

Program Complot
(Version 2021-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

U.S.A.

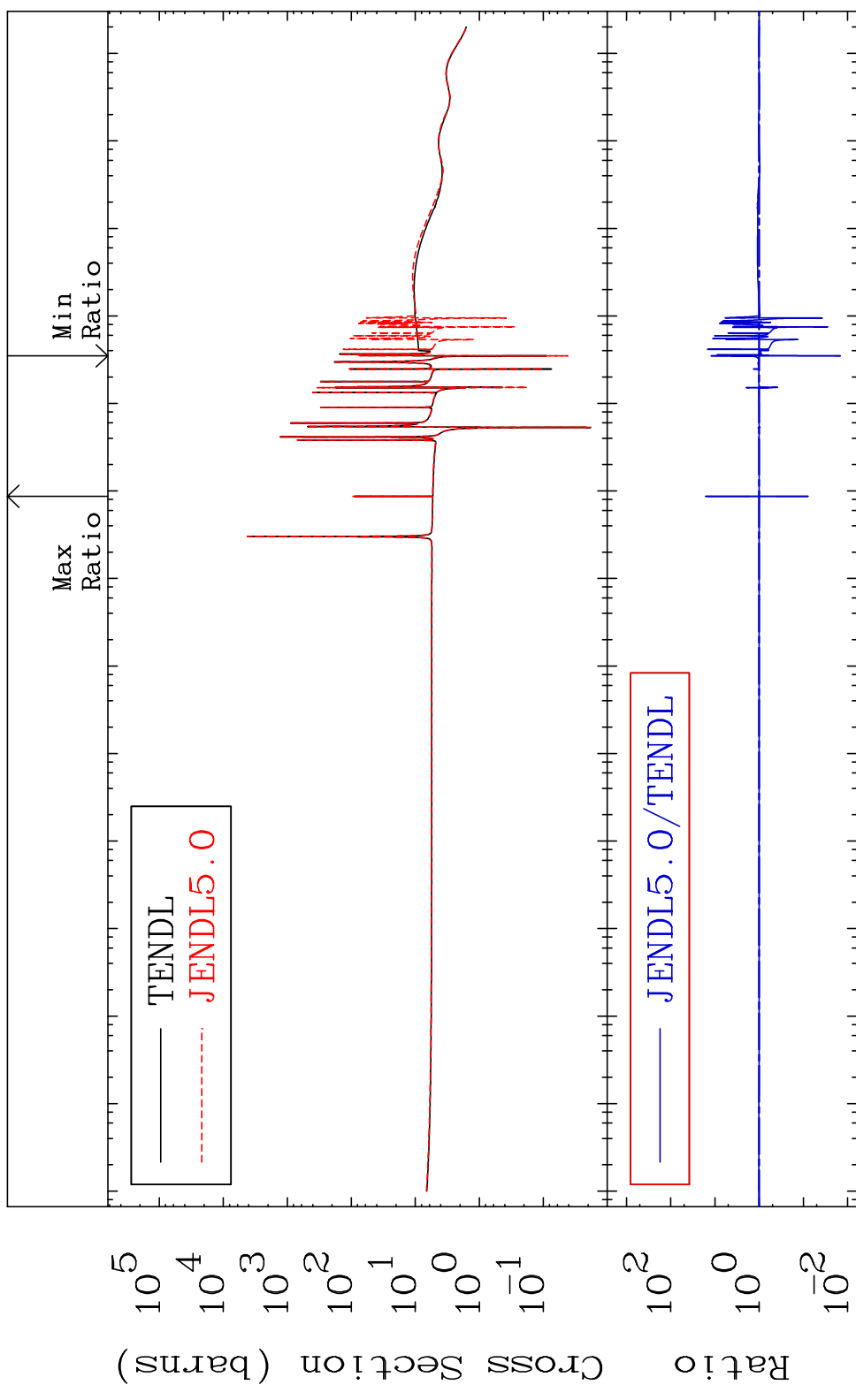
Tele: 925-443-1911

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

Press Mouse Button to Start

MAT 4043

Total Cross Section -98.54 To 1511. % 40-Zr-96



1

Incident Energy (eV)

40-Zr-96

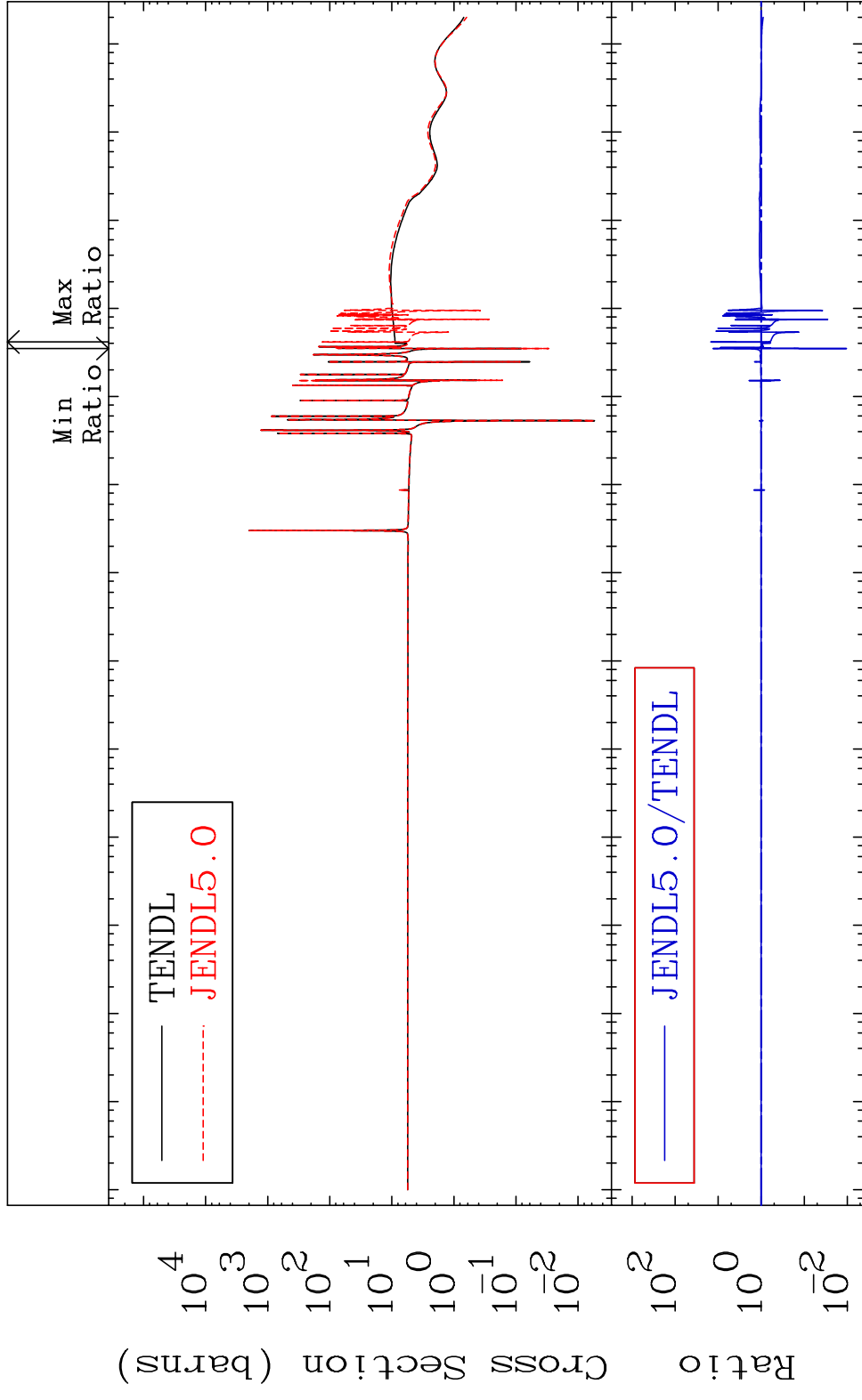
MAT 4043

Elastic

40-Zr-96

Cross Section

-98.95 To 1389. %

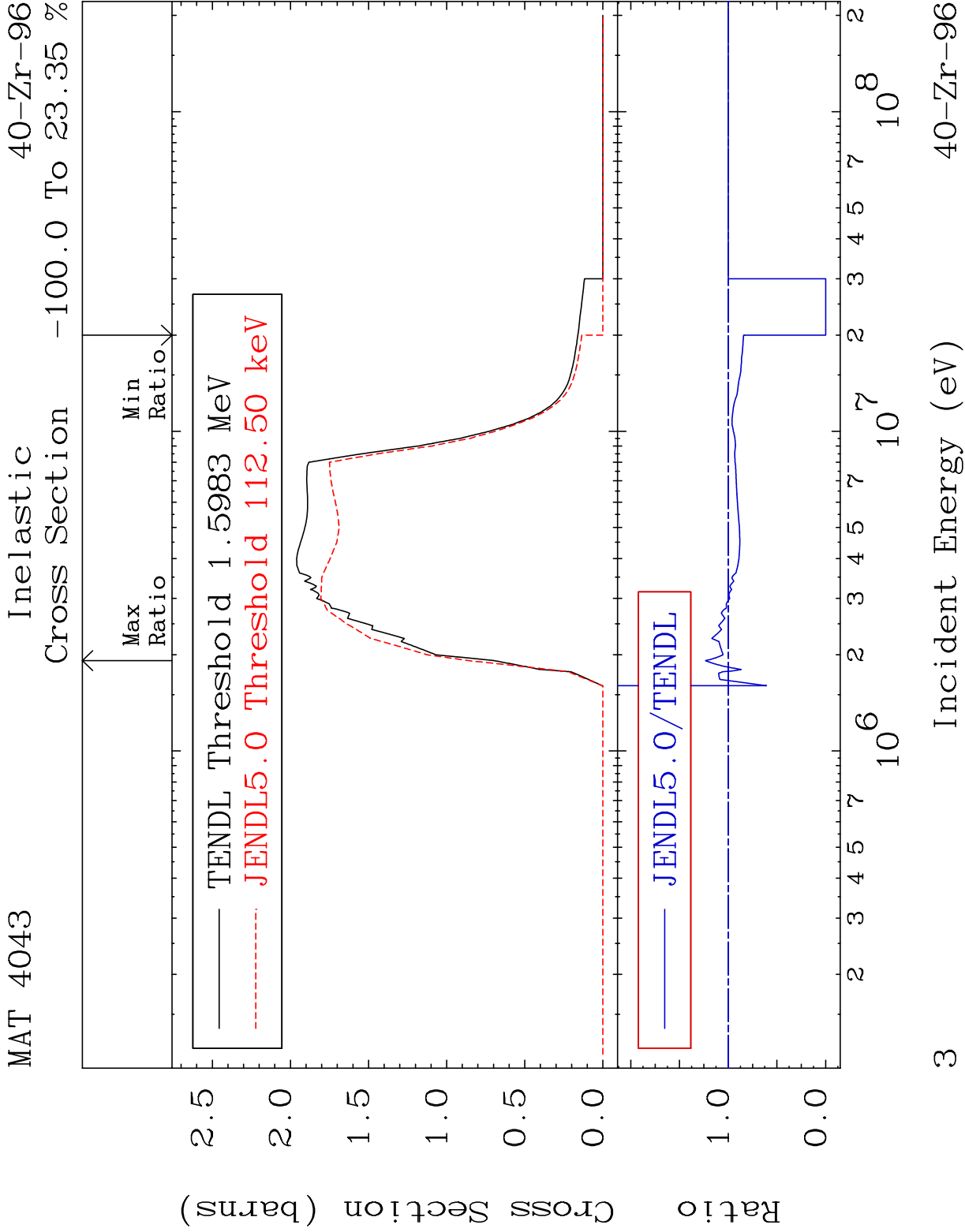


10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

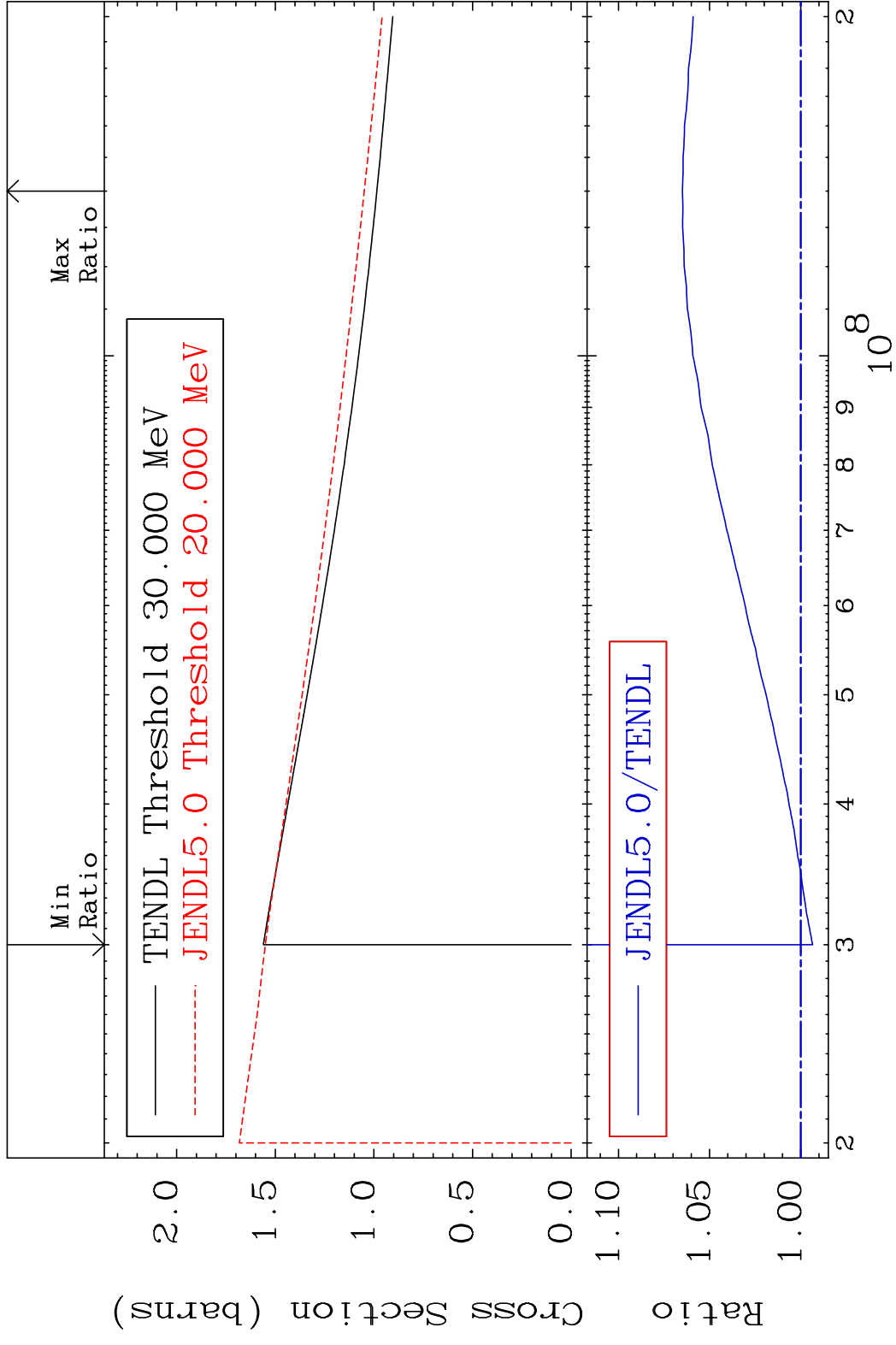
2

Incident Energy (eV)

