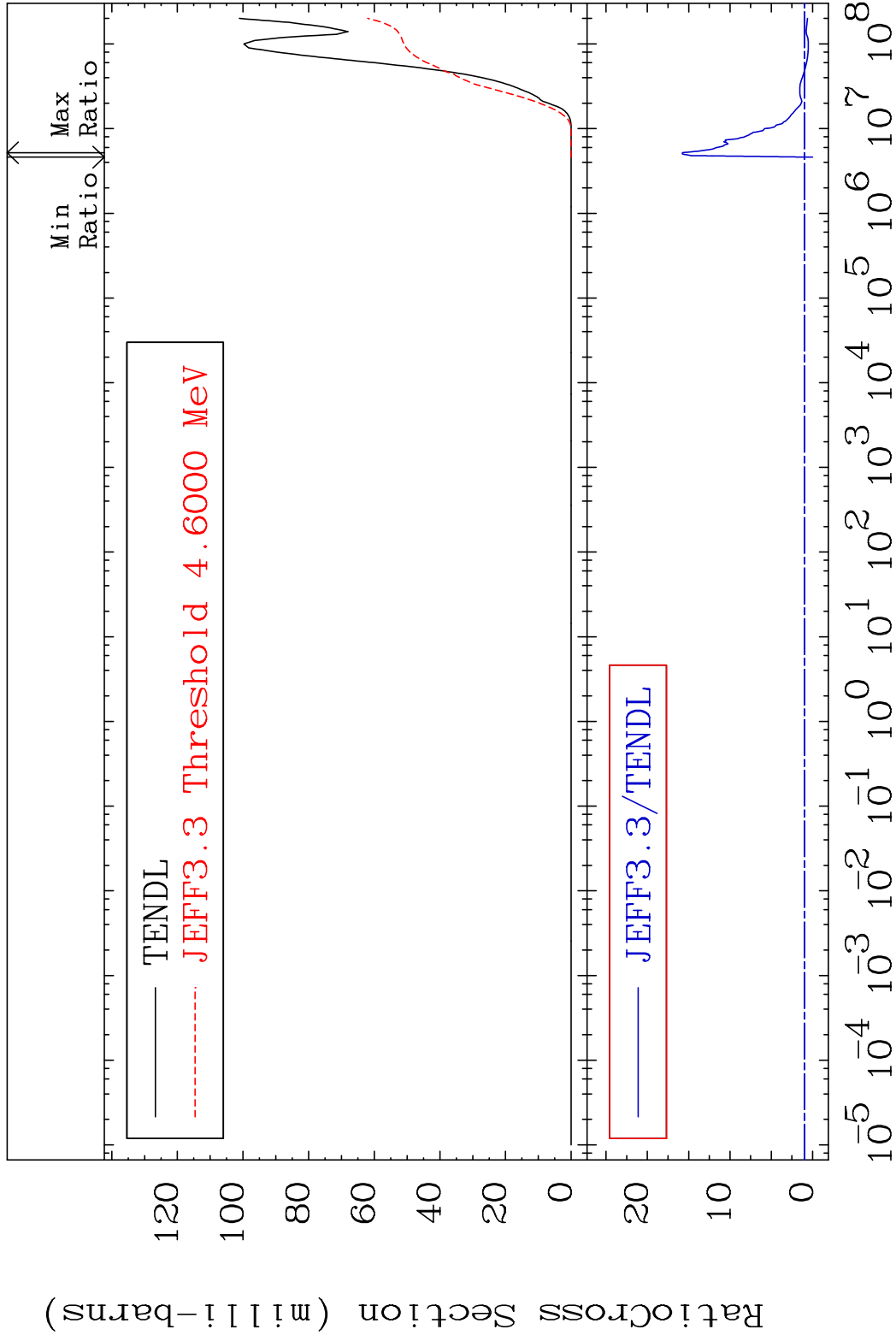
40 Incident Energy (eV) 40-Zr-96

MAT 4043

He-4 Production

40-Zr-96

Cross Section -100.0 To 1476. %



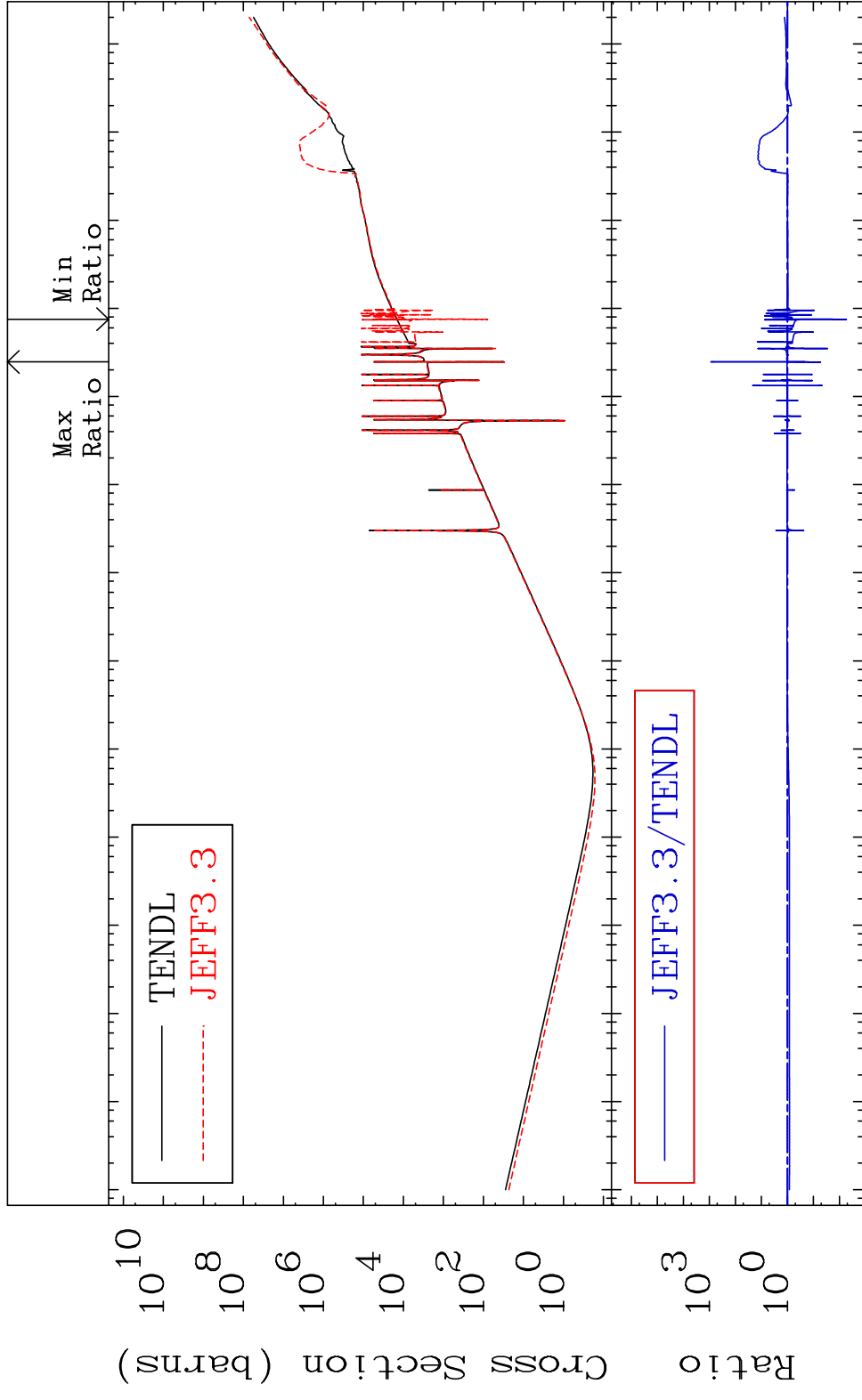
41

Incident Energy (eV)

40-Zr-96

MAT 4043

Kerma total (eV-barns) 40-Zr-96