40-Zr-96

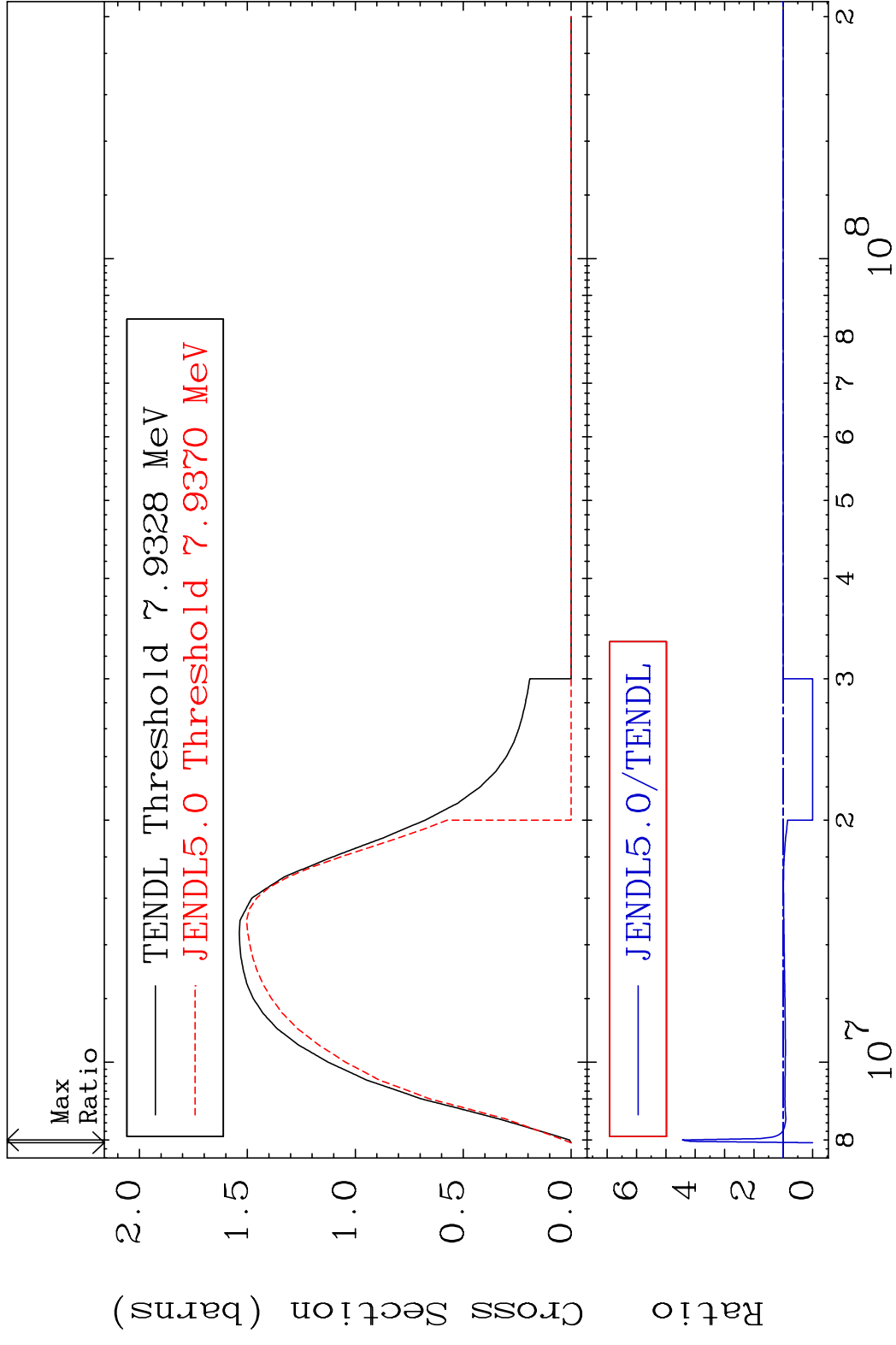


MAT 4043 (n, remainder) 40-Zr-96
 Cross Section -0.649 To 6.493 %



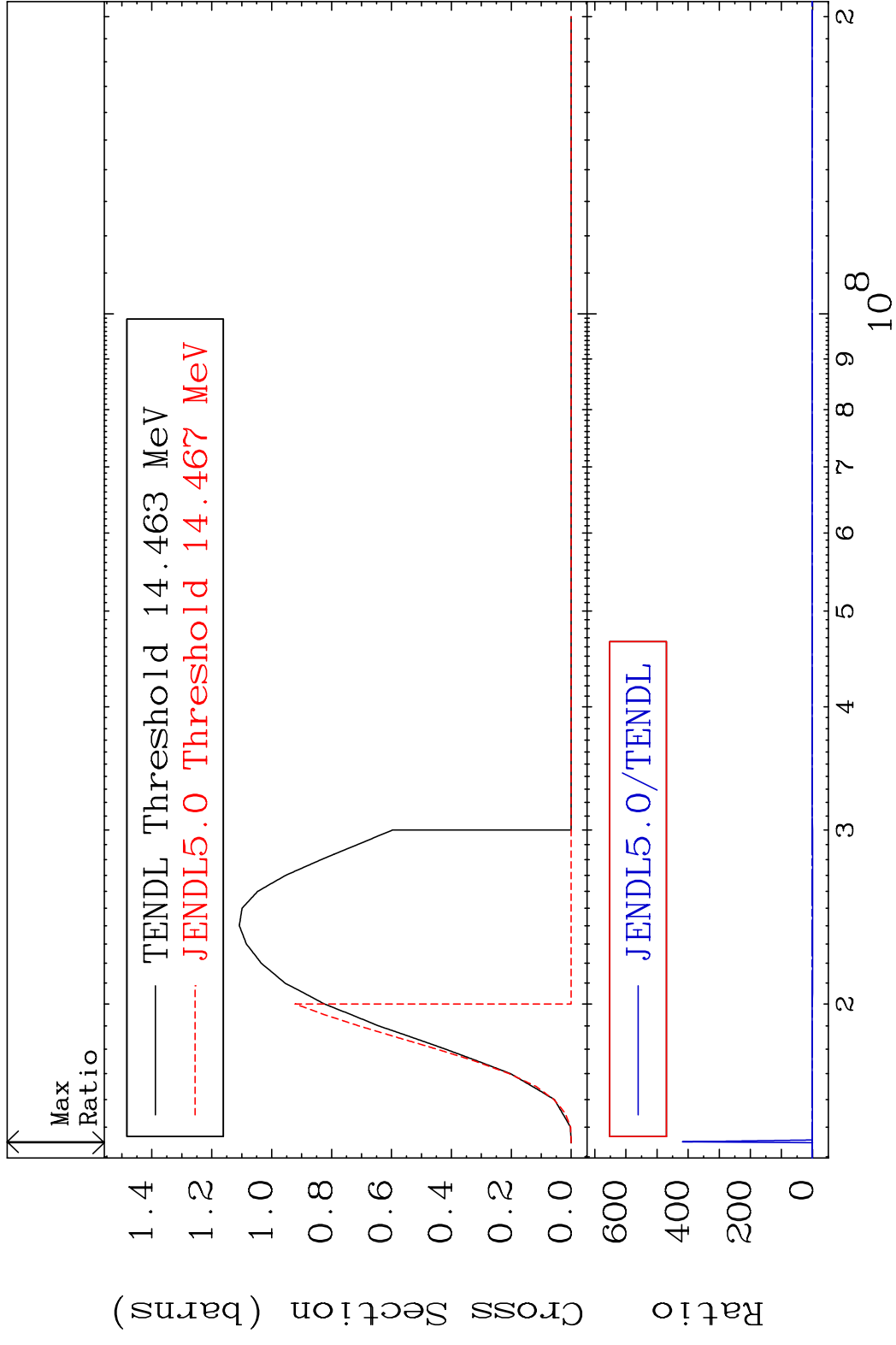
4 Incident Energy (eV) 40-Zr-96

MAT 4043 (n,2n) 40-Zr-96
 Cross Section -100.0 To 343.9 %

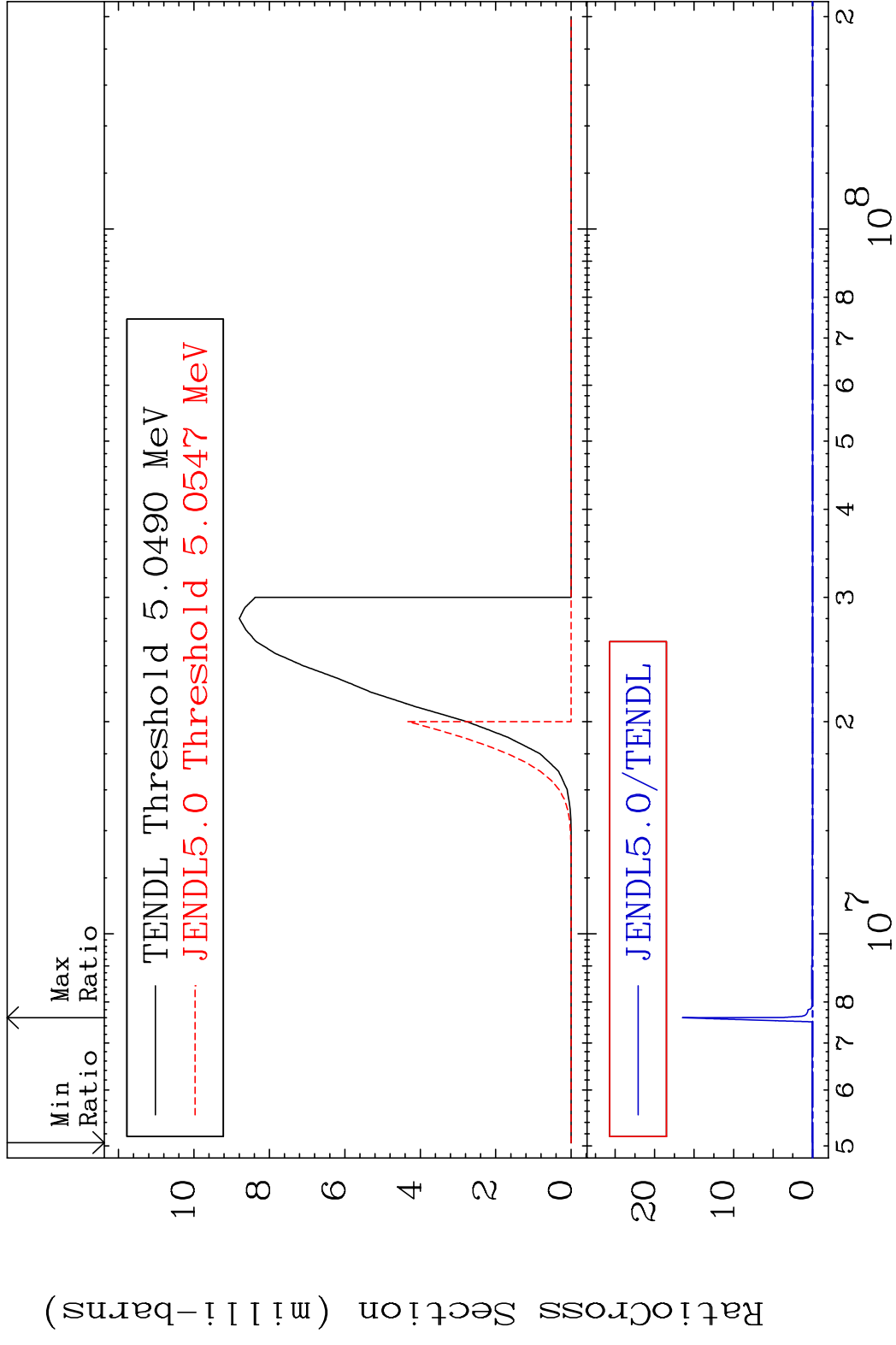


5 Incident Energy (eV) 40-Zr-96

MAT 4043 (n,3n) 40-Zr-96
 Cross Section -100.0 To 9999. %

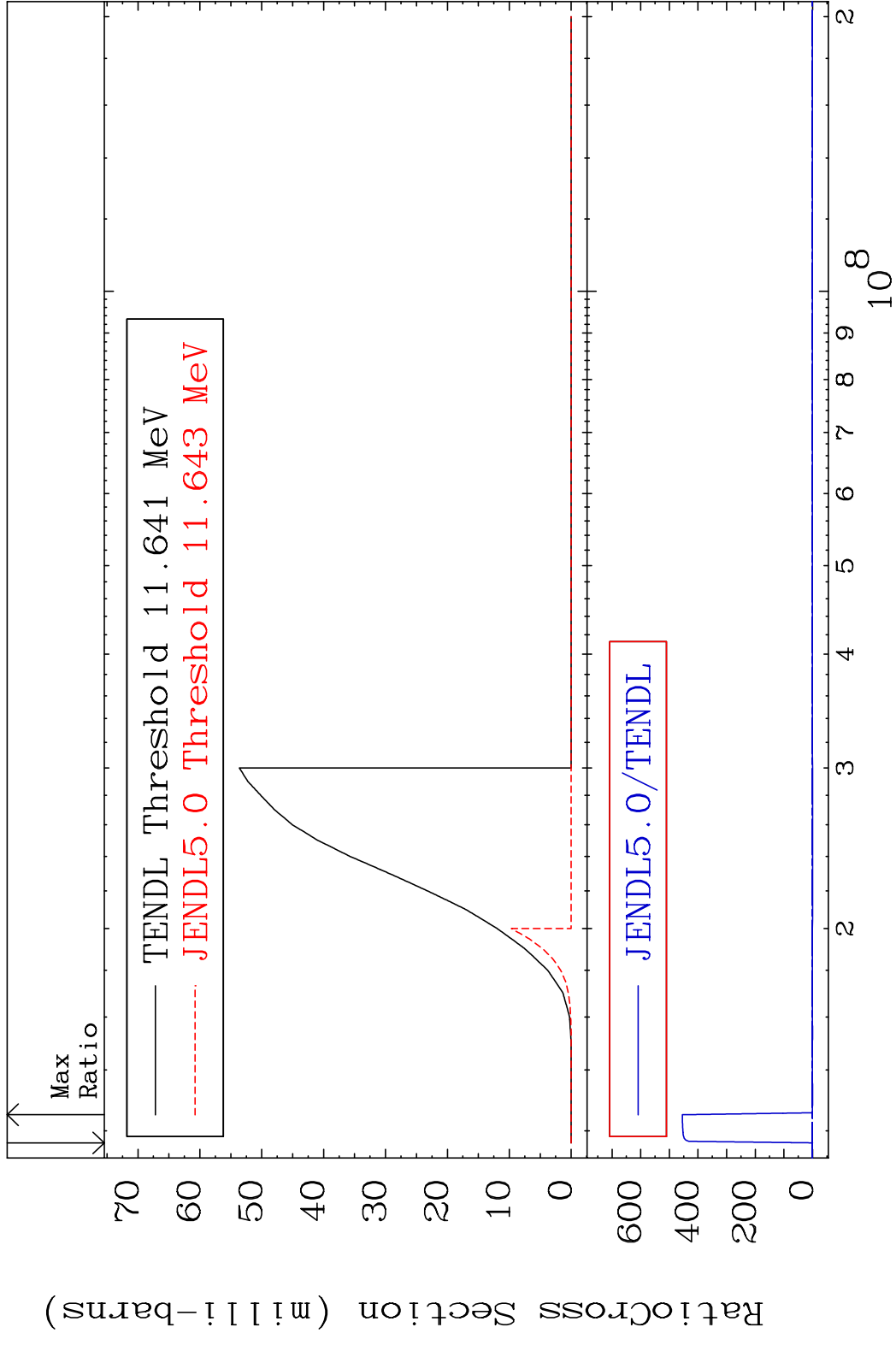


MAT 4043 (n, n') α 40-Zr-96
 Cross Section -100.0 To 9999. %

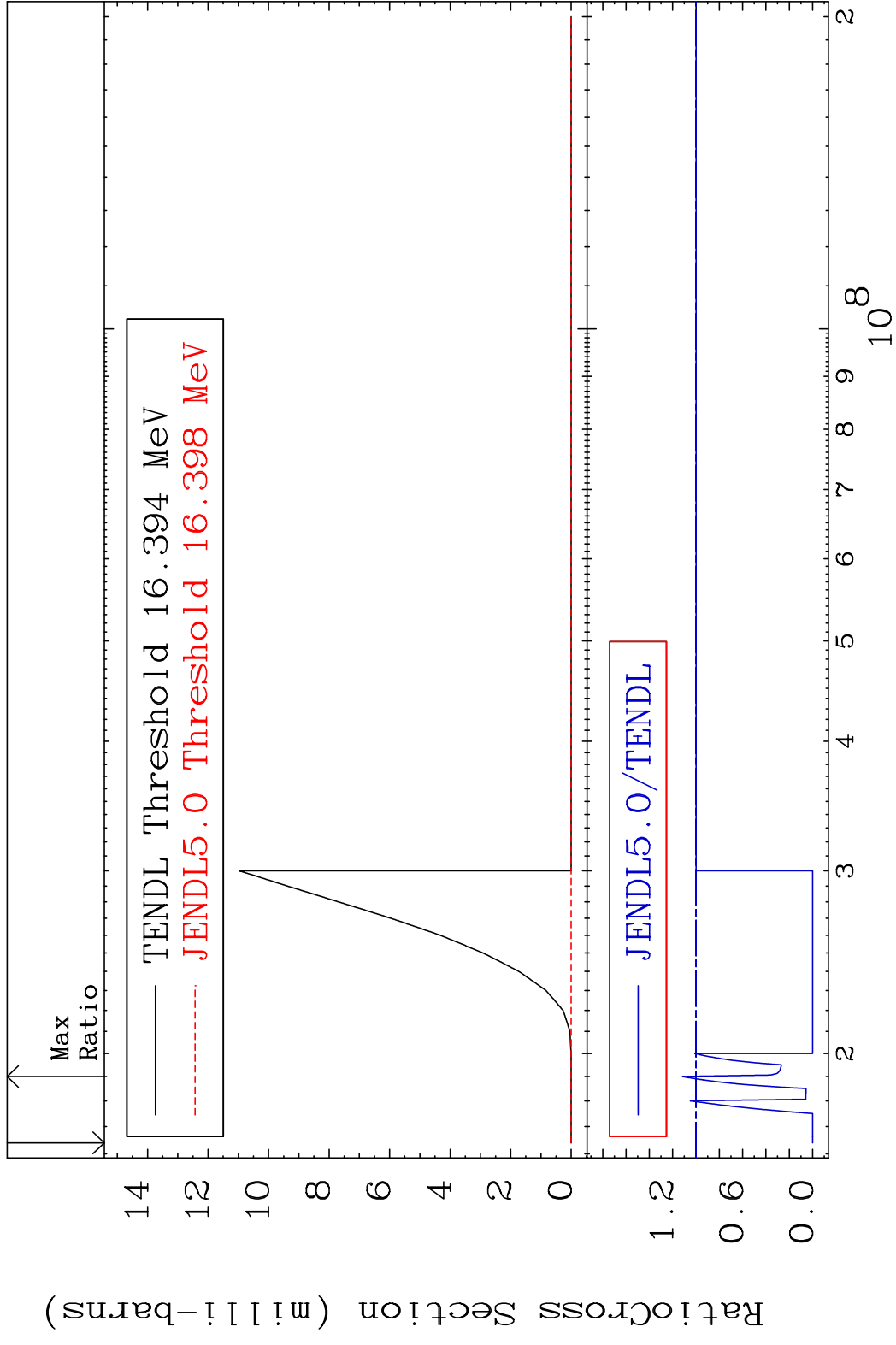


7 Incident Energy (eV) 40-Zr-96

MAT 4043 (n, n') p 40-Zr-96
 Cross Section -100.0 To 9999. %

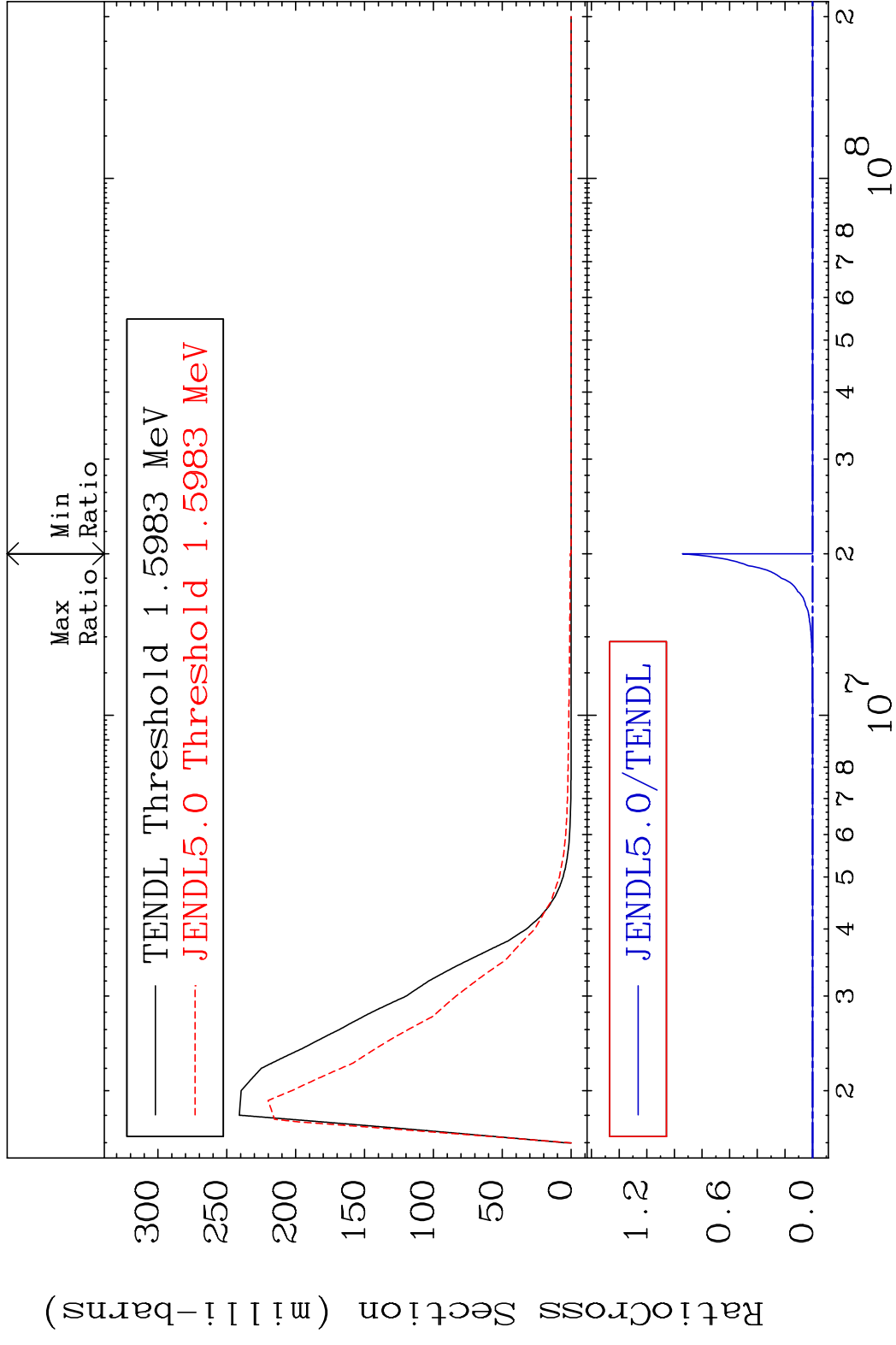


MAT 4043 (n, n') d 40-Zr-96
 Cross Section -100.0 To 11.68 %

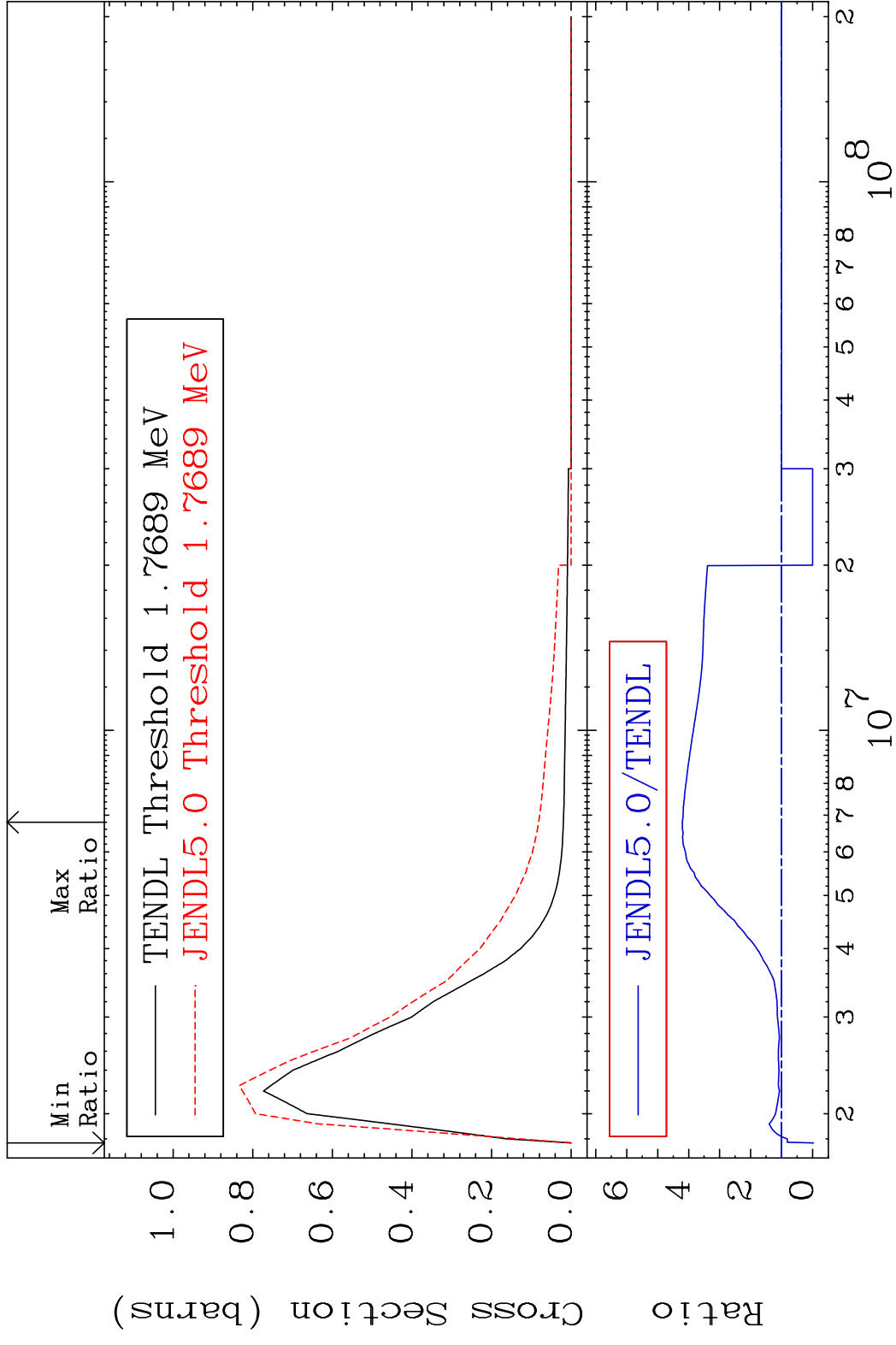


10 Incident Energy (eV) 40-Zr-96

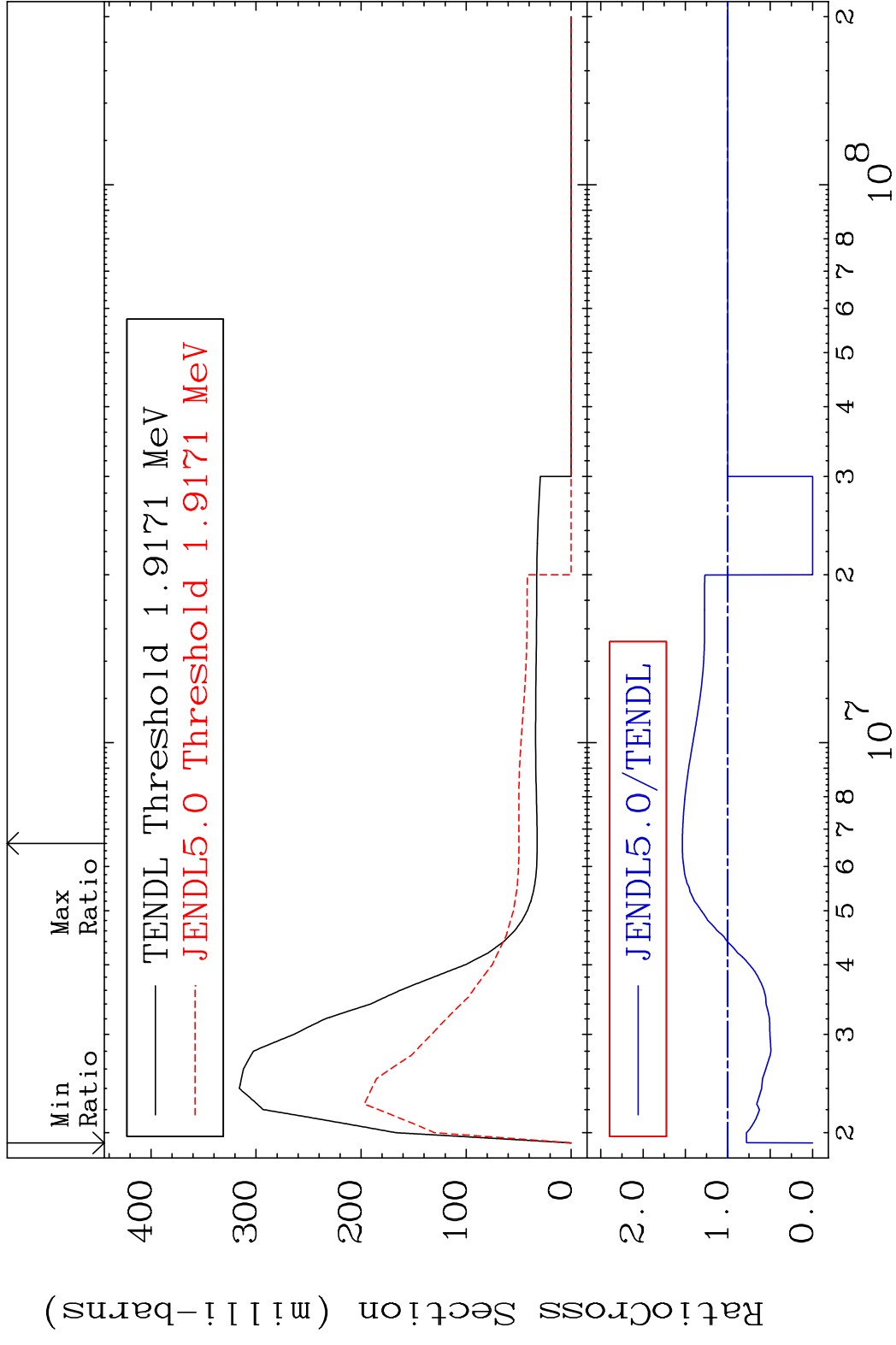
MAT 4043 MT= 51 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 9999. %



MAT 4043 MT= 52 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 320.4 %



MAT 4043 MT= 53 (n, n') Level 40-Zr-96
 Cross Section -100.0 To 53.63 %

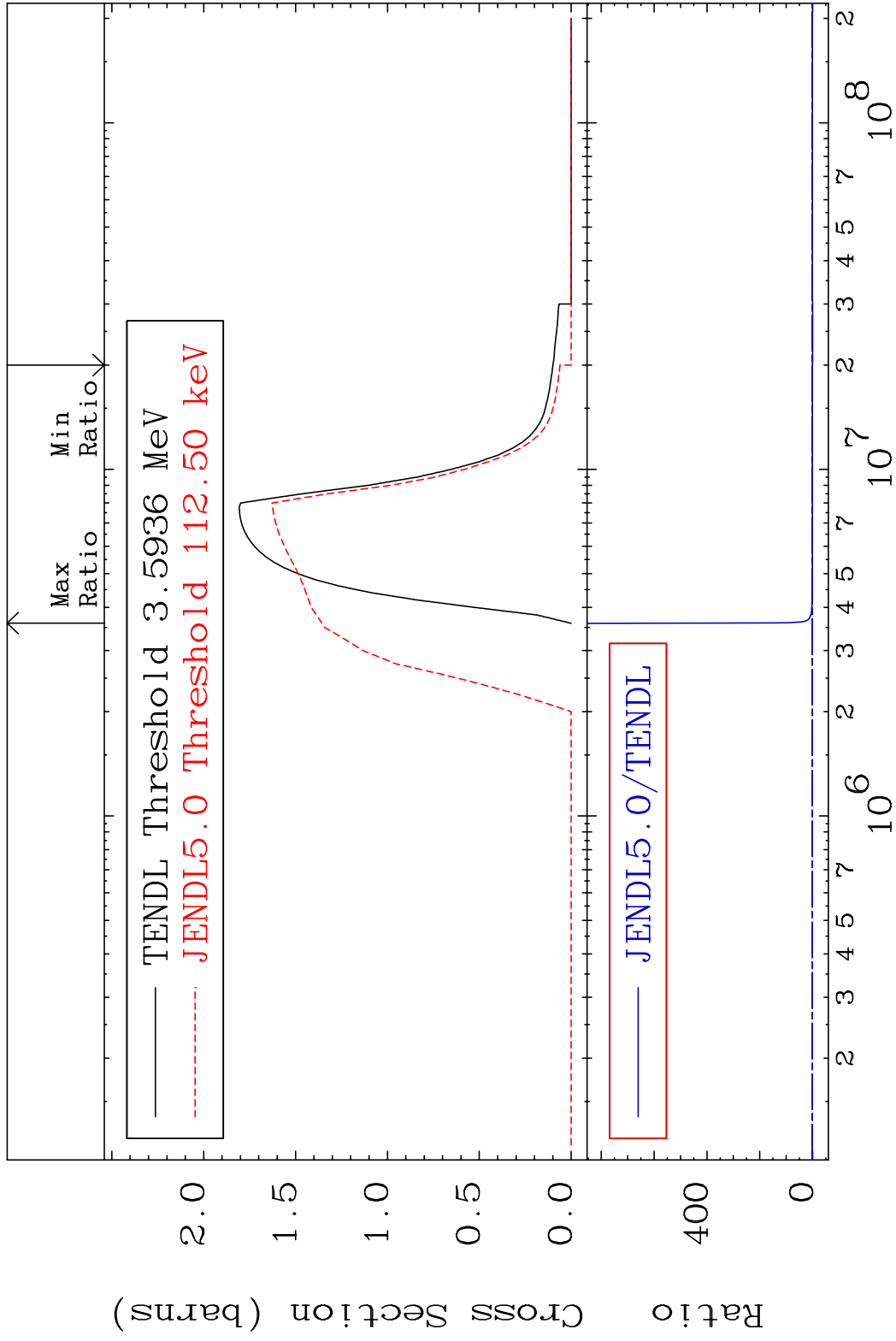


MAT 4043

(n,n') Continuum

40-Zr-96

Cross Section -100.0 To 9999. %

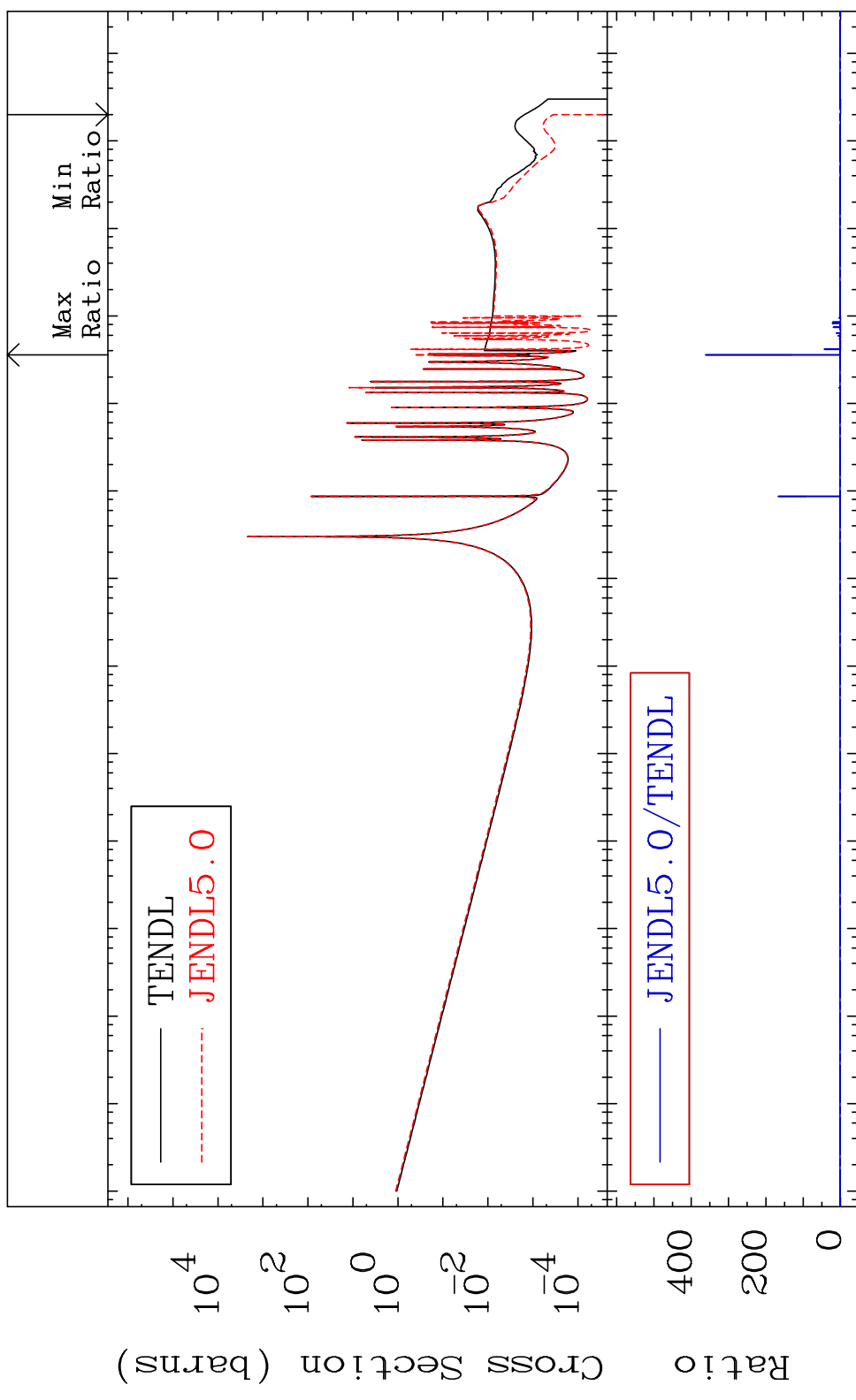


MAT 4043

(n, γ)

40-Zr-96

Cross Section -100.0 To 9999. %

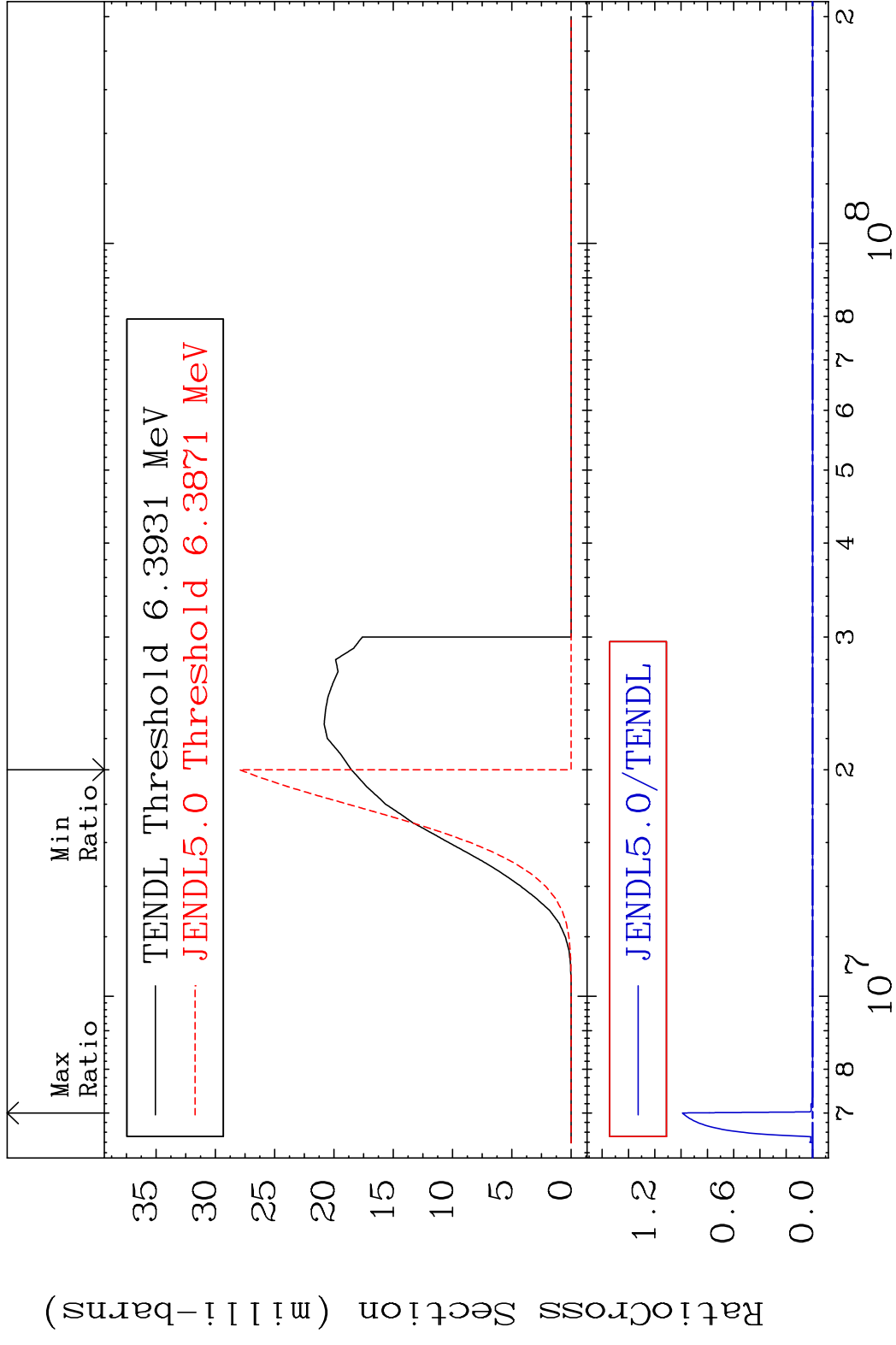


15

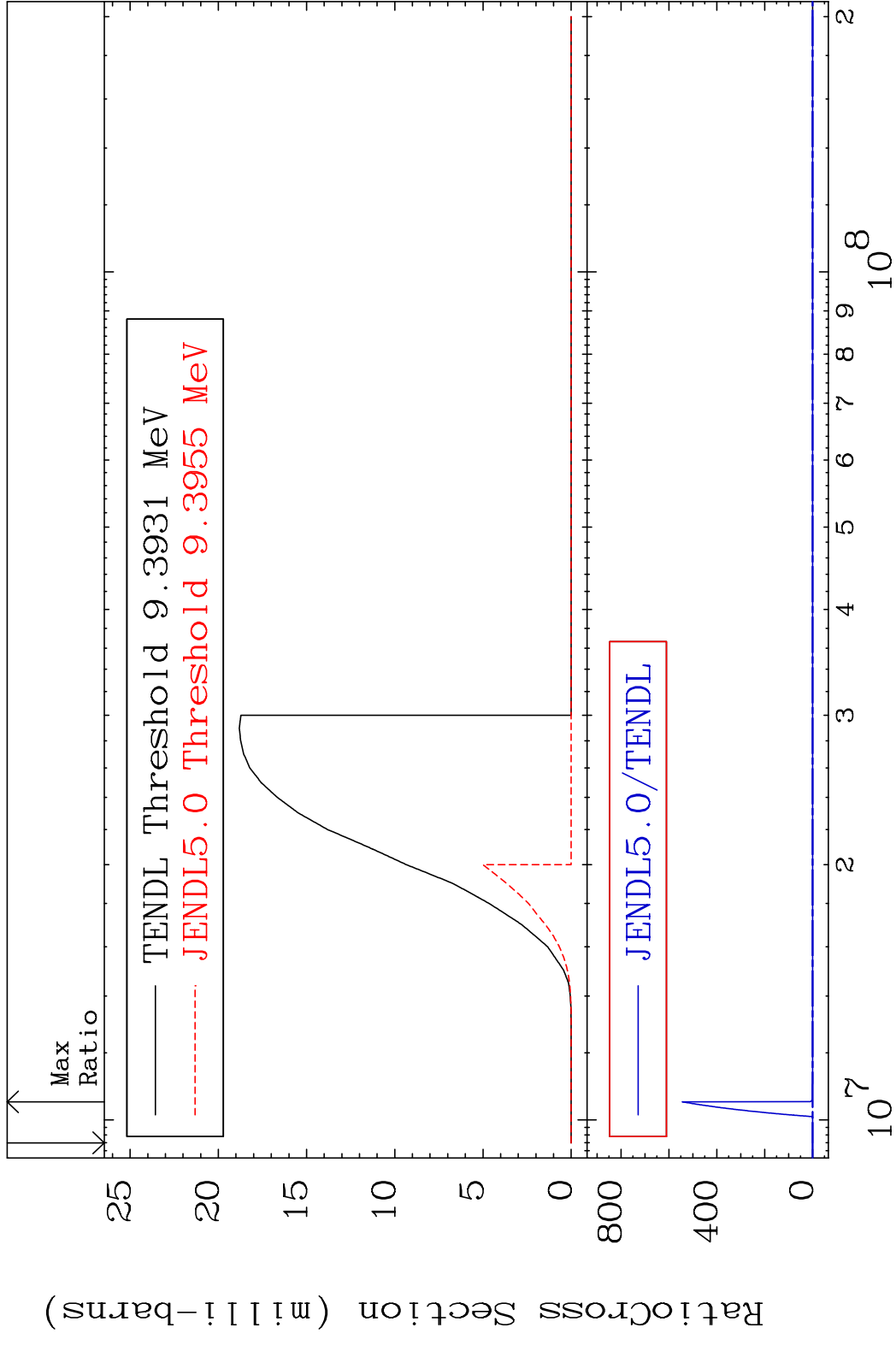
Incident Energy (eV)

40-Zr-96

MAT 4043 (n,p) 40-Zr-96
 Cross Section -100.0 To 9999. %



MAT 4043 (n,d) 40-Zr-96
 Cross Section -100.0 To 9999. %



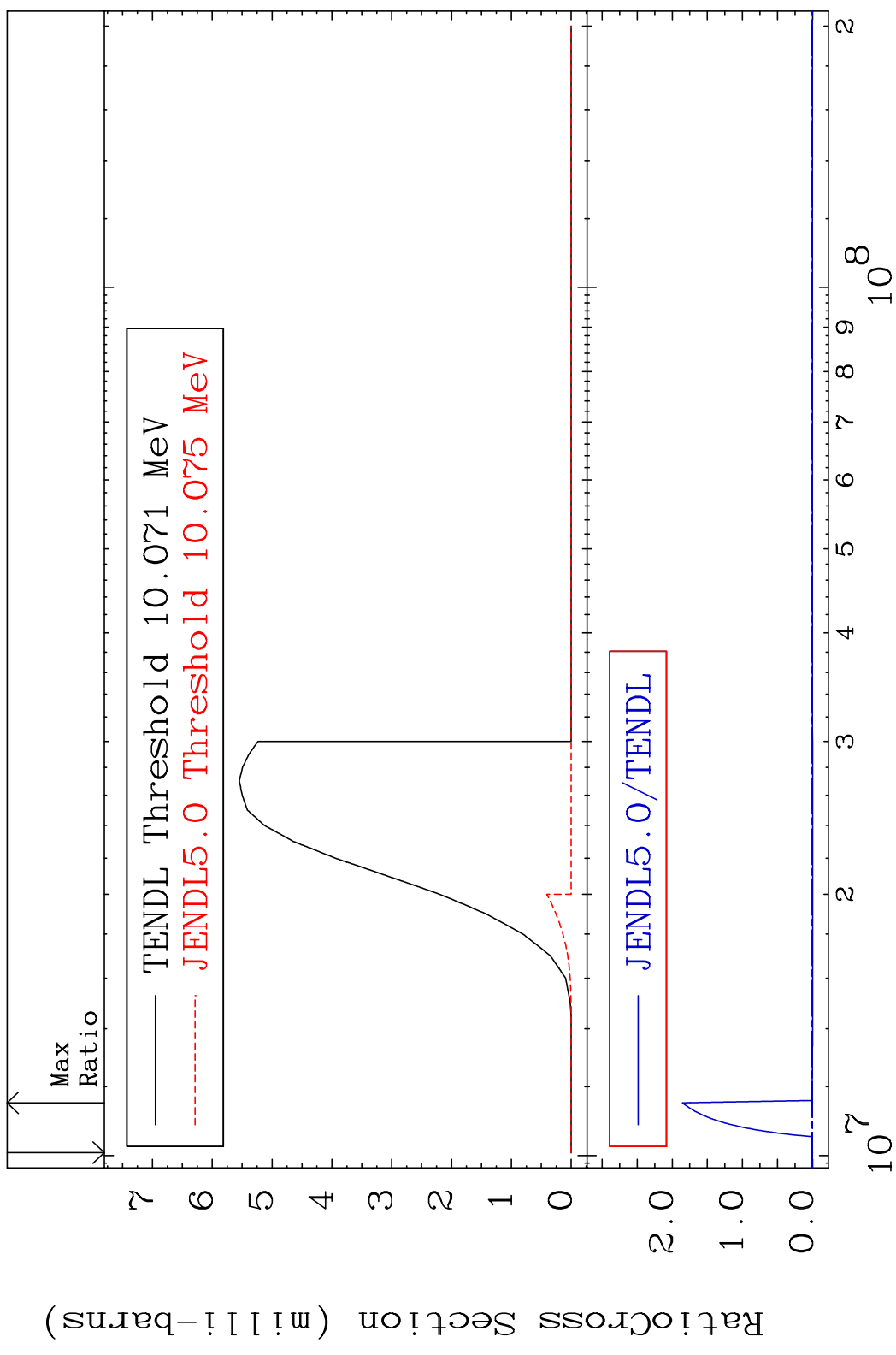
17 40-Zr-96

MAT 4043

(n, t)