Cross Section -99.46 To 9999. %



42

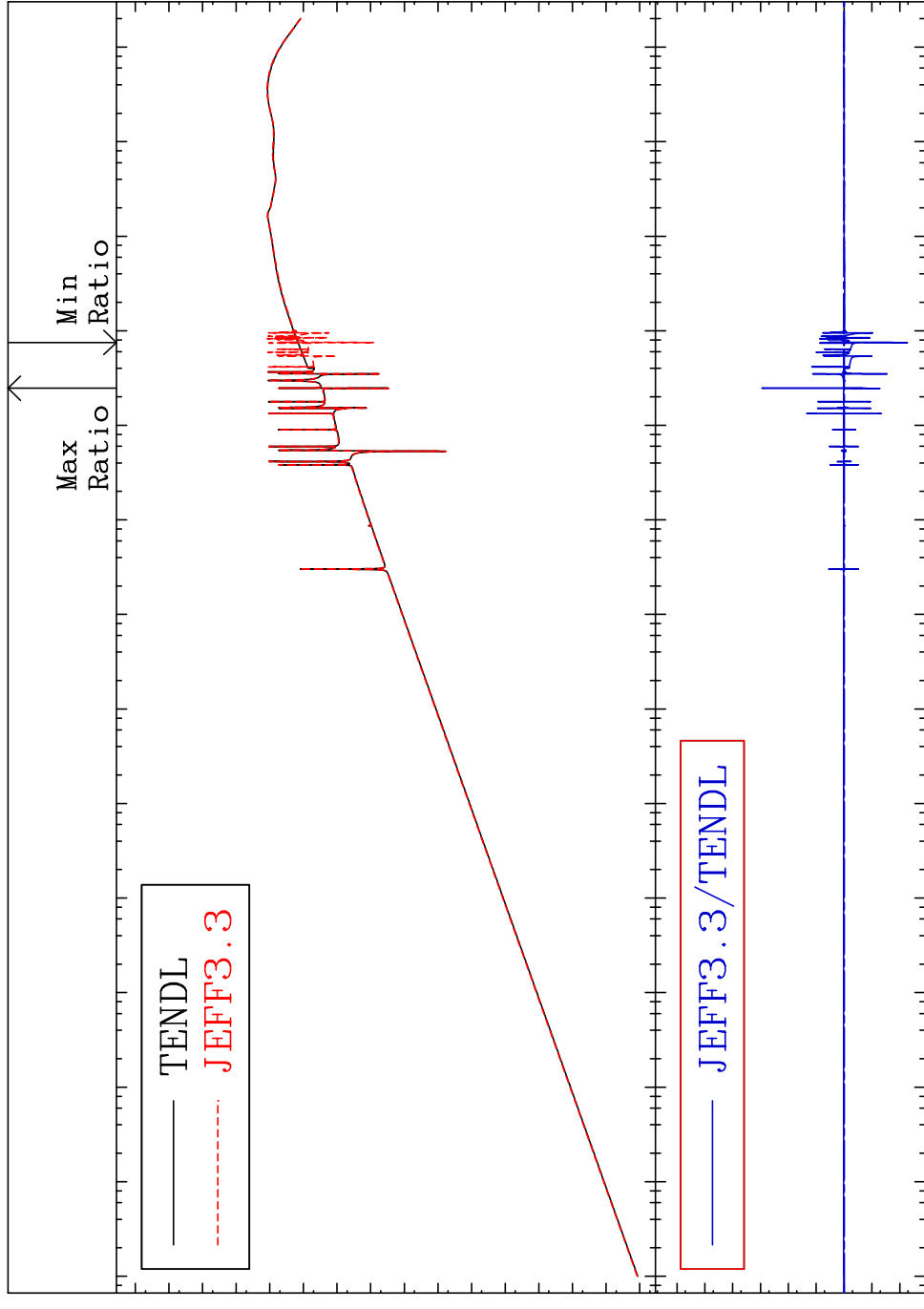
Incident Energy (eV)

40-Zr-96

MAT 4043

Kerma elastic
Cross Section

40-Zr-96
-99.46 To 9999. %



10^8
 10^6
 10^4
 10^2
 10^0
 10^{-2}
 10^{-4}
 10^{-6}
Cross Section (barns)