40-Zr-96

Cross Section -100.0 To 9999. %



18

Incident Energy (eV)

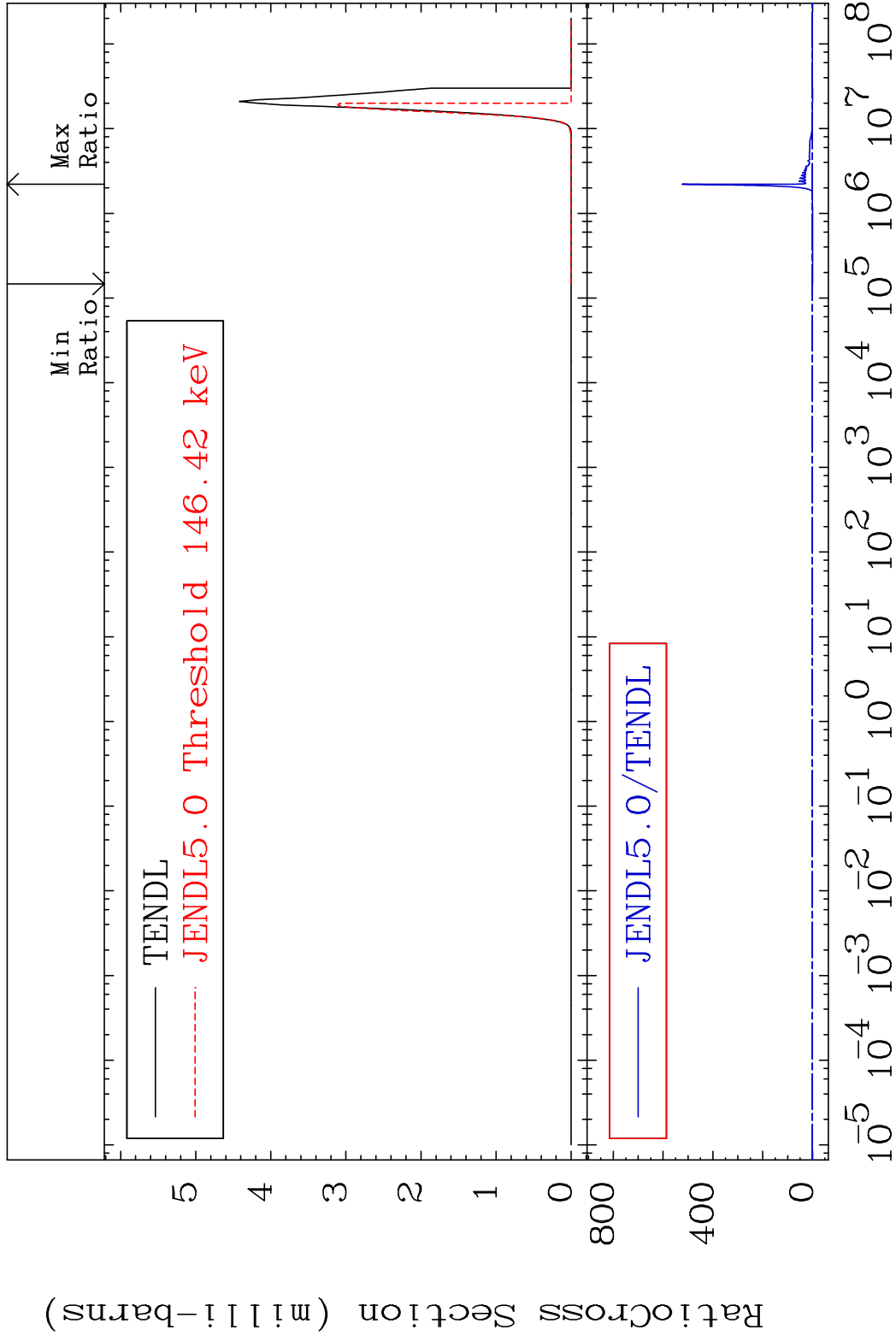
40-Zr-96

MAT 4043

(n, α)

40-Zr-96

Cross Section -100.0 To 9999. %

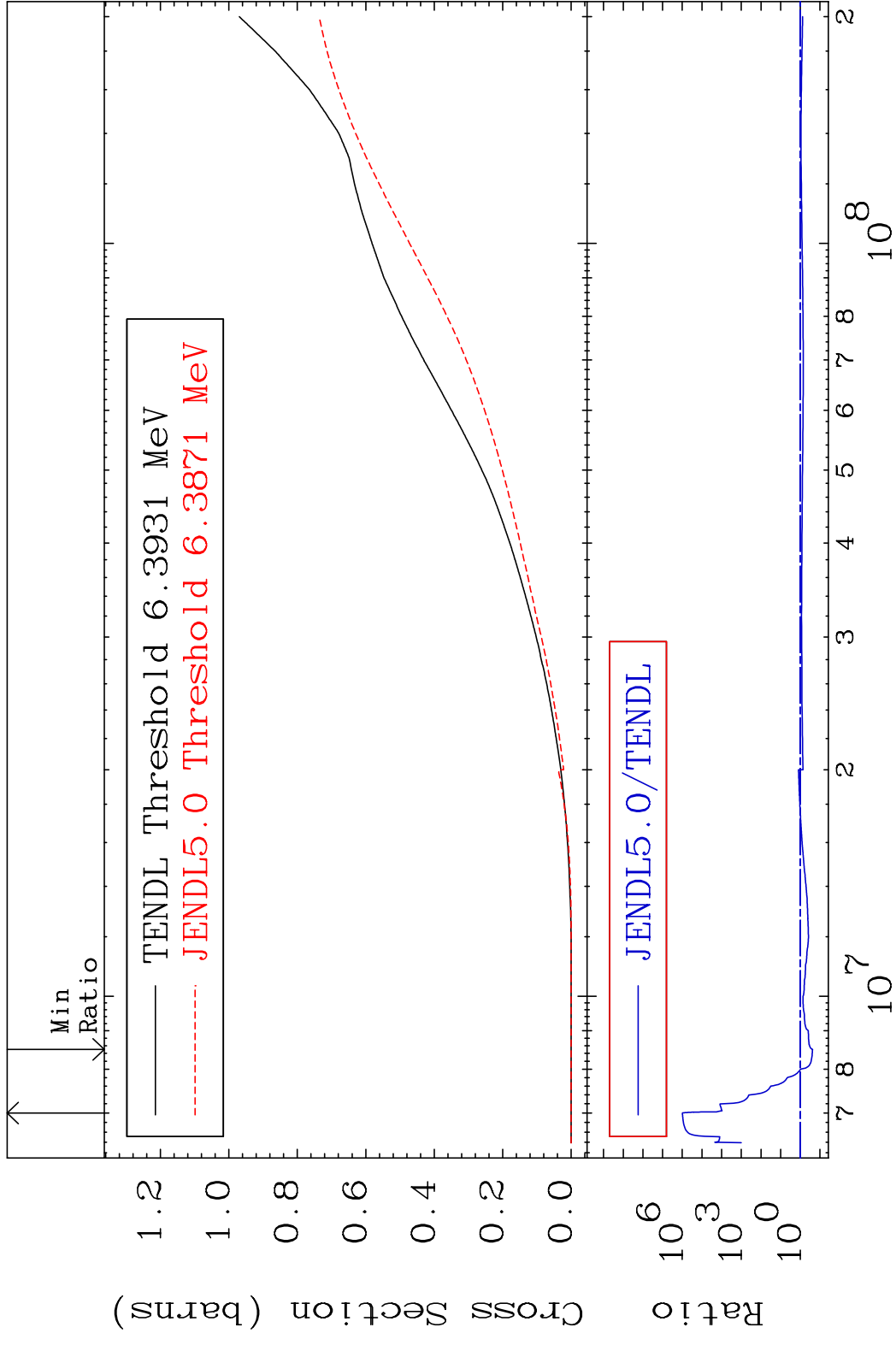


19

Incident Energy (eV)

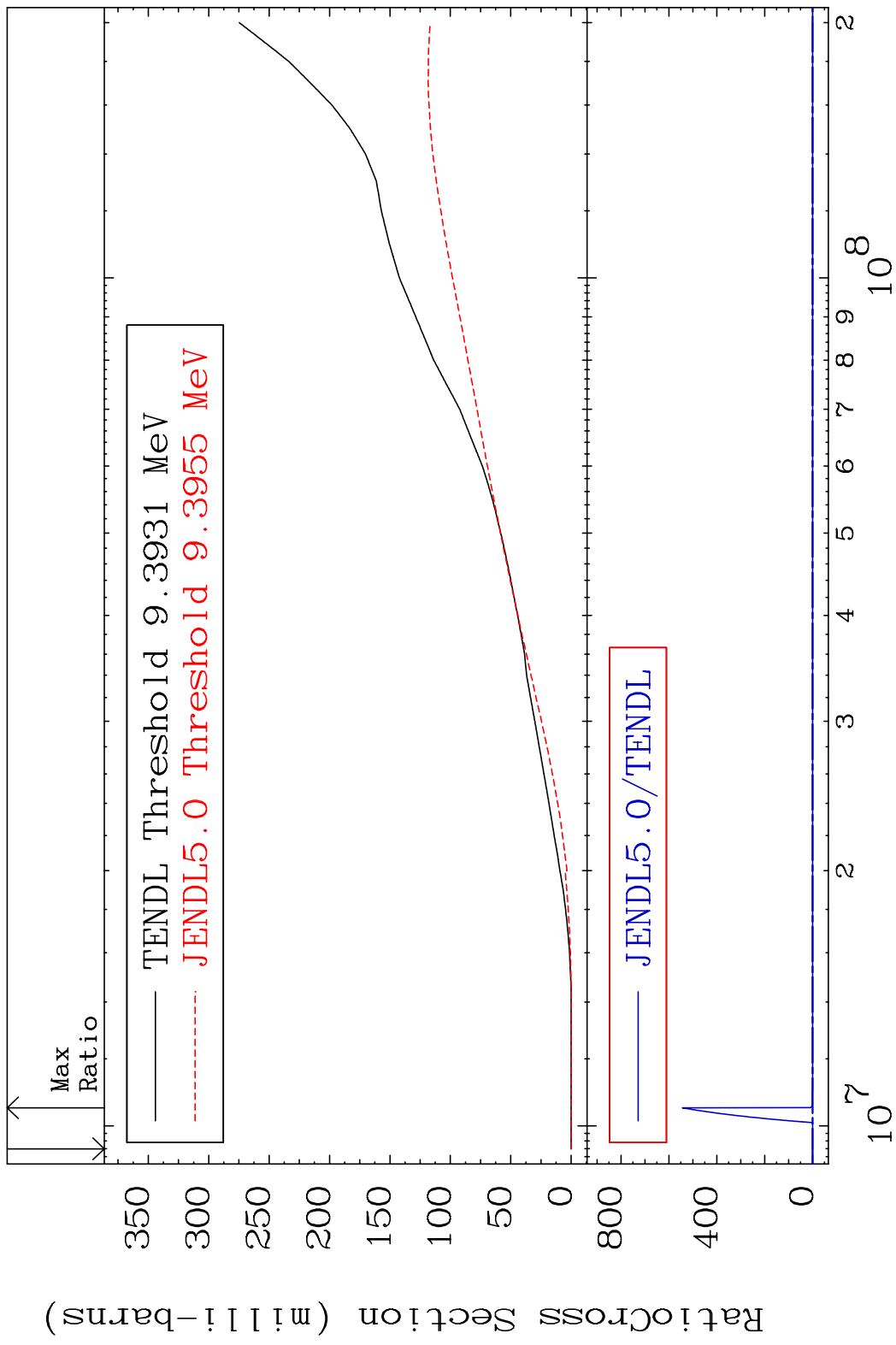
40-Zr-96

MAT 4043 Hydrogen Production 40-Zr-96
 Cross Section -76.17 To 9999. %



20 Incident Energy (eV) 40-Zr-96

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

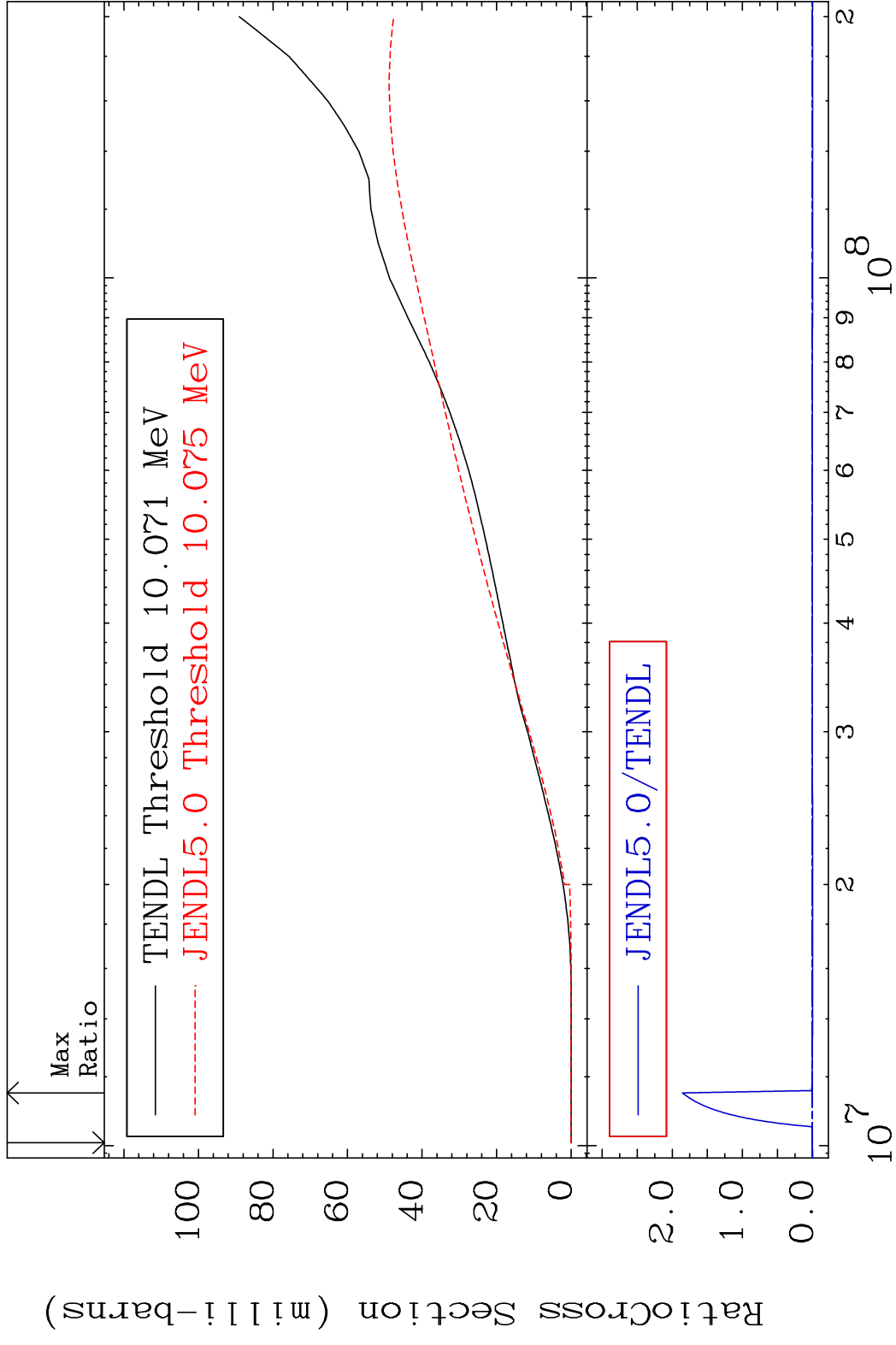


MAT 4043

Tritium Production

40-Zr-96

Cross Section -100.0 To 9999. %

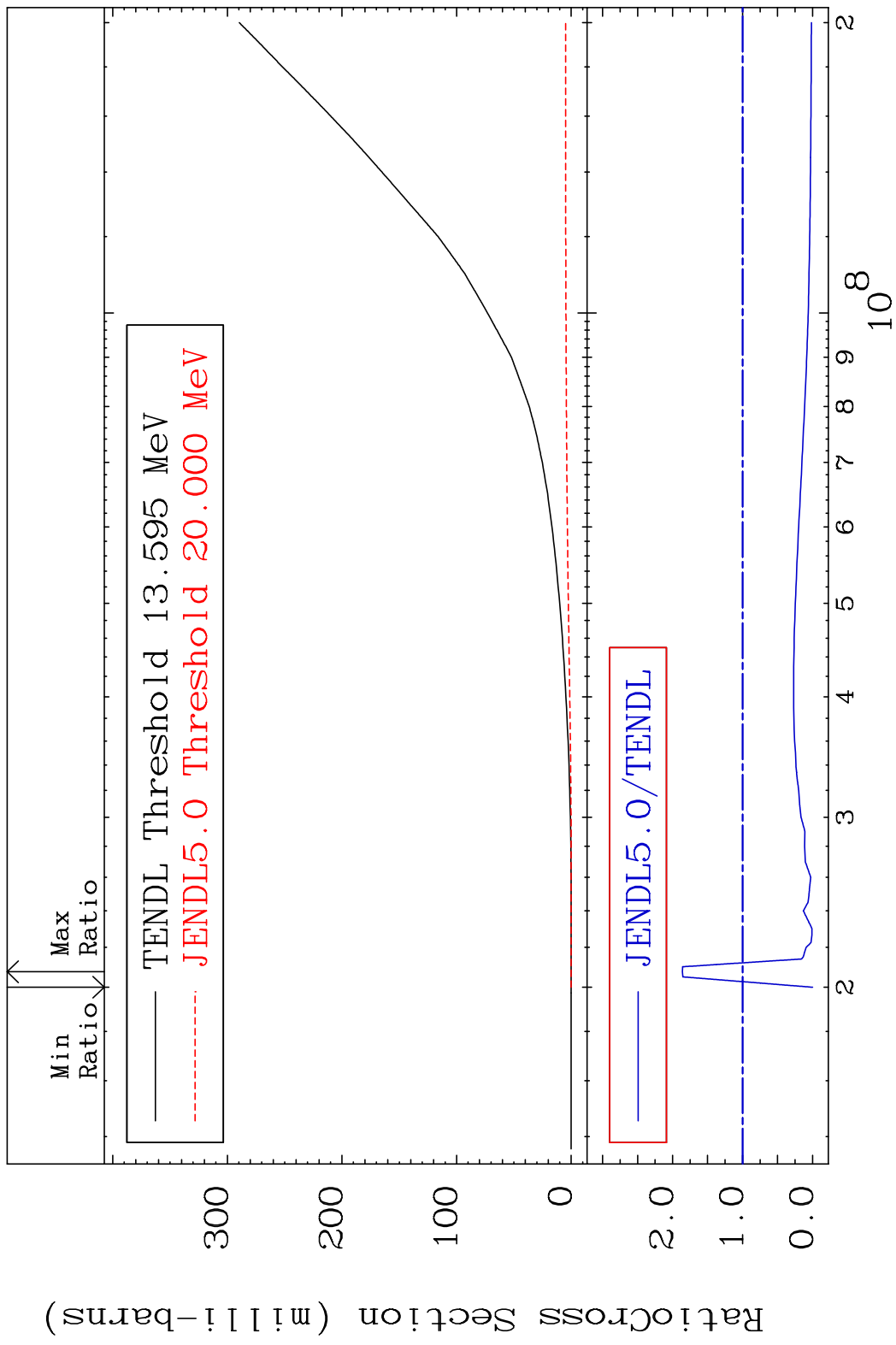


22

Incident Energy (eV)