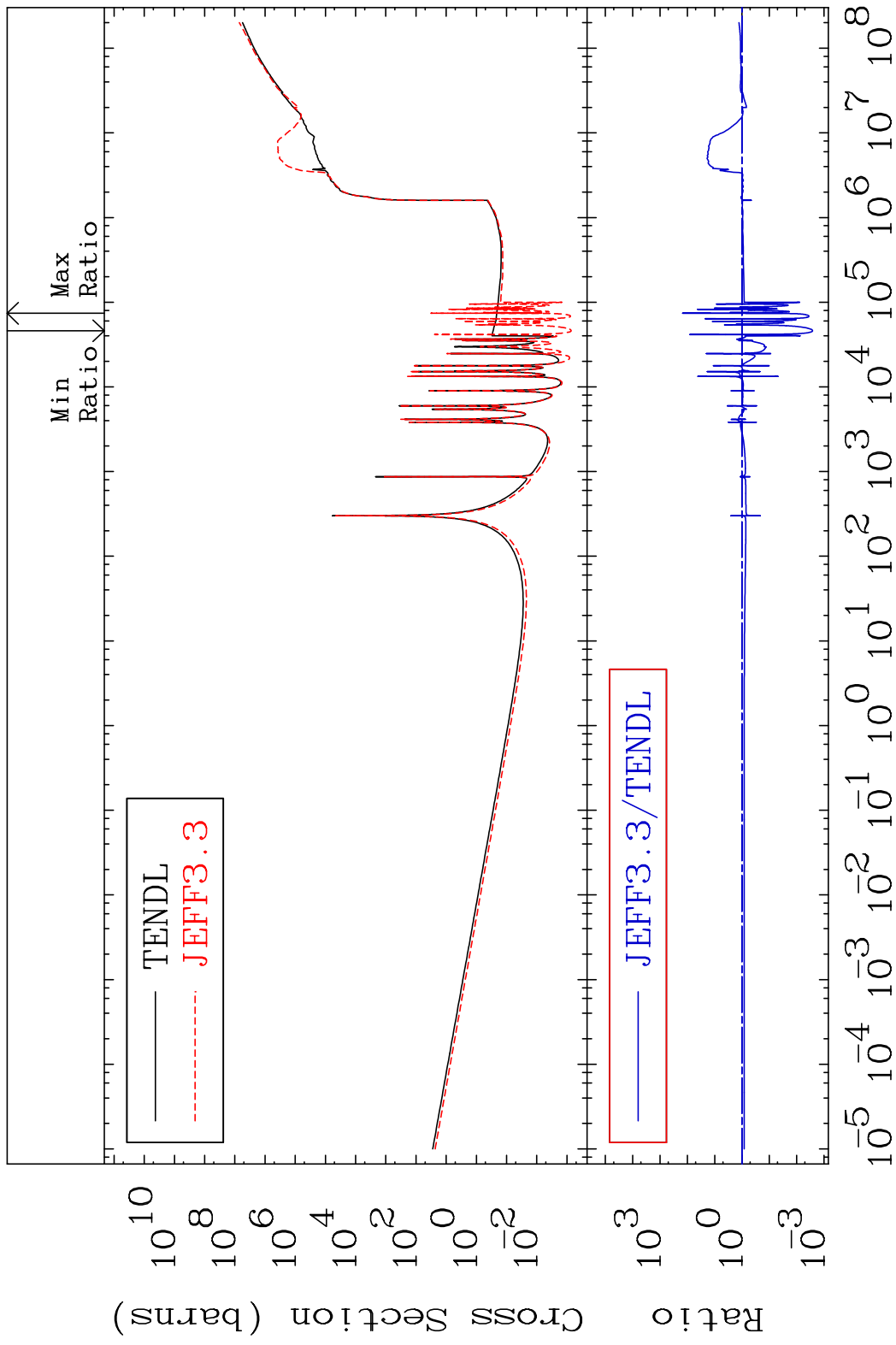
10^3
 10^0
Ratio

10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
Incident Energy (eV)