40-Zr-96

MAT 4043 He-3 Production 40-Zr-96
 Cross Section -100.0 To 86.05 %

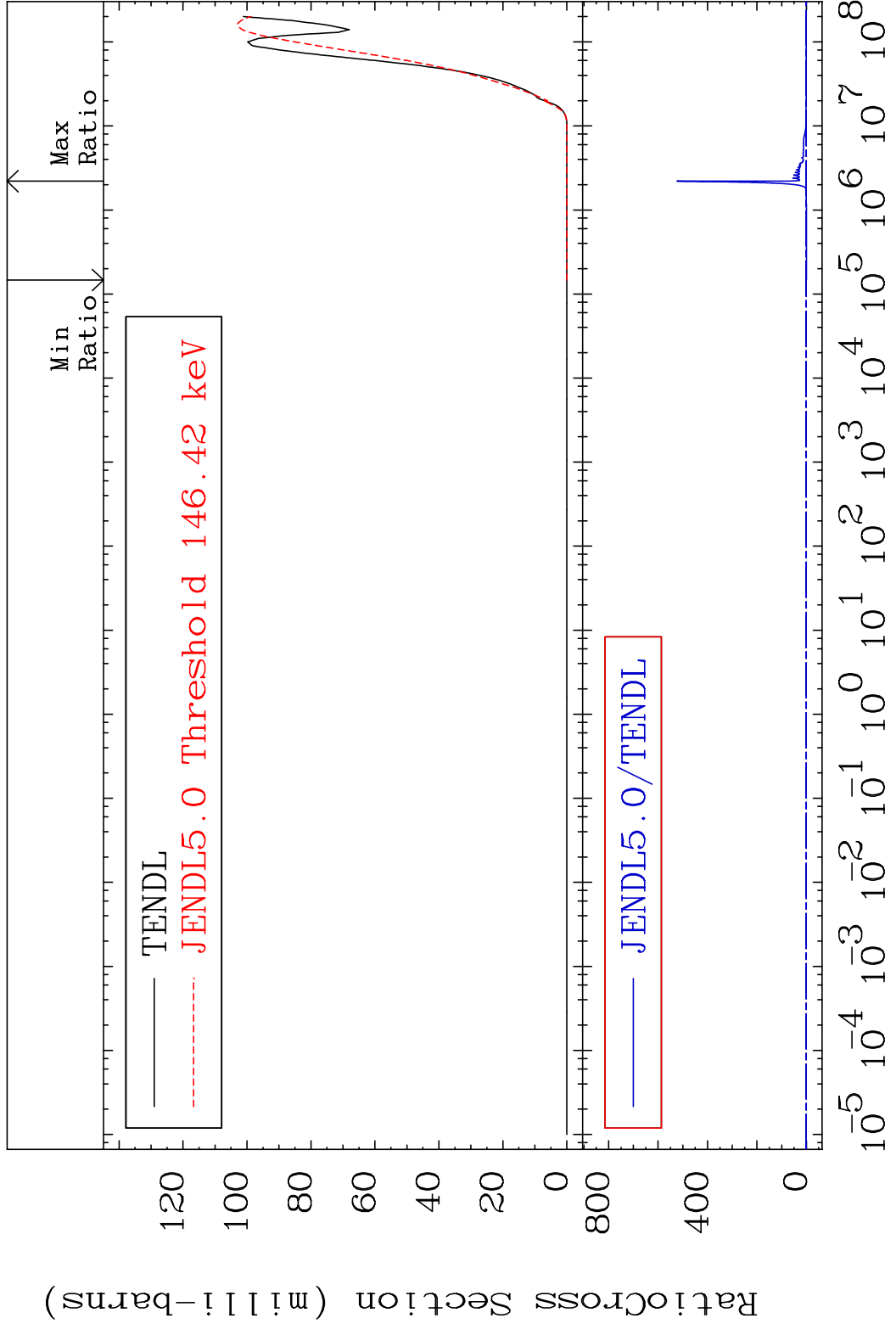


MAT 4043

He-4 Production

40-Zr-96

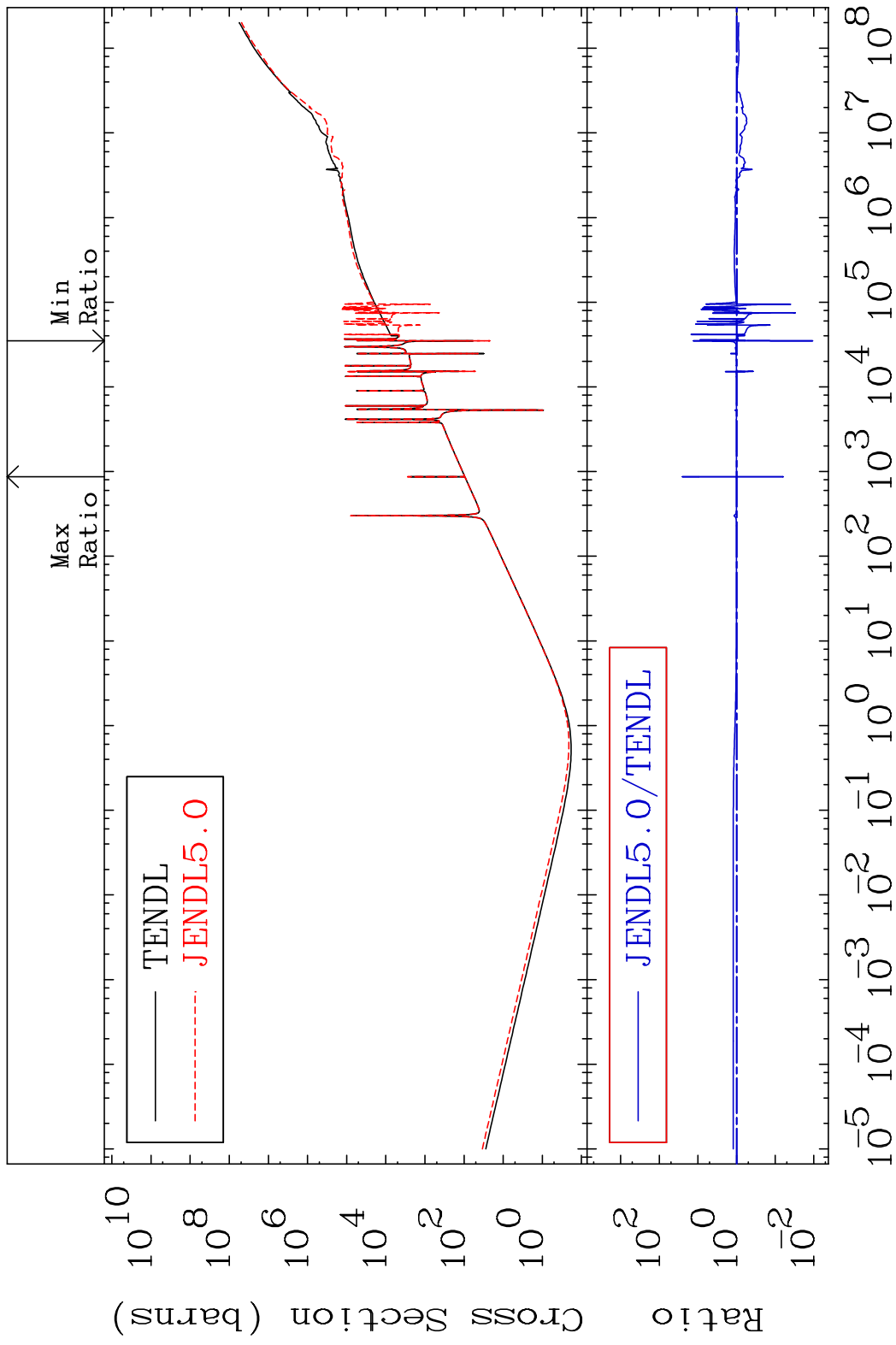
Cross Section -100.0 To 9999. %



24

40-Zr-96

MAT 4043 Kerma total (eV-barns) 40-Zr-96
 Cross Section -98.92 To 2431. %

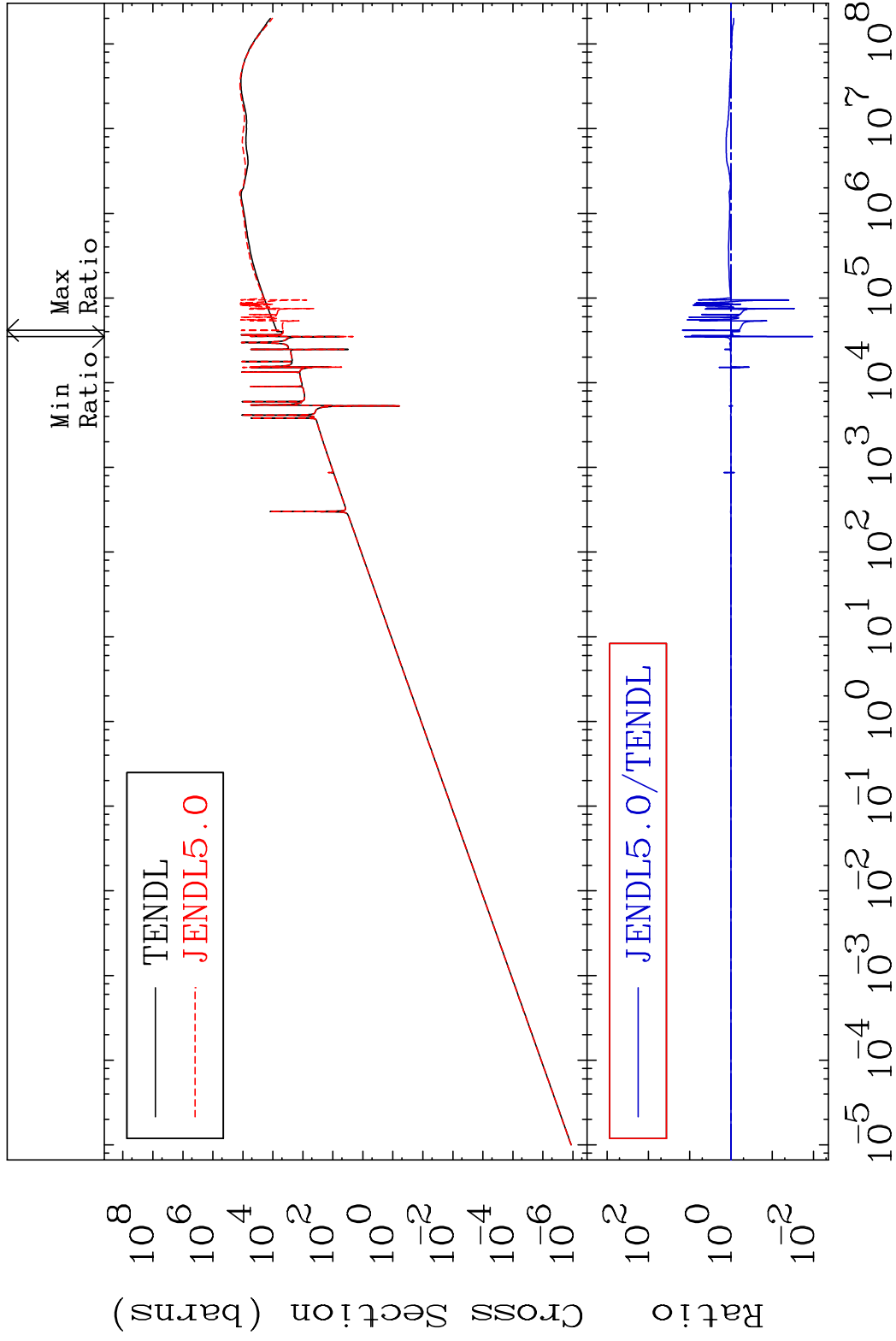


25 Incident Energy (eV) 40-Zr-96

MAT 4043

Kerma elastic
Cross Section

40-Zr-96
-98.94 To 1407. %

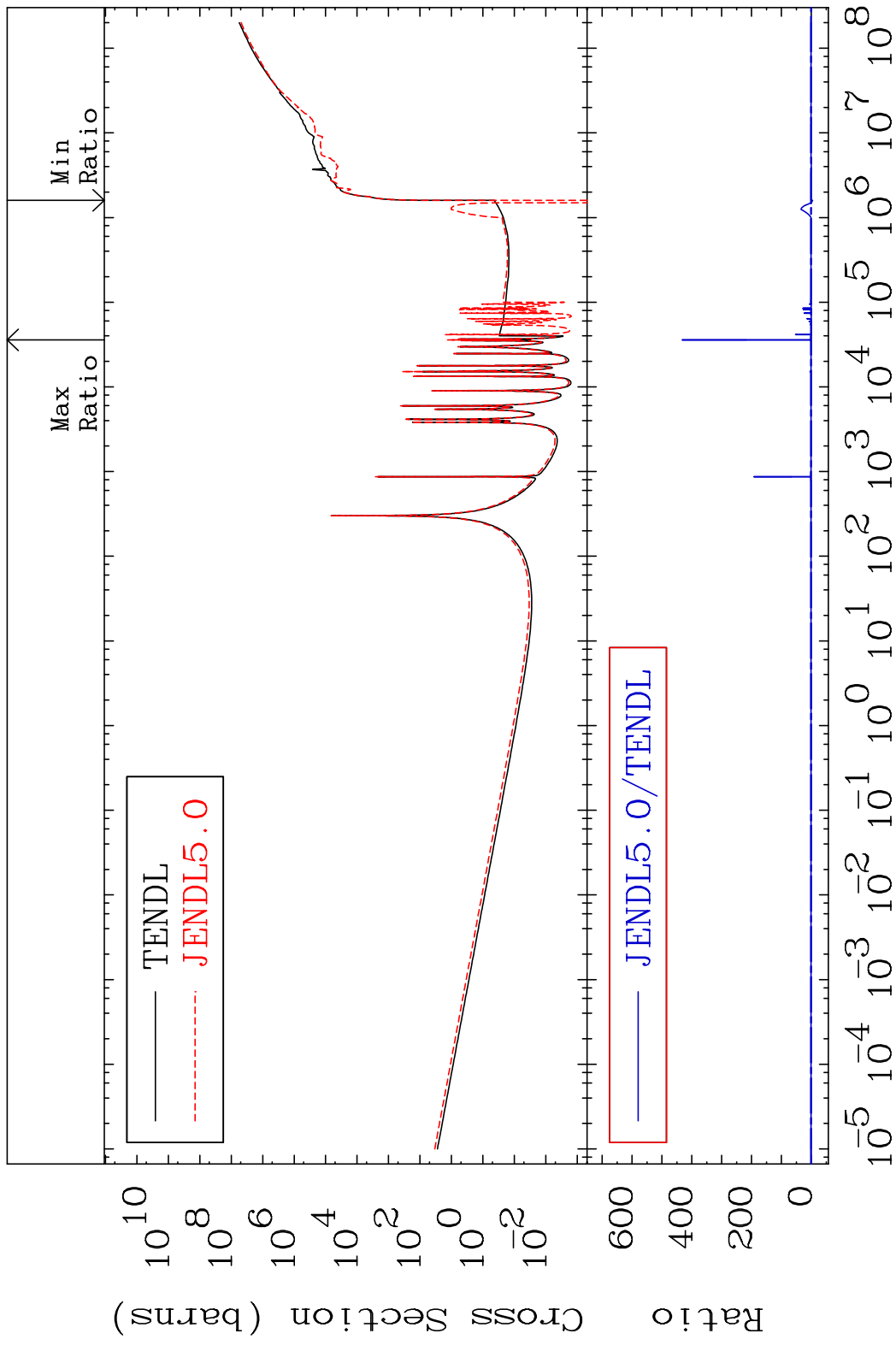


26

Incident Energy (eV)

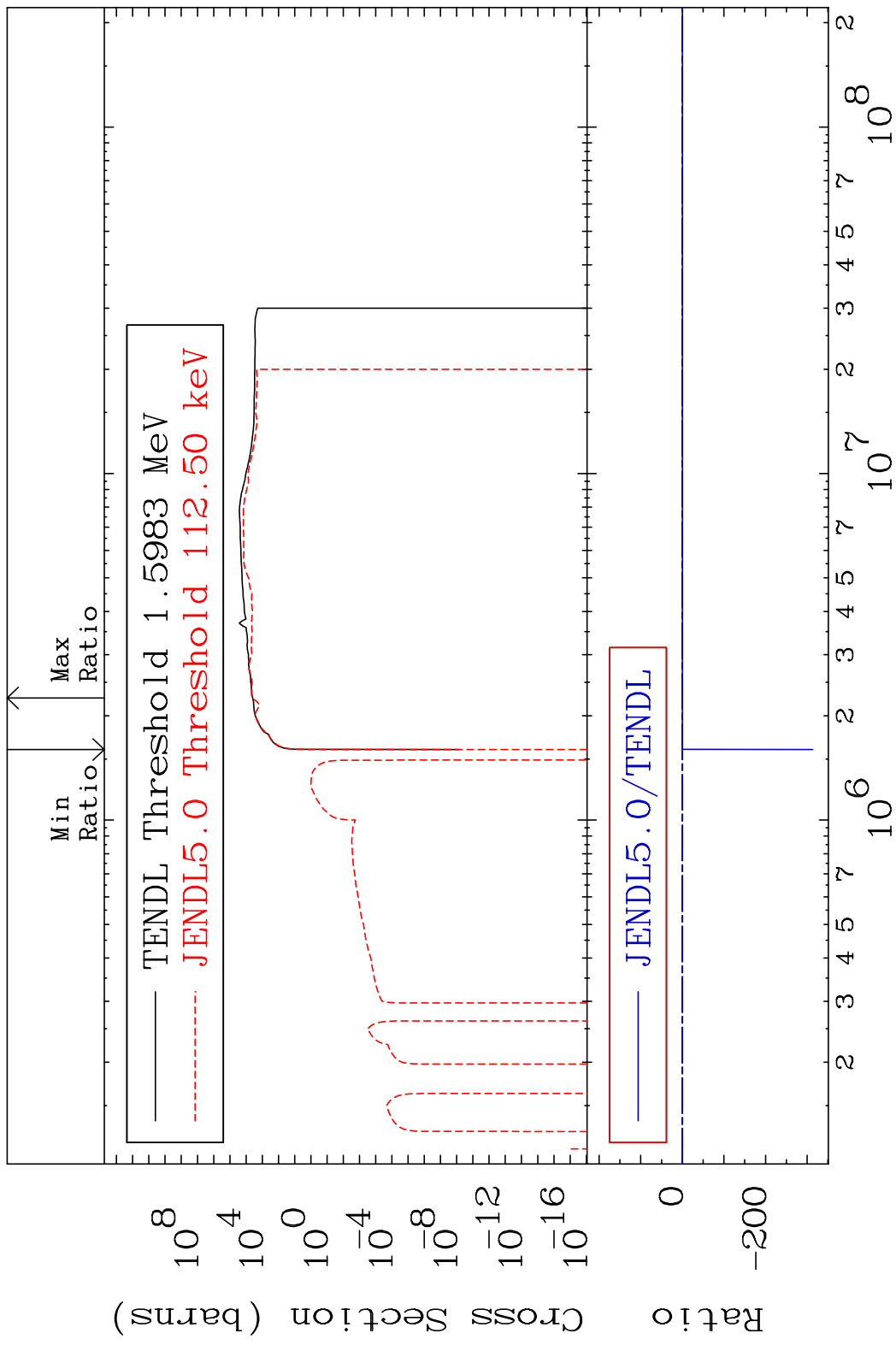
40-Zr-96

MAT 4043 Kerma non-elastic (all but mt2) 40-Zr-96
 Cross Section -533.1 To 9999. %