43

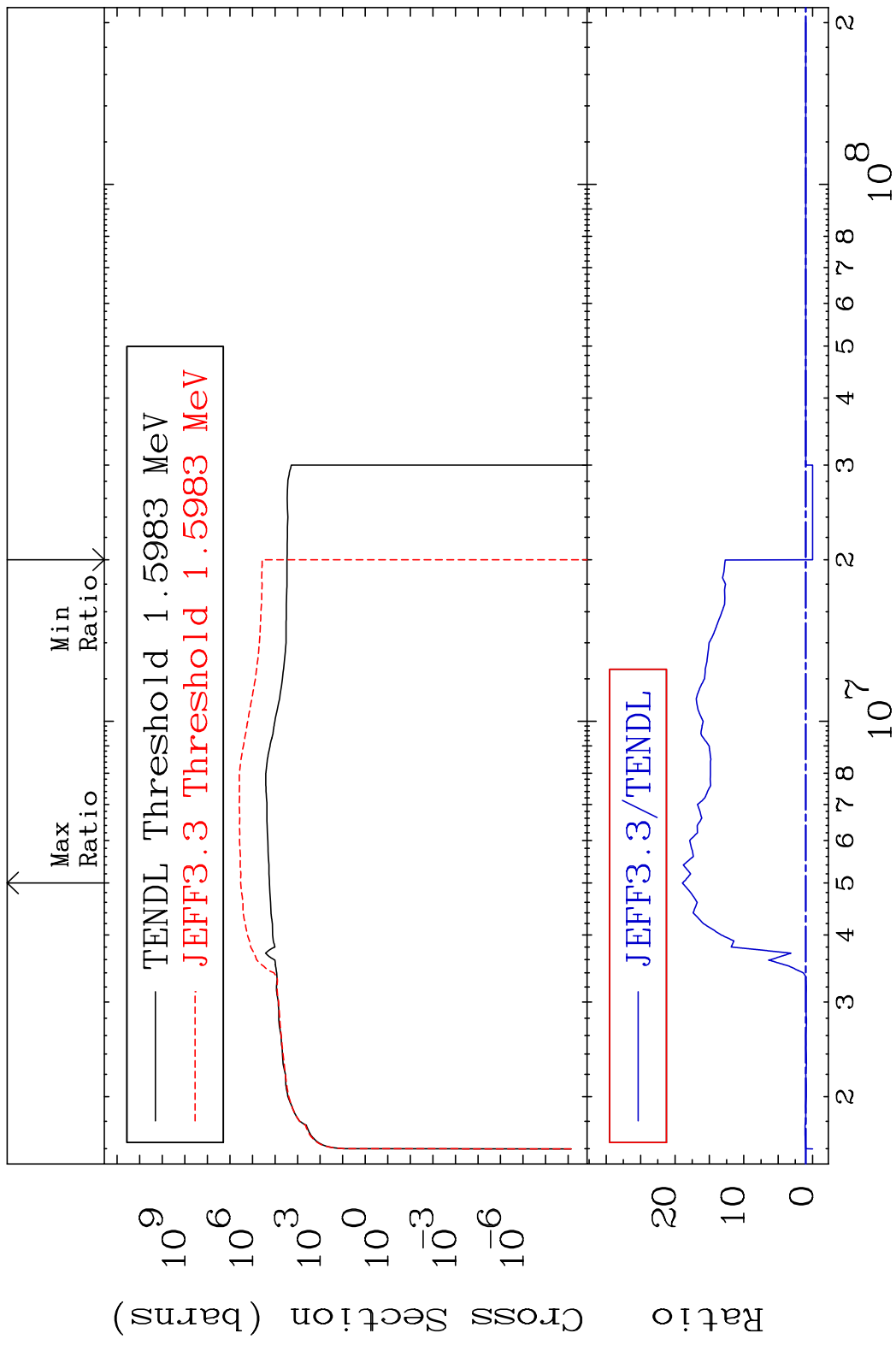
40-Zr-96

MAT 4043 Kerma non-elastic (all but mt2) 40-Zr-96
 Cross Section -99.74 To 9999. %