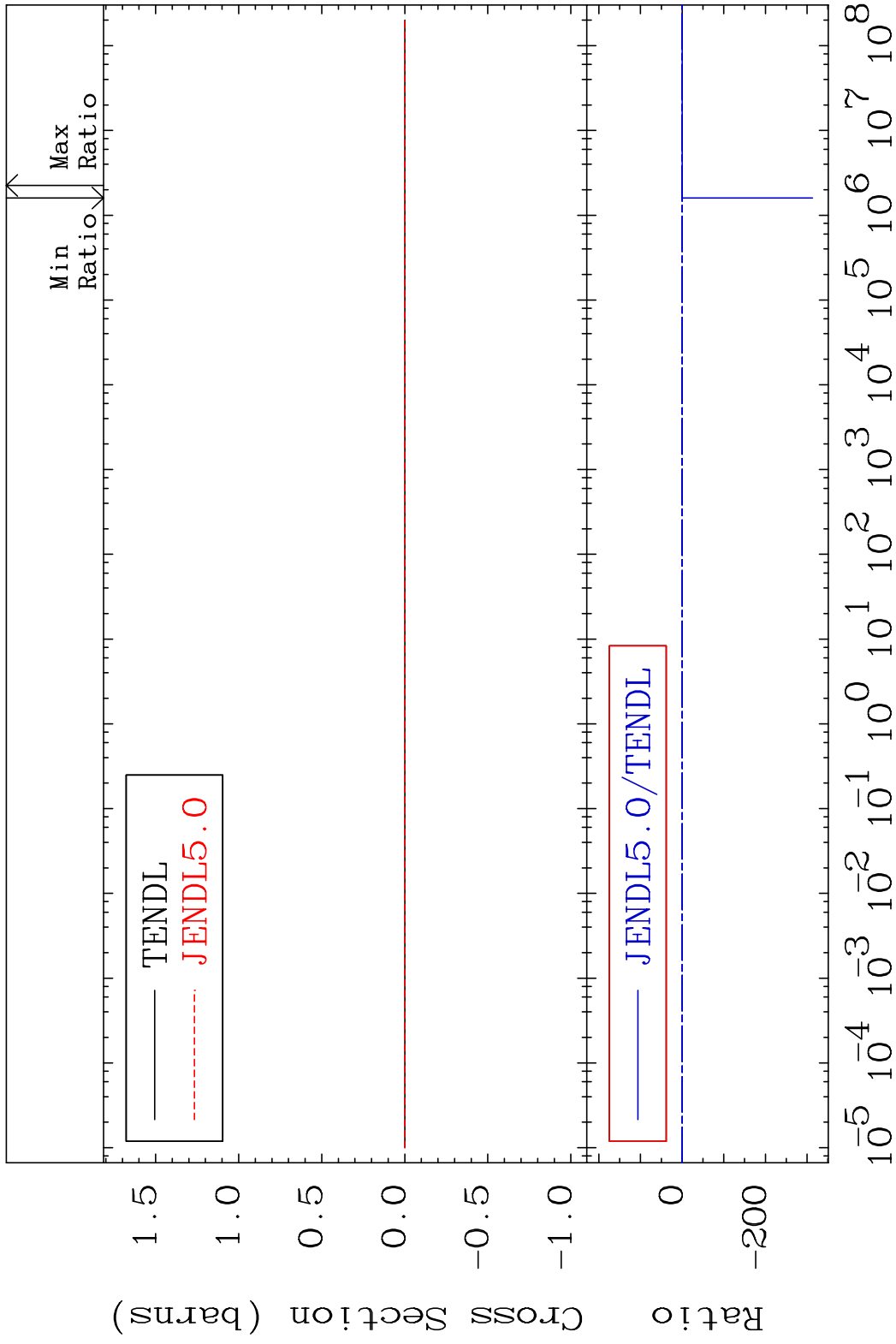


27 Incident Energy (eV) 40-Zr-96

MAT 4043 Kerma inelastic (mt51-91) 40-Zr-96
 Cross Section -9999. To 14.18 %

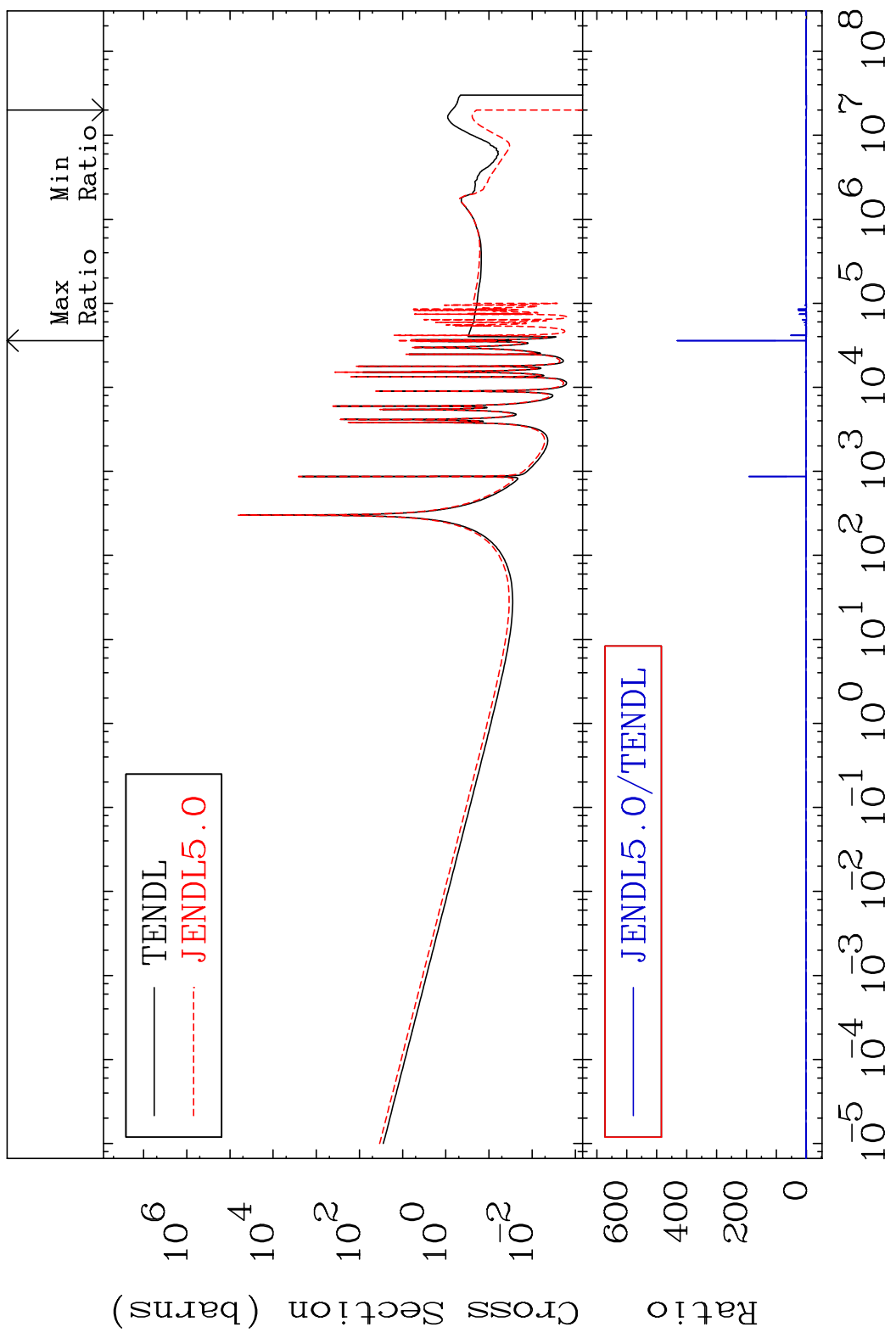


MAT 4043 Kerma fission (mt18 or mt19-20-21-38) 40-Zr-96
 Cross Section -9999. To 14.18 %



MAT 4043

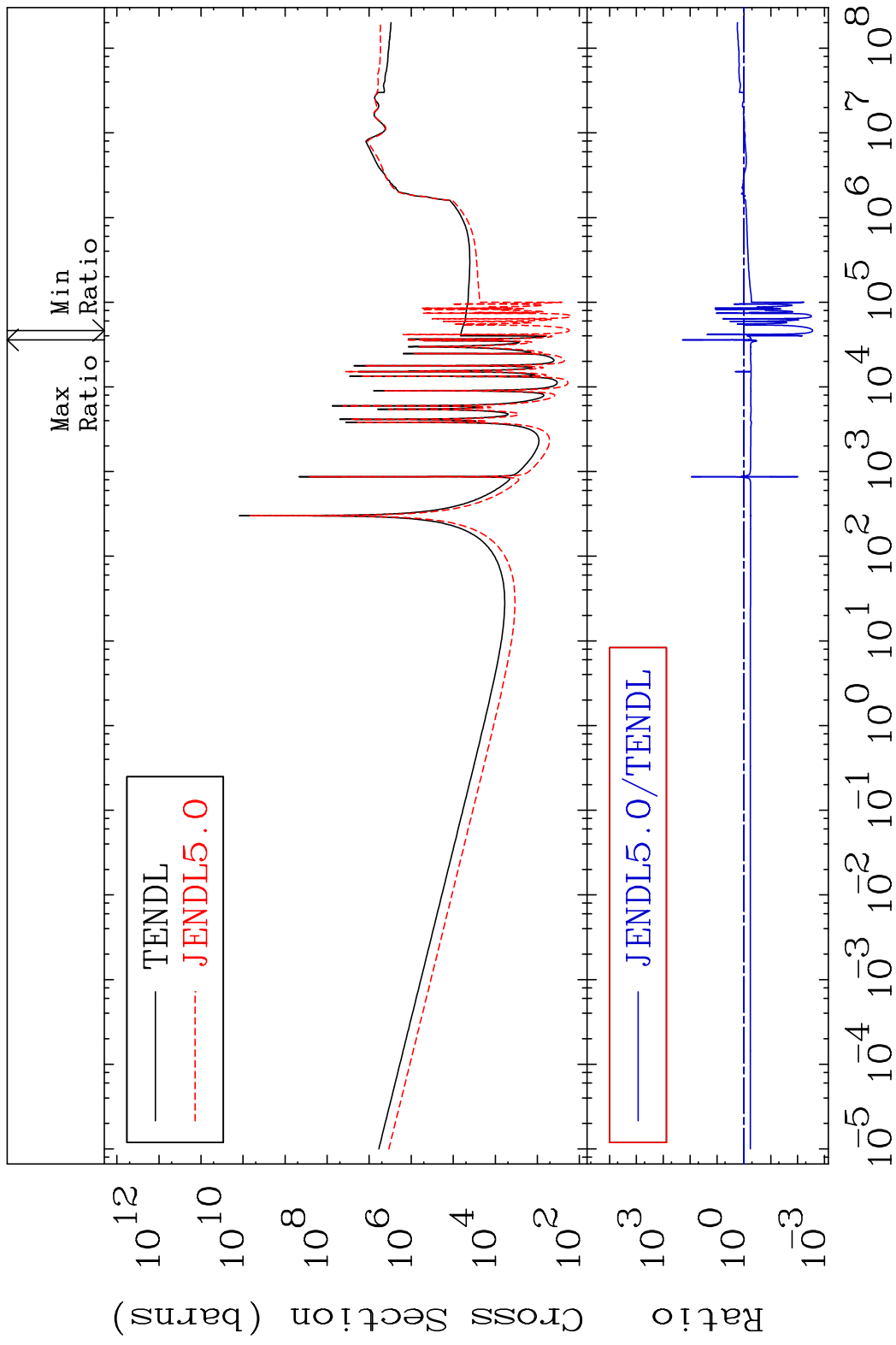
Kerma capture (mt102) 40-Zr-96
Cross Section -100.0 To 9999. %



30

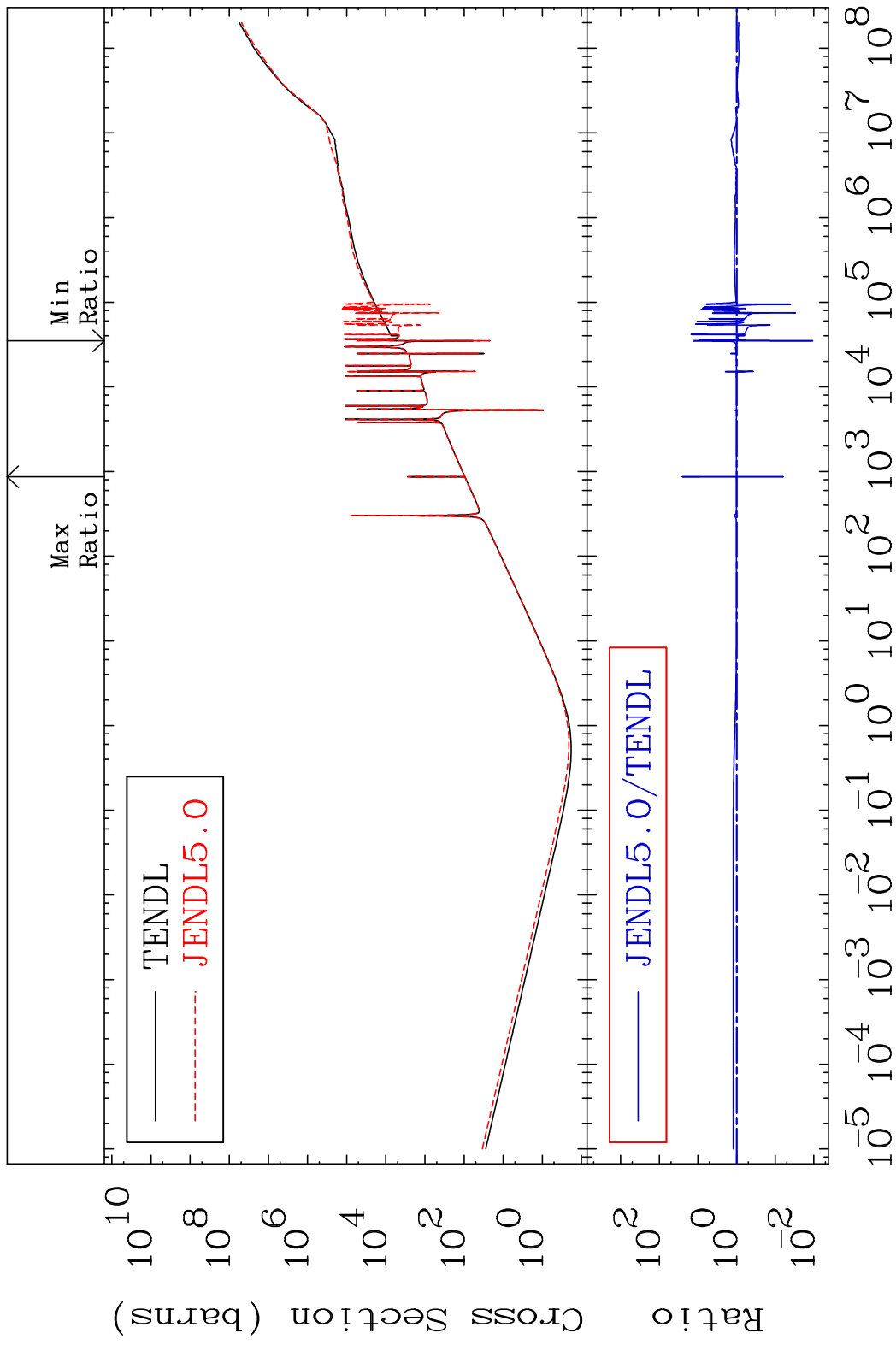
Incident Energy (eV) 40-Zr-96

MAT 4043 Total photon (eV-barns) 40-Zr-96
 Cross Section -99.72 To 9999. %



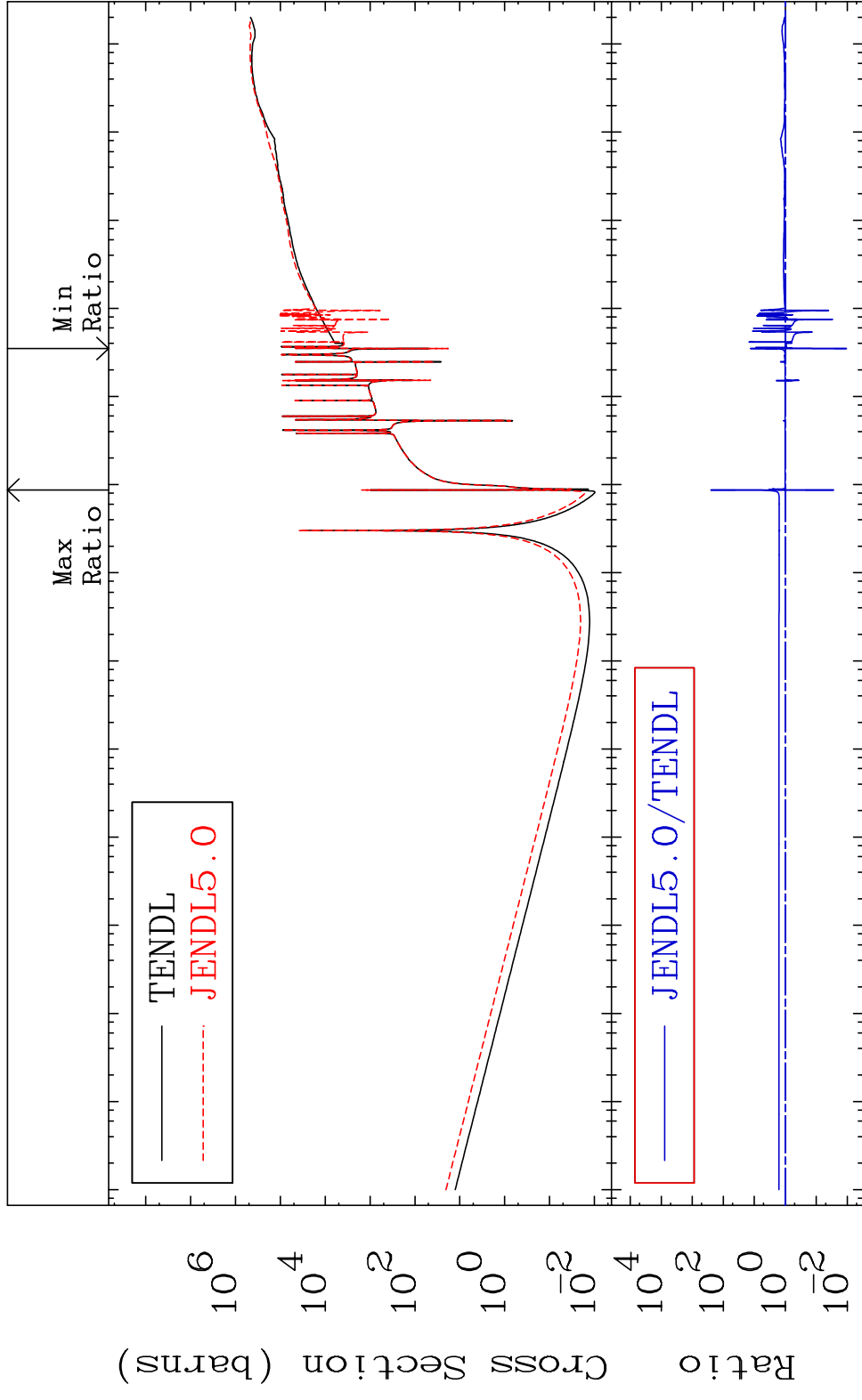
31 Incident Energy (eV) 40-Zr-96

MAT 4043 Total kinematic kerma (high limit) 40-Zr-96
 Cross Section -98.92 To 2431. %



32 Incident Energy (eV) 40-Zr-96

MAT 4043 Dpa total (eV-barns) 40-Zr-96
 Cross Section -98.93 To 9999. %

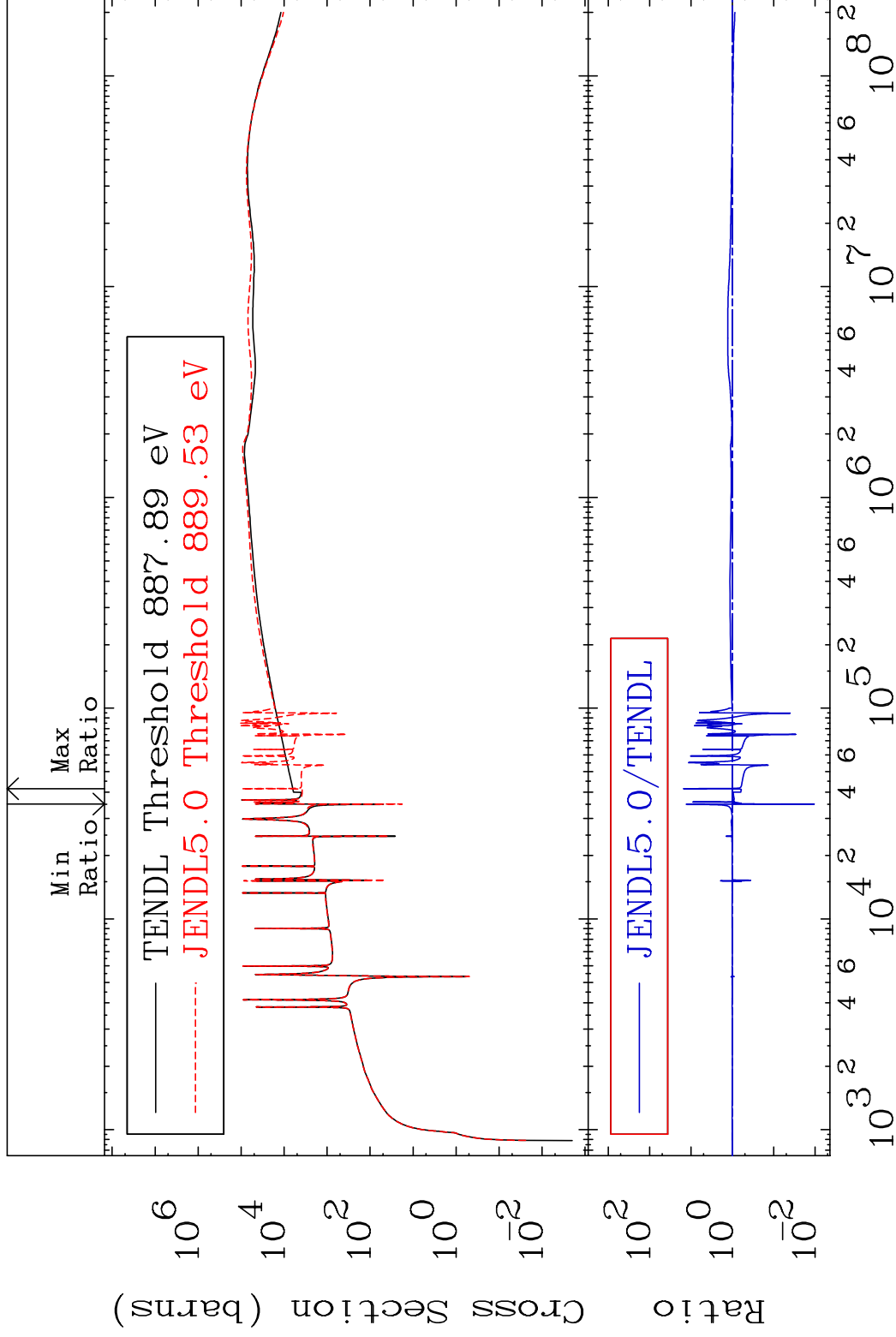


MAT 4043

Dpa elastic (mt2)