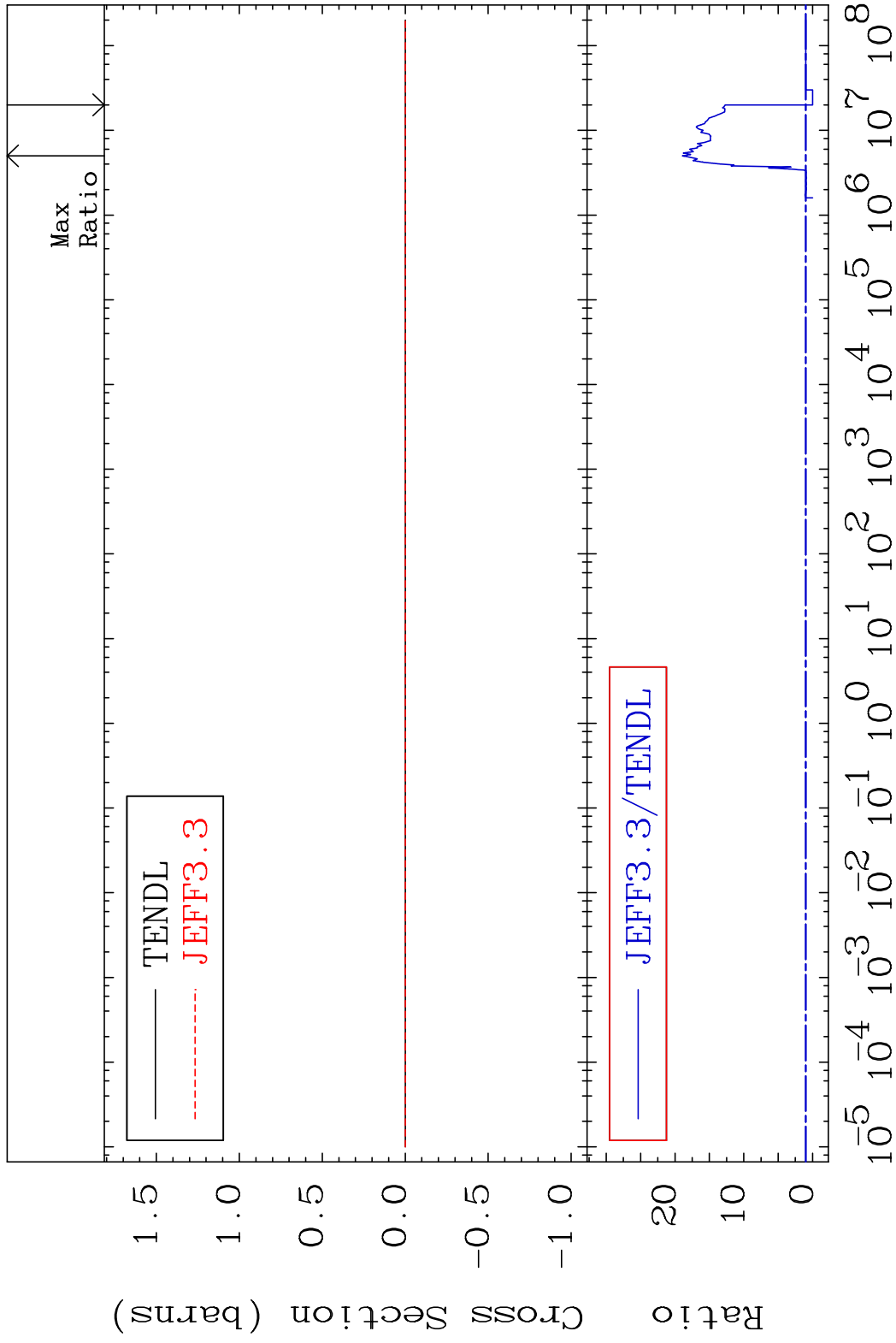
44 Incident Energy (eV) 40-Zr-96

MAT 4043 Kerma inelastic (mt51-91) 40-Zr-96
 Cross Section -100.0 To 1793. %

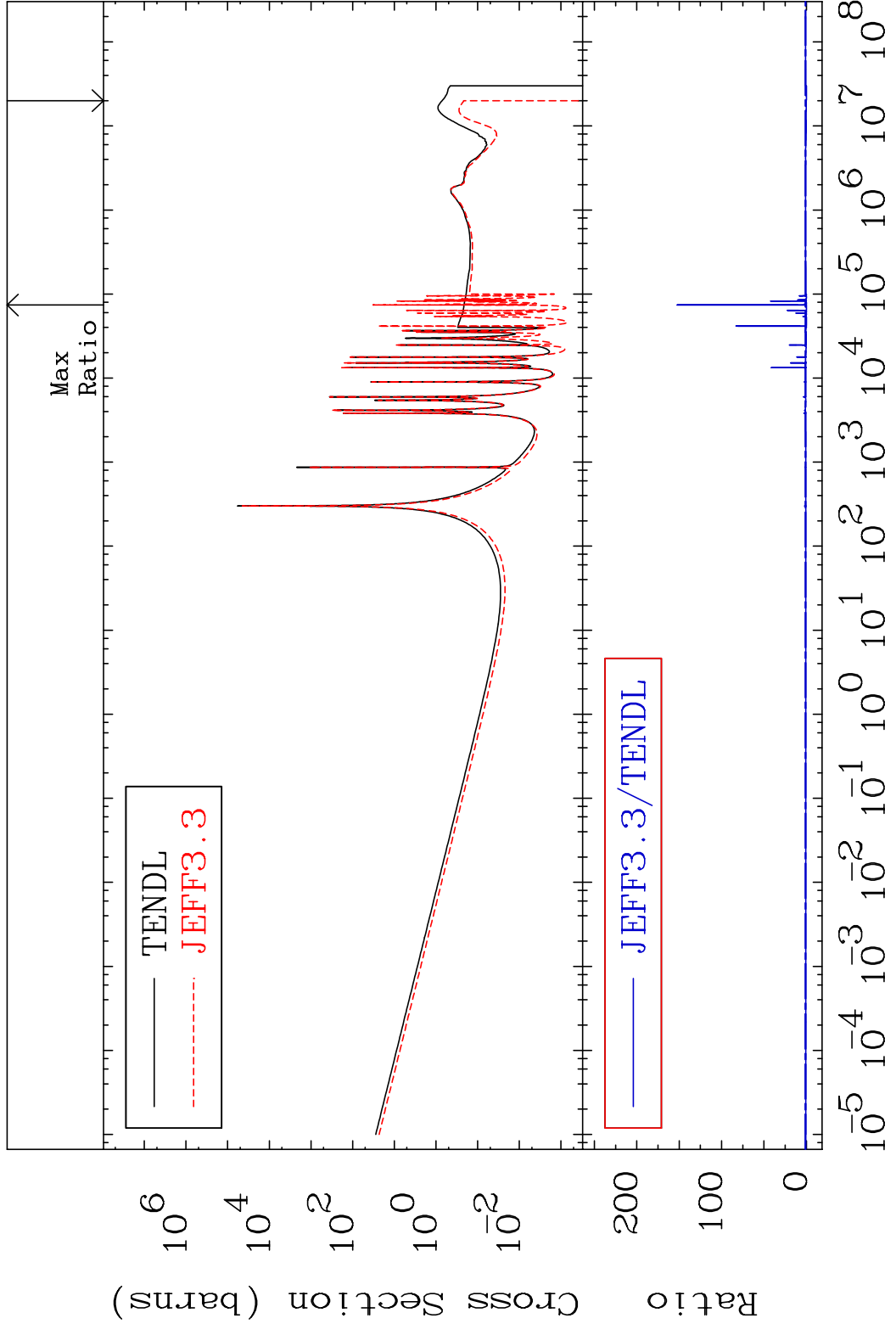


45 Incident Energy (eV) 40-Zr-96

MAT 4043 Kerma fission (mt18 or mt19-20-21-38) 40-Zr-96
 Cross Section -100.0 To 1793. %



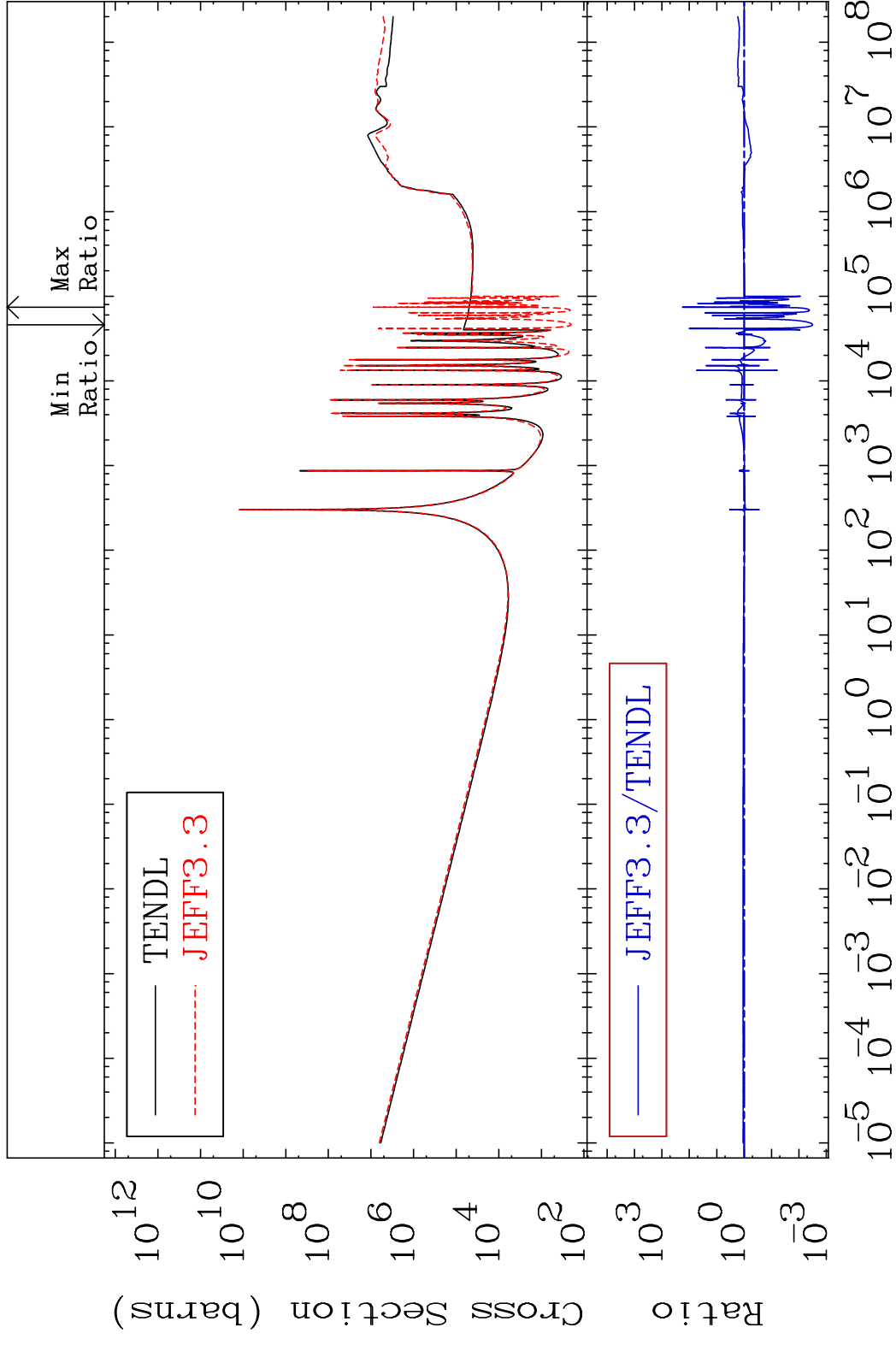
MAT 4043 Kerma capture (mt102) 40-Zr-96
Cross Section -100.0 To 9999. %