40-Zr-96

Cross Section -98.94 To 1407. %

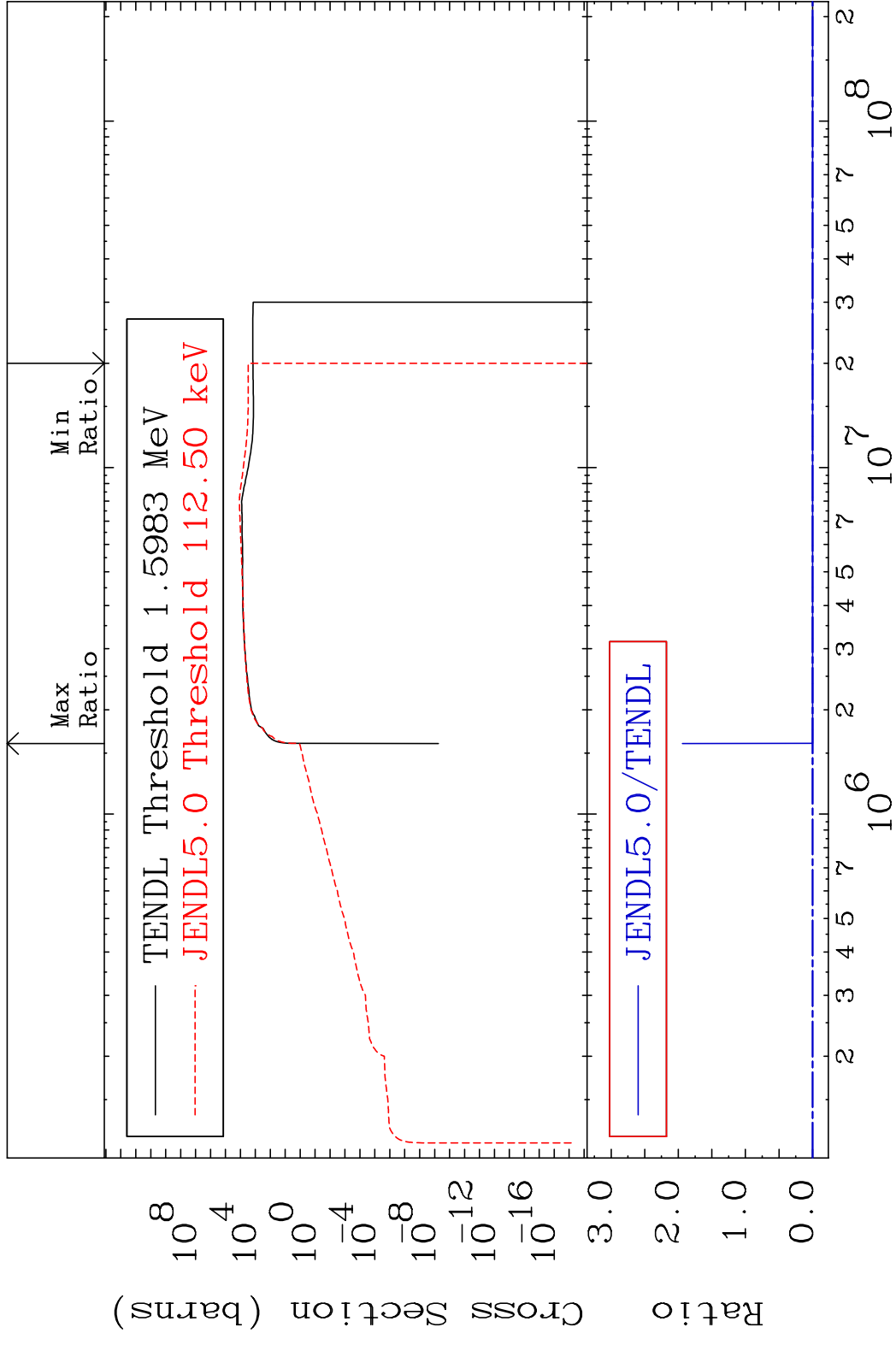


34

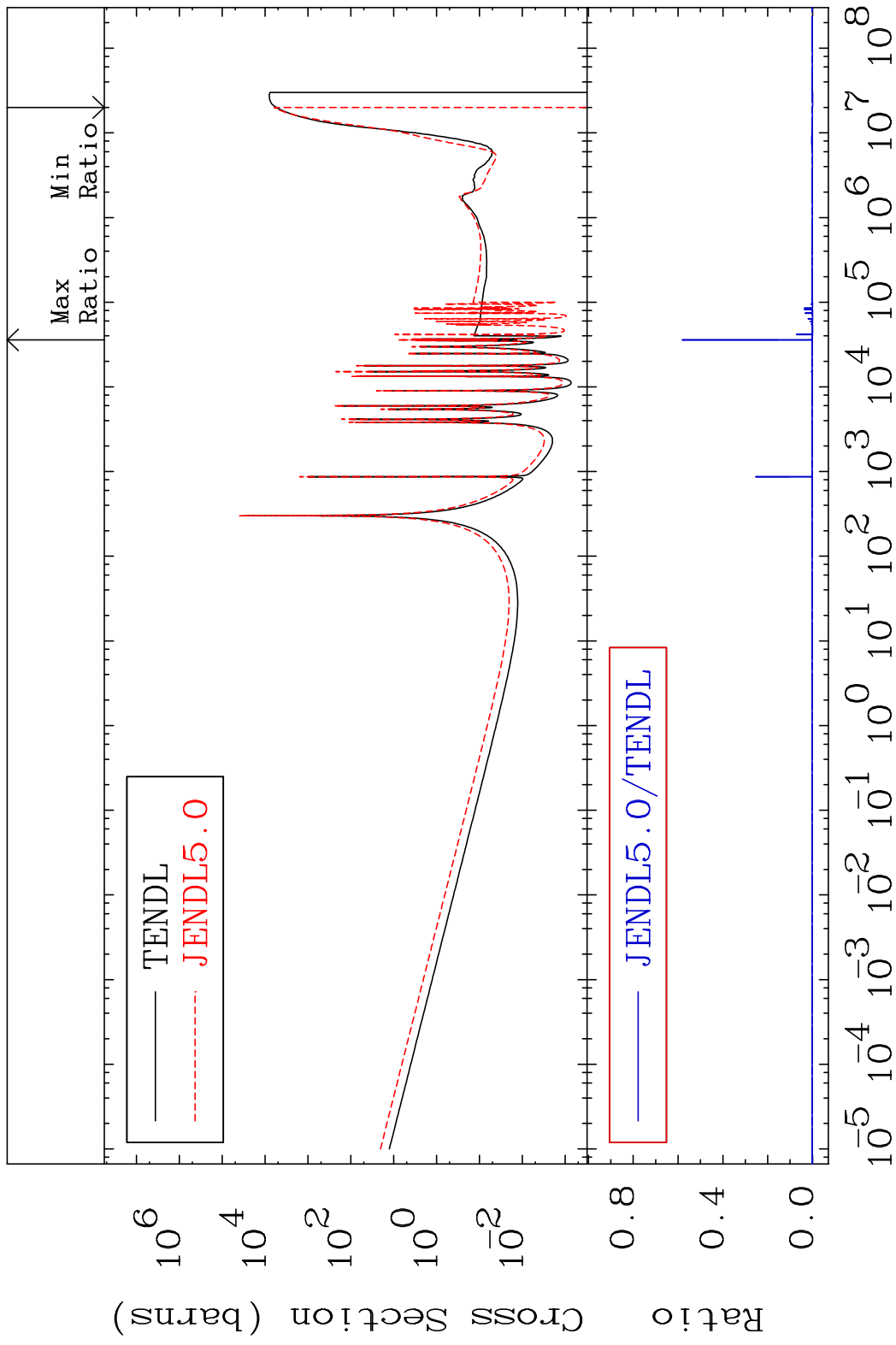
Incident Energy (eV)

40-Zr-96

MAT 4043 Dpa inelastic (mt51-91) 40-Zr-96
 Cross Section -100.0 To 9999. %

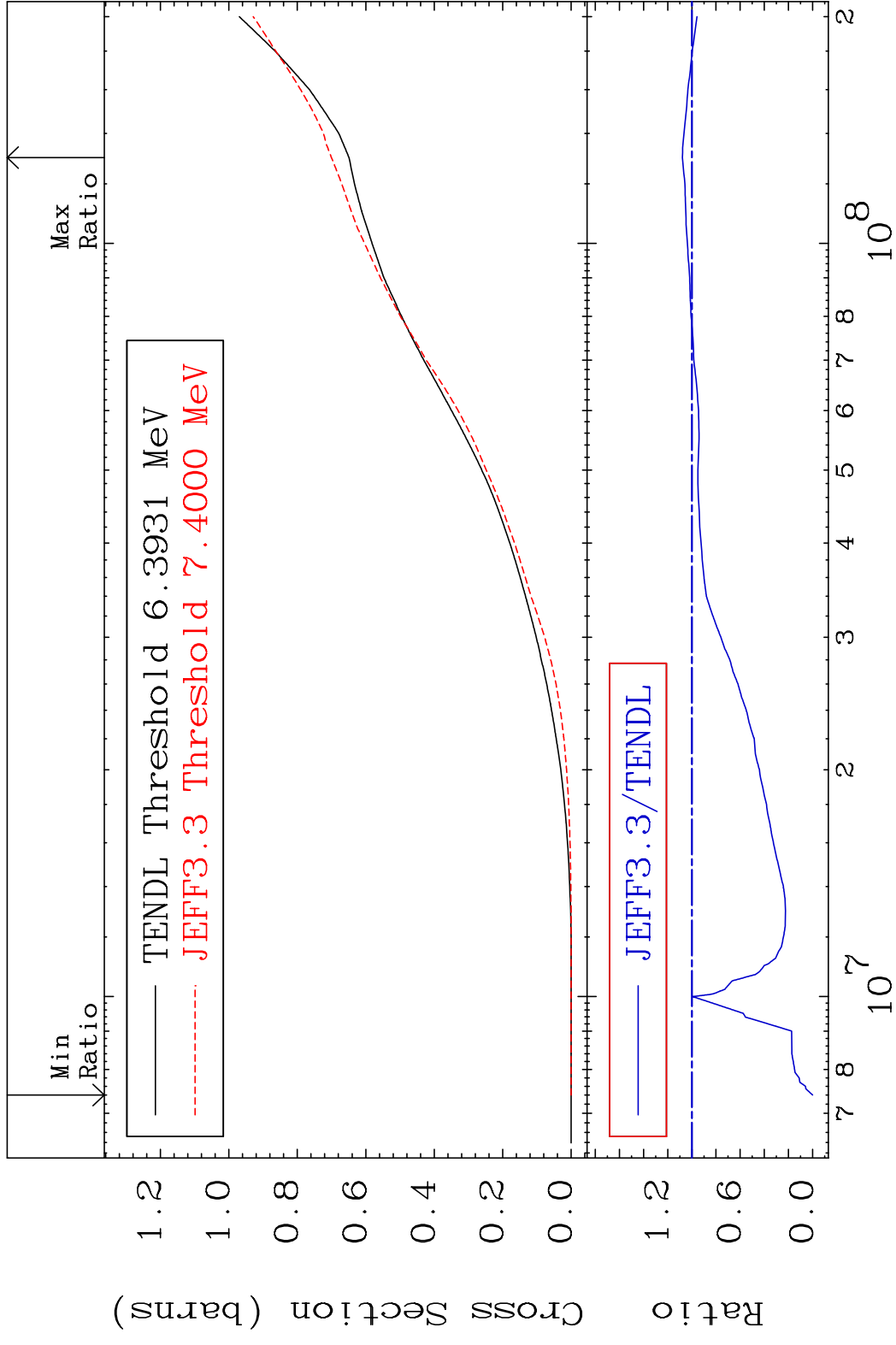


MAT 4043 Dpa disappearance (mt102 -120) 40-Zr-96
 Cross Section -100.0 To 9999. %