47 Incident Energy (eV) 40-Zr-96

MAT 4043

Total photon (eV-barns) 40-Zr-96
Cross Section -99.68 To 9999. %

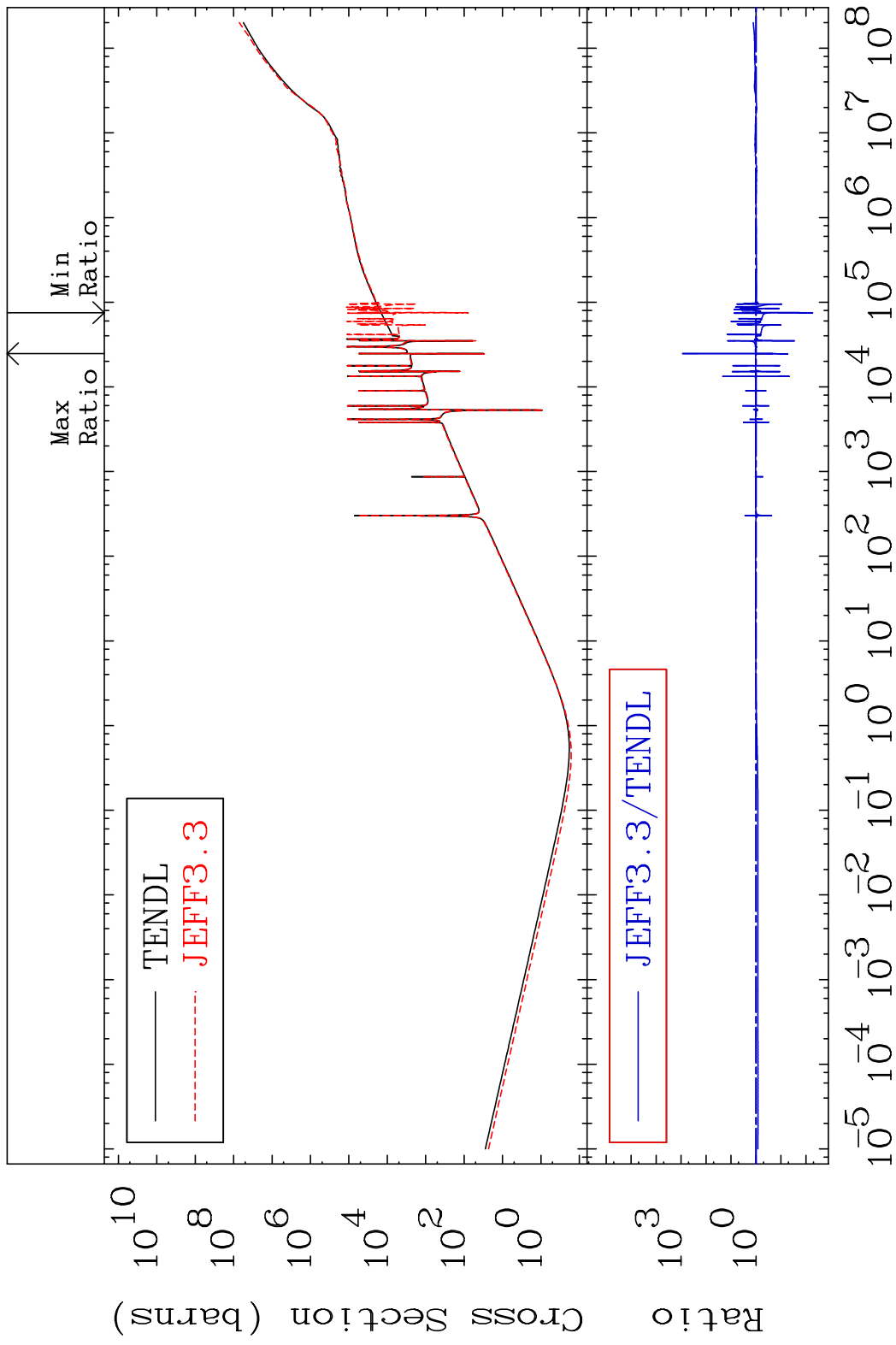


48

Incident Energy (eV)

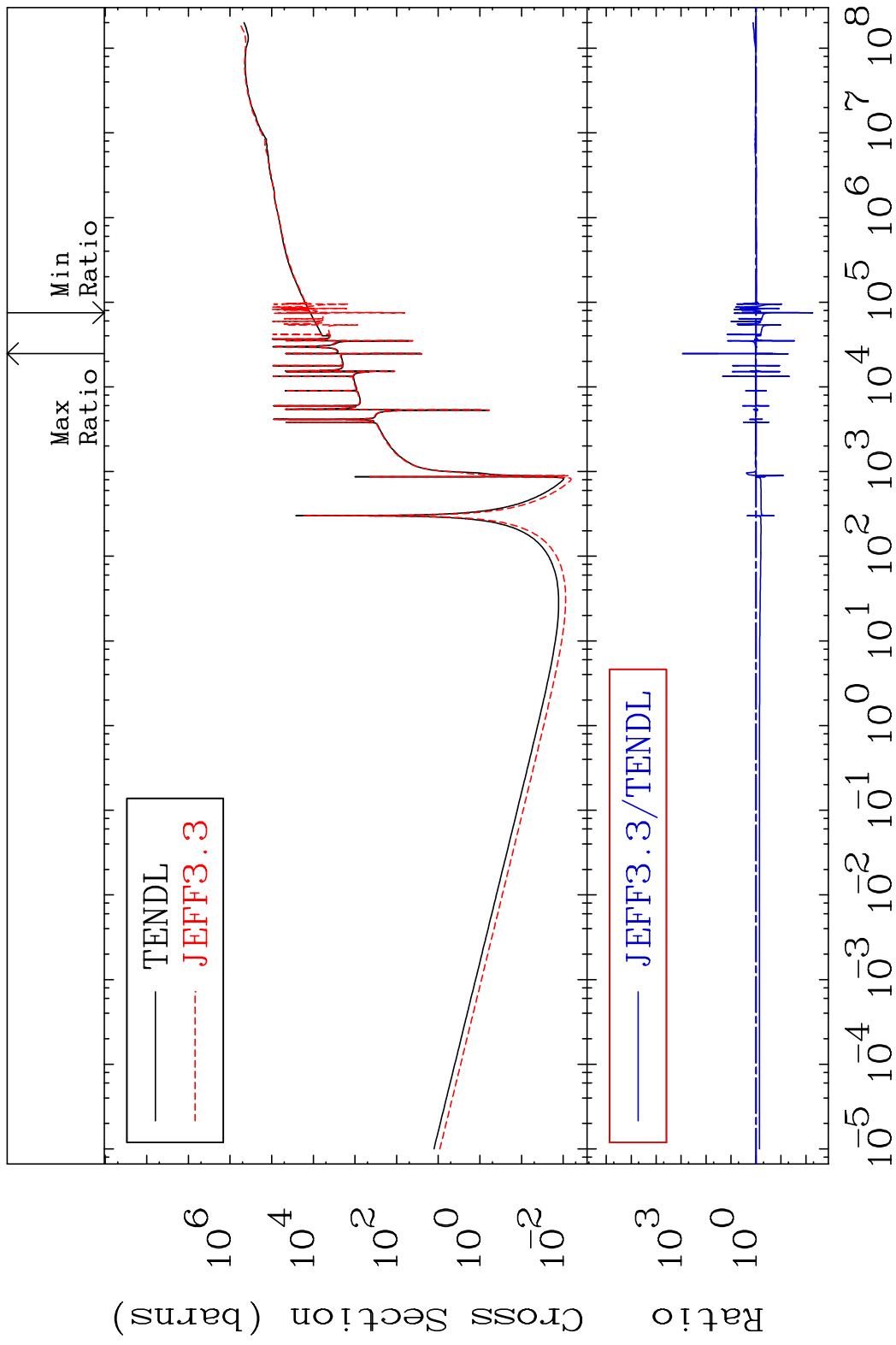
40-Zr-96

MAT 4043 Total kinematic kerma (high limit) 40-Zr-96
 Cross Section -99.46 To 9999. %



49 Incident Energy (eV) 40-Zr-96

MAT 4043 Dpa total (eV-barns) 40-Zr-96
 Cross Section -99.46 To 9999. %



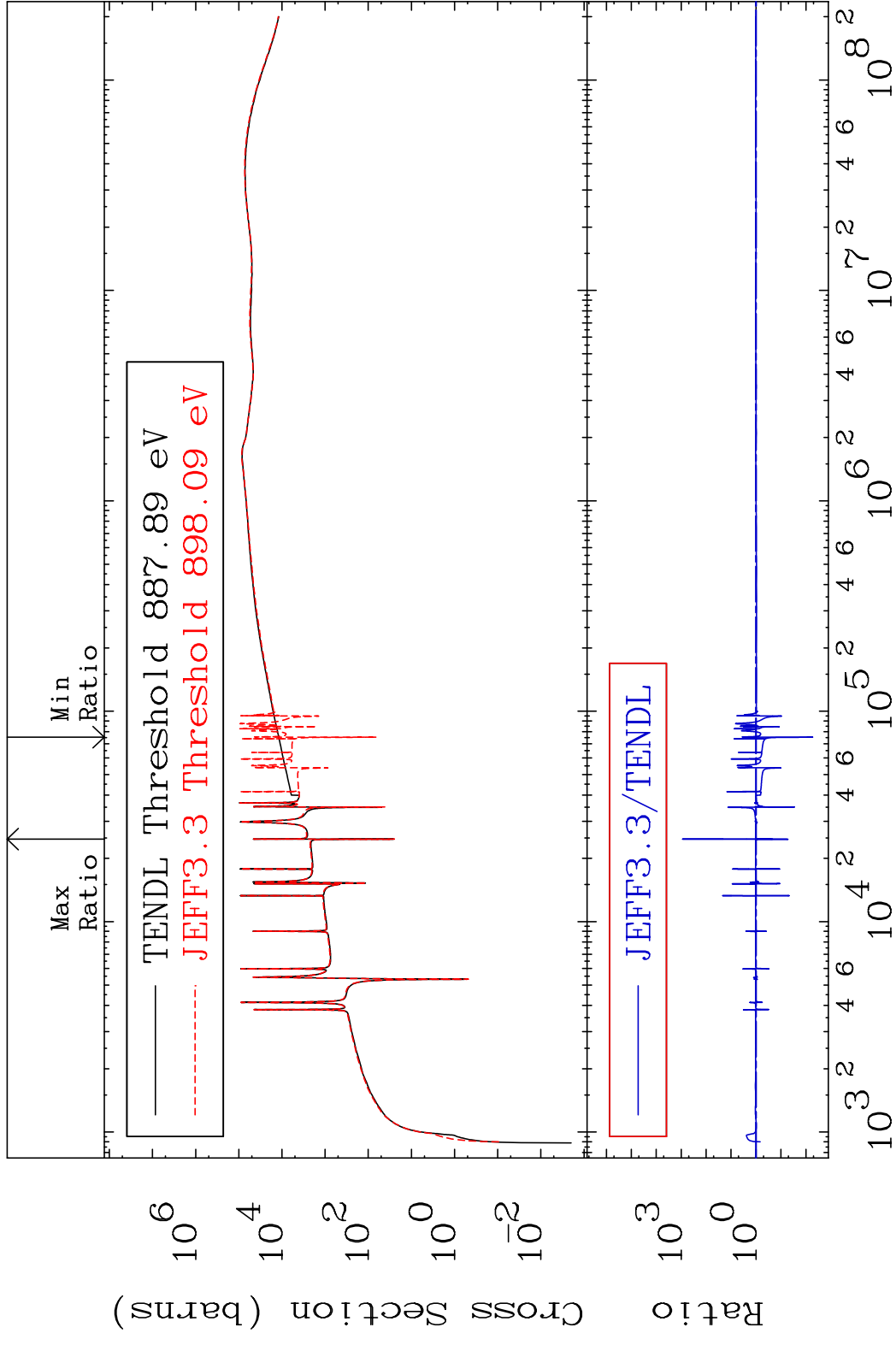
50 Incident Energy (eV) 40-Zr-96

MAT 4043

Dpa elastic (mt2)

40-Zr-96

Cross Section -99.46 To 9999. %

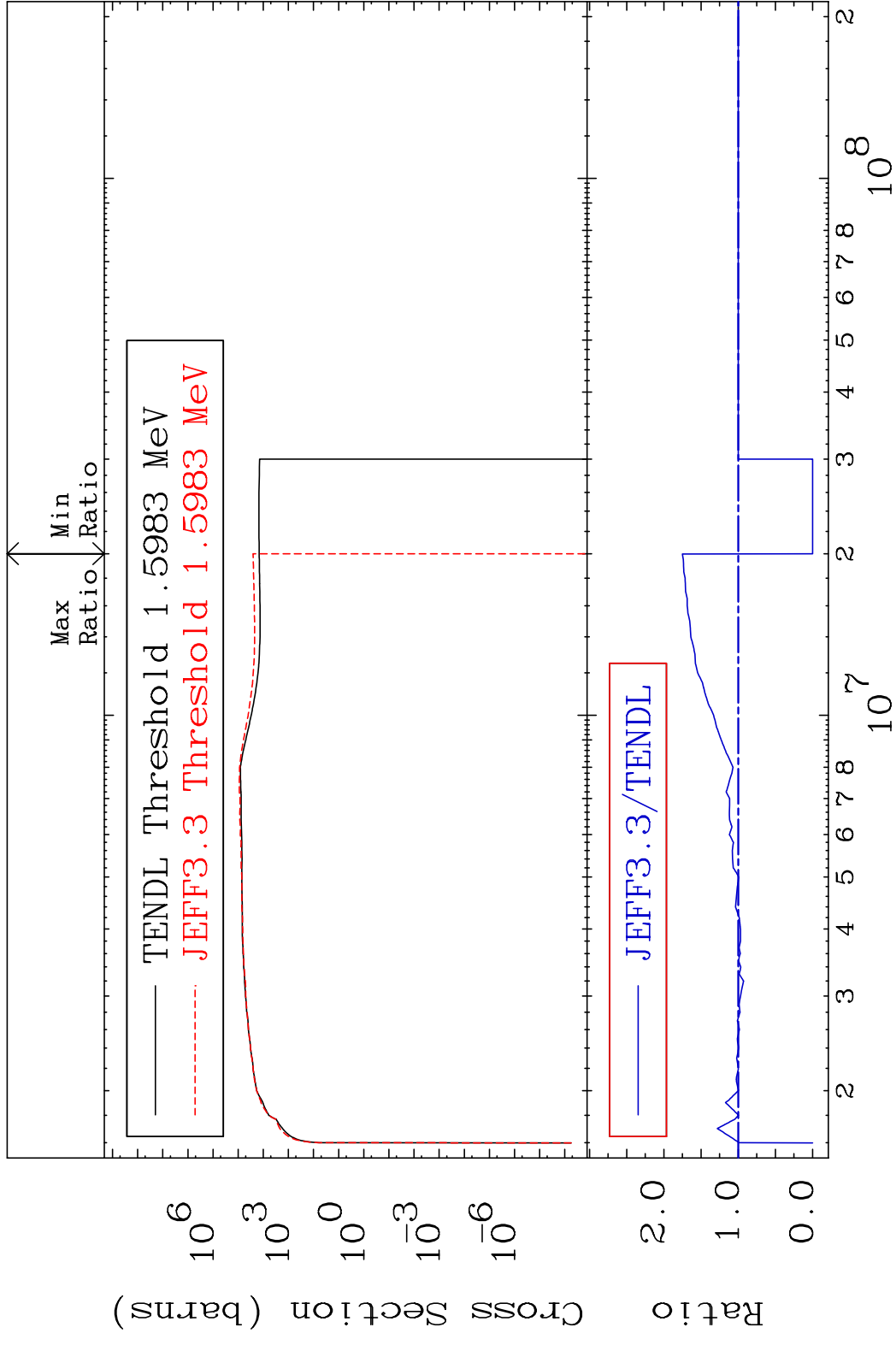


51

Incident Energy (eV)

40-Zr-96

MAT 4043 Dpa inelastic (mt51-91) 40-Zr-96
 Cross Section -100.0 To 75.15 %



MAT 4043 Dpa disappearance (mt102 -120) 40-Zr-96
 Cross Section -100.0 To 9999. %