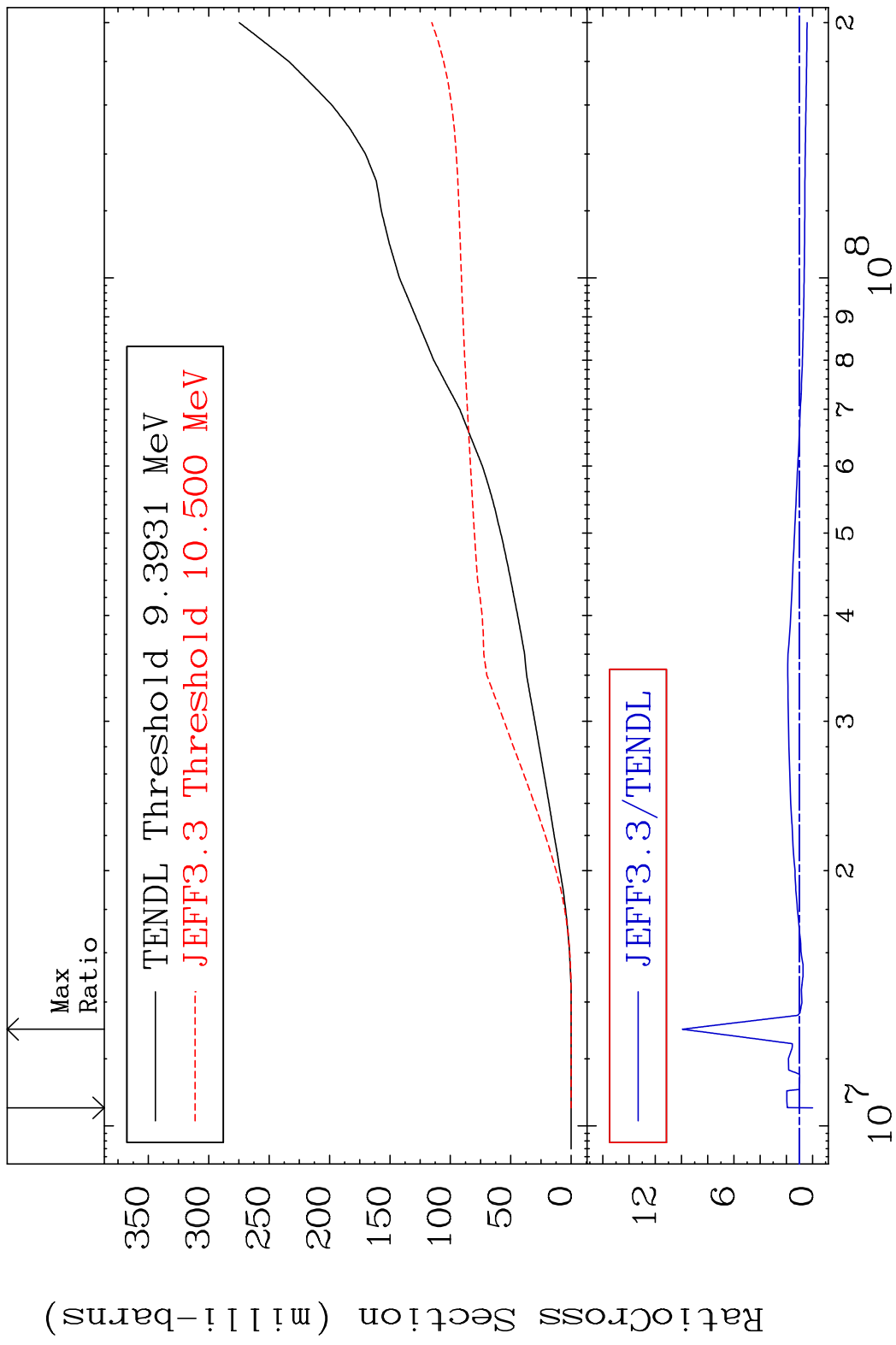


36 Incident Energy (eV) 40-Zr-96

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

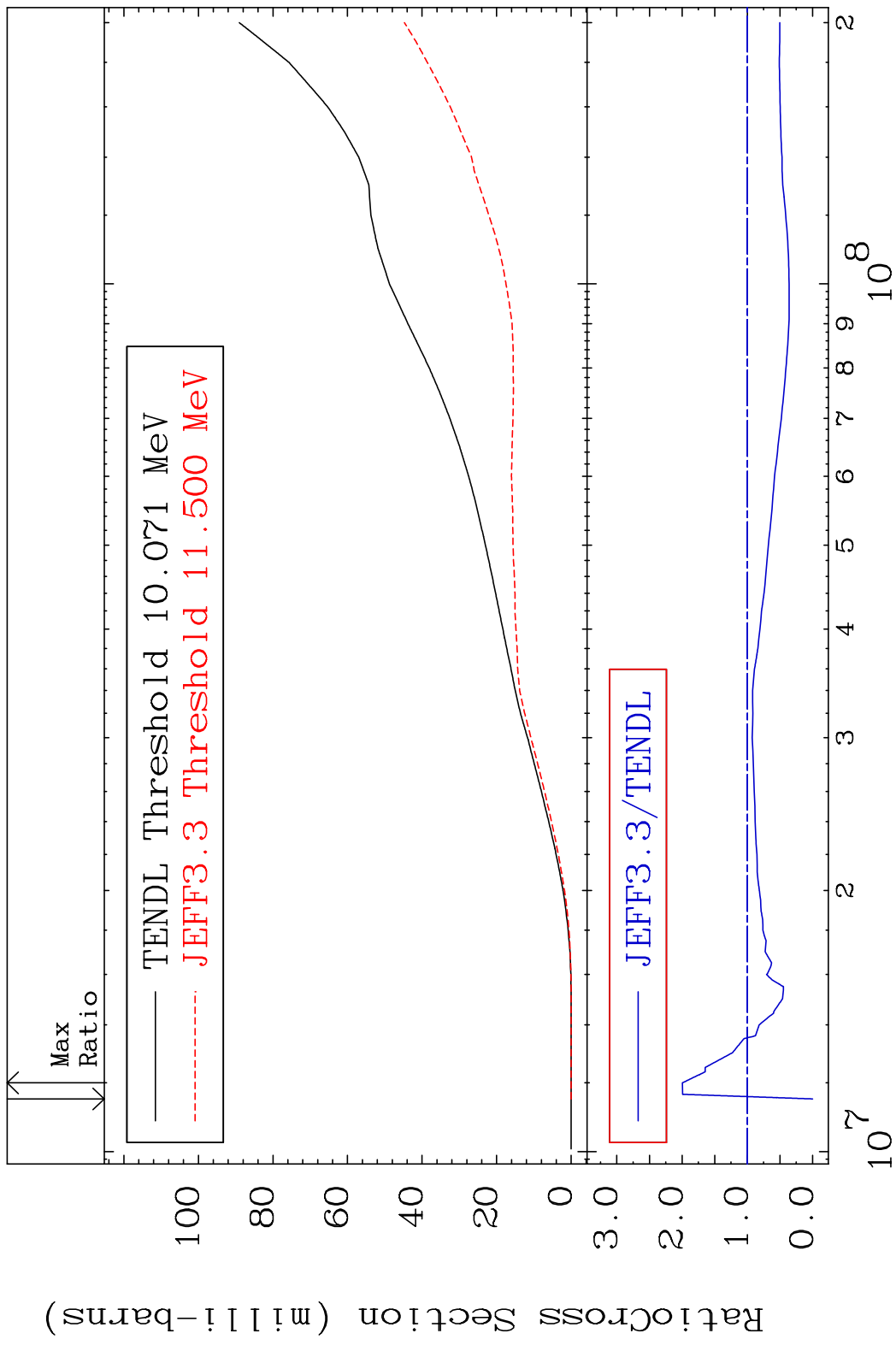


MAT 4043 Deuterium Production 40-Zr-96
 Cross Section -100.0 To 893.7 %



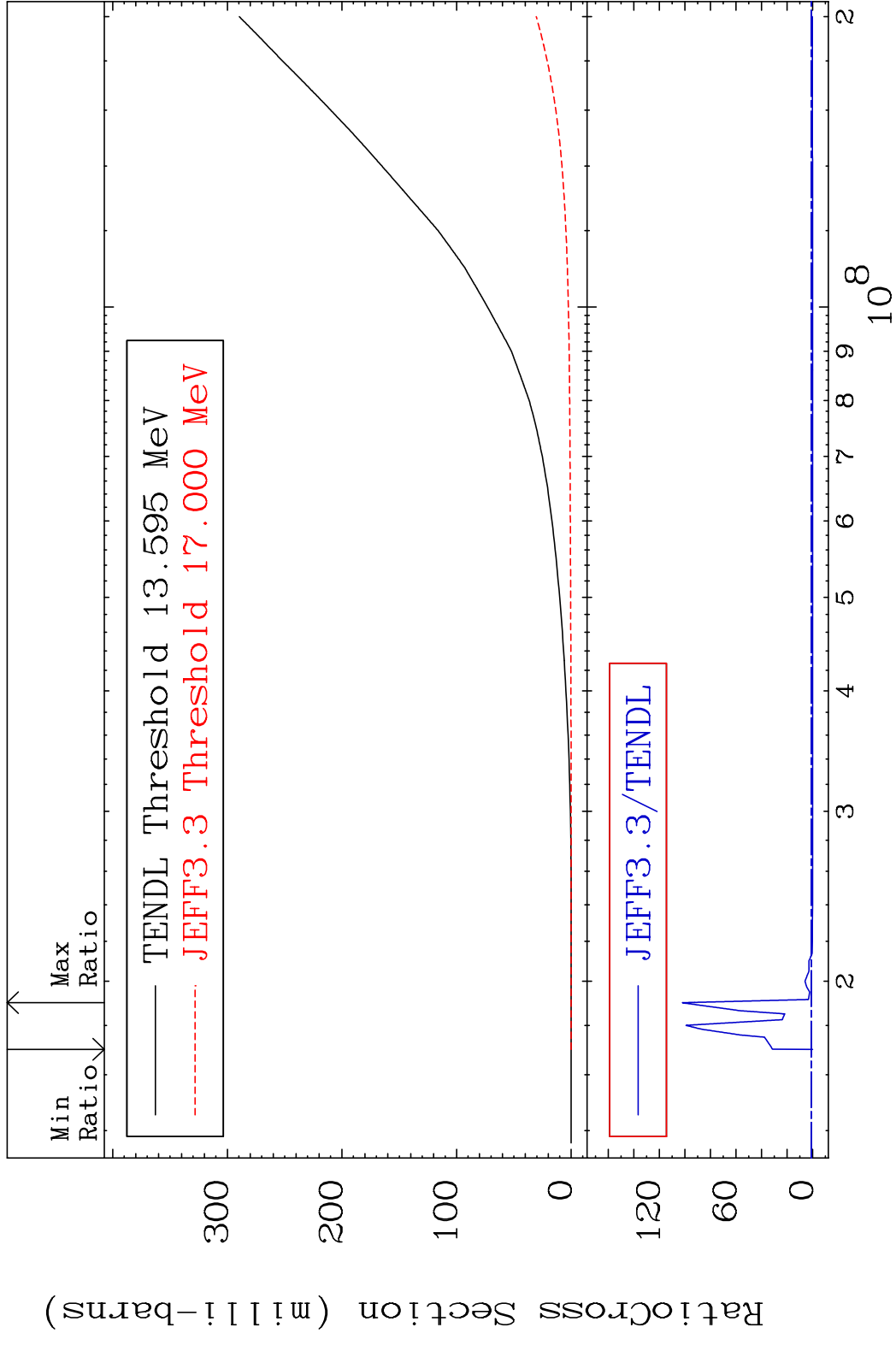
38 40-Zr-96

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



39

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

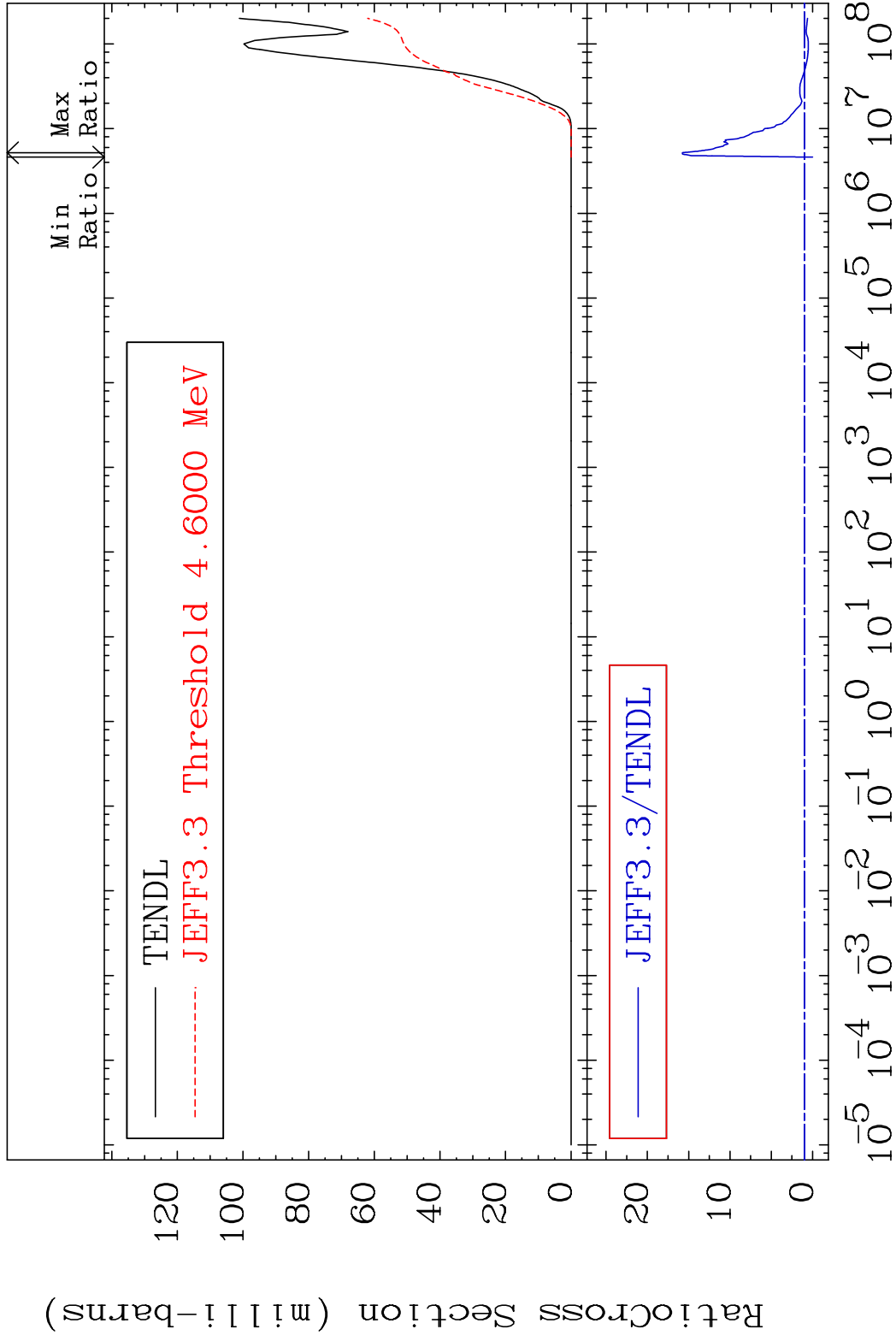


MAT 4043

He-4 Production

40-Zr-96

Cross Section -100.0 To 1476. %



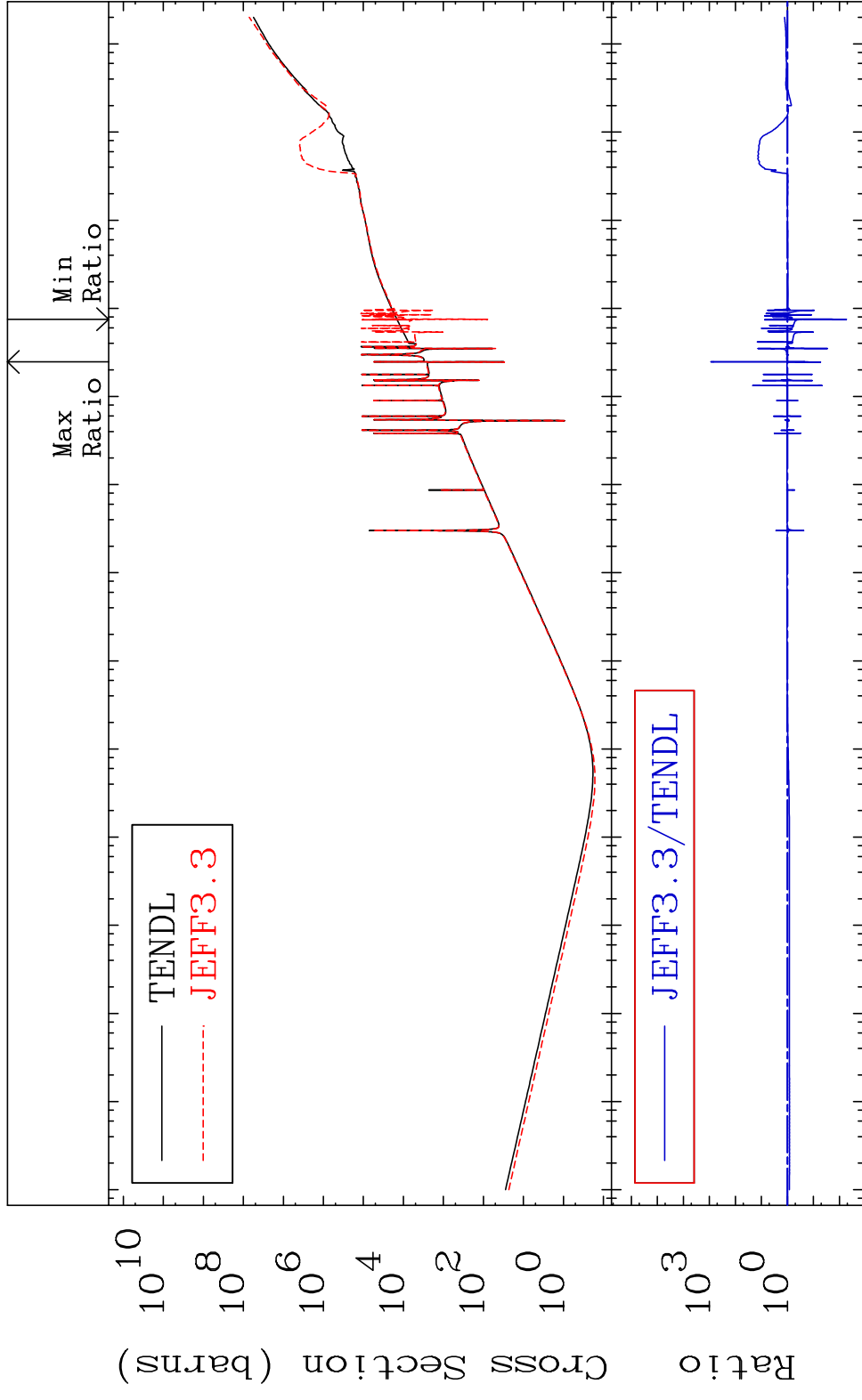
41

Incident Energy (eV)

40-Zr-96

MAT 4043

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



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

42

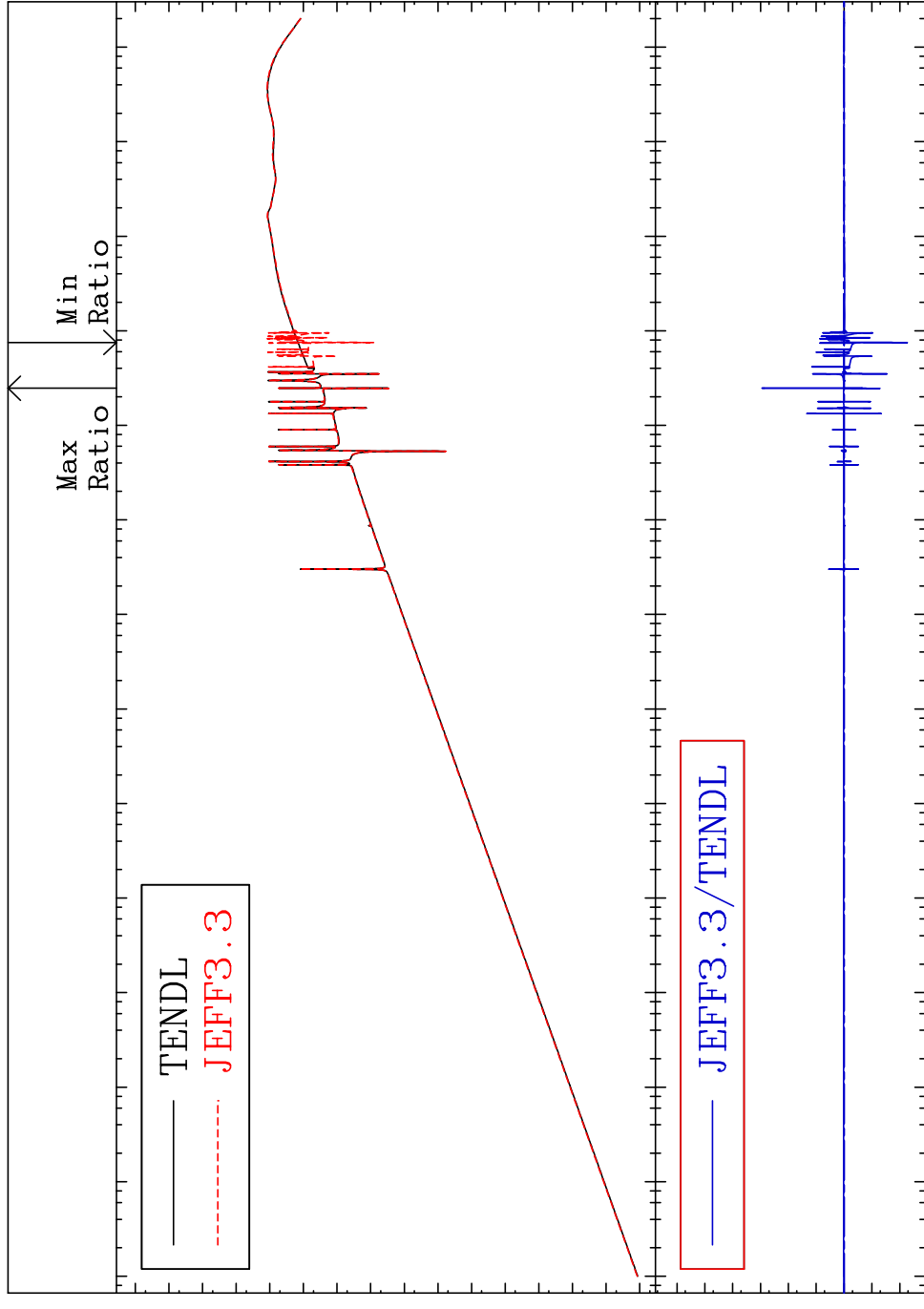
Incident Energy (eV)

40-Zr-96

MAT 4043

Kerma elastic
Cross Section

40-Zr-96
-99.46 To 9999. %



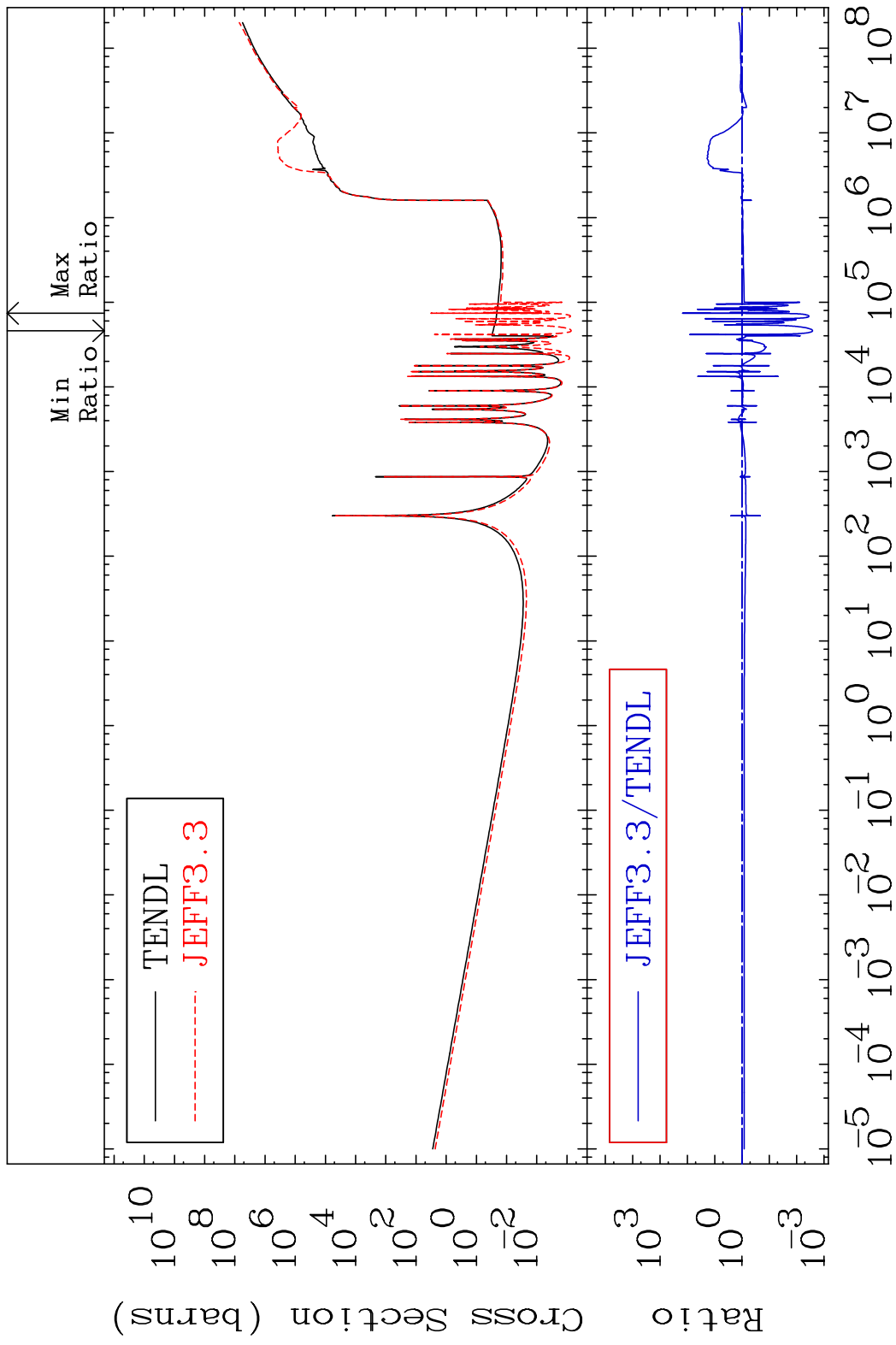
Cross Section (barns)
Ratio

Incident Energy (eV)

43

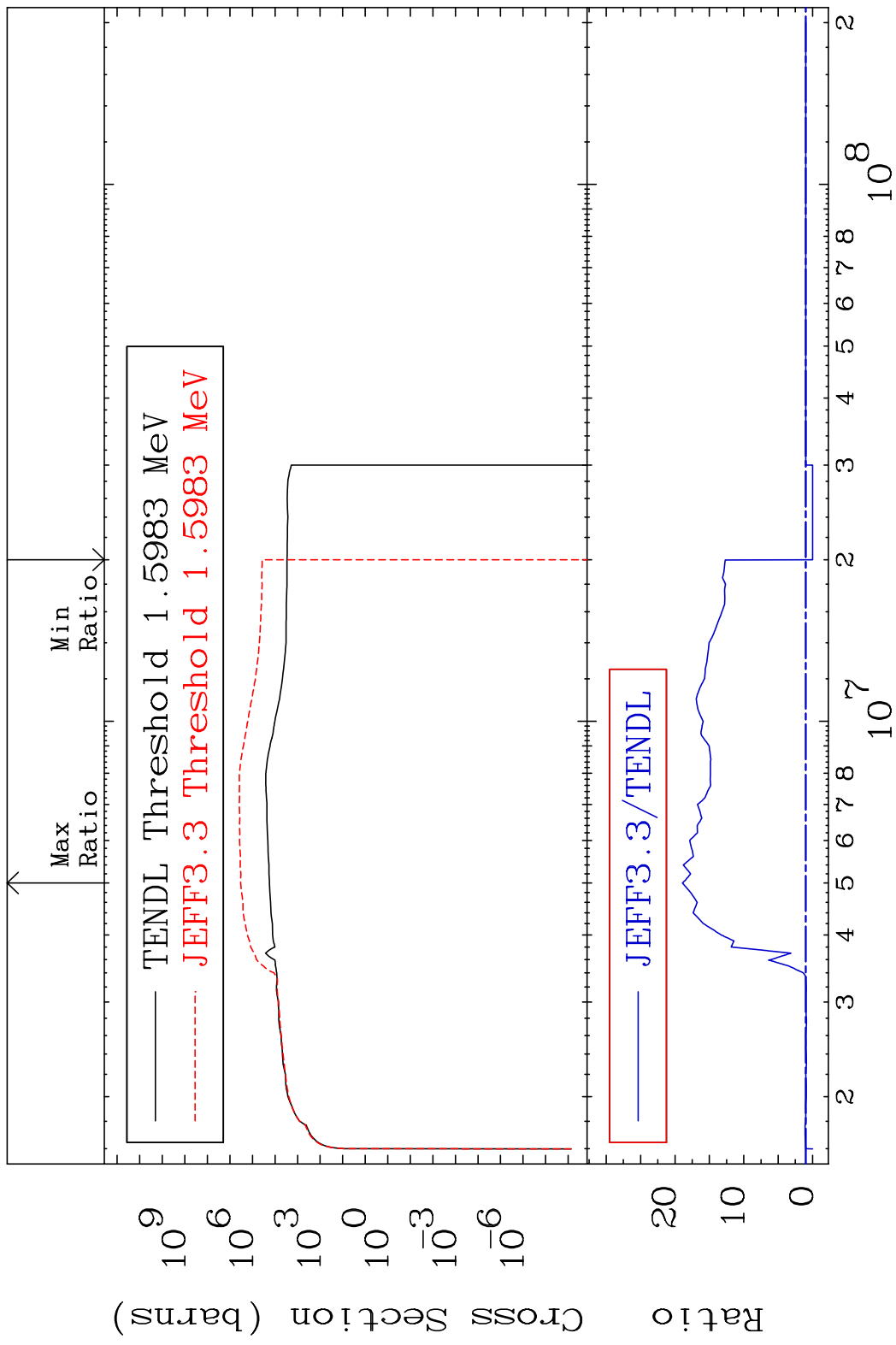
40-Zr-96

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



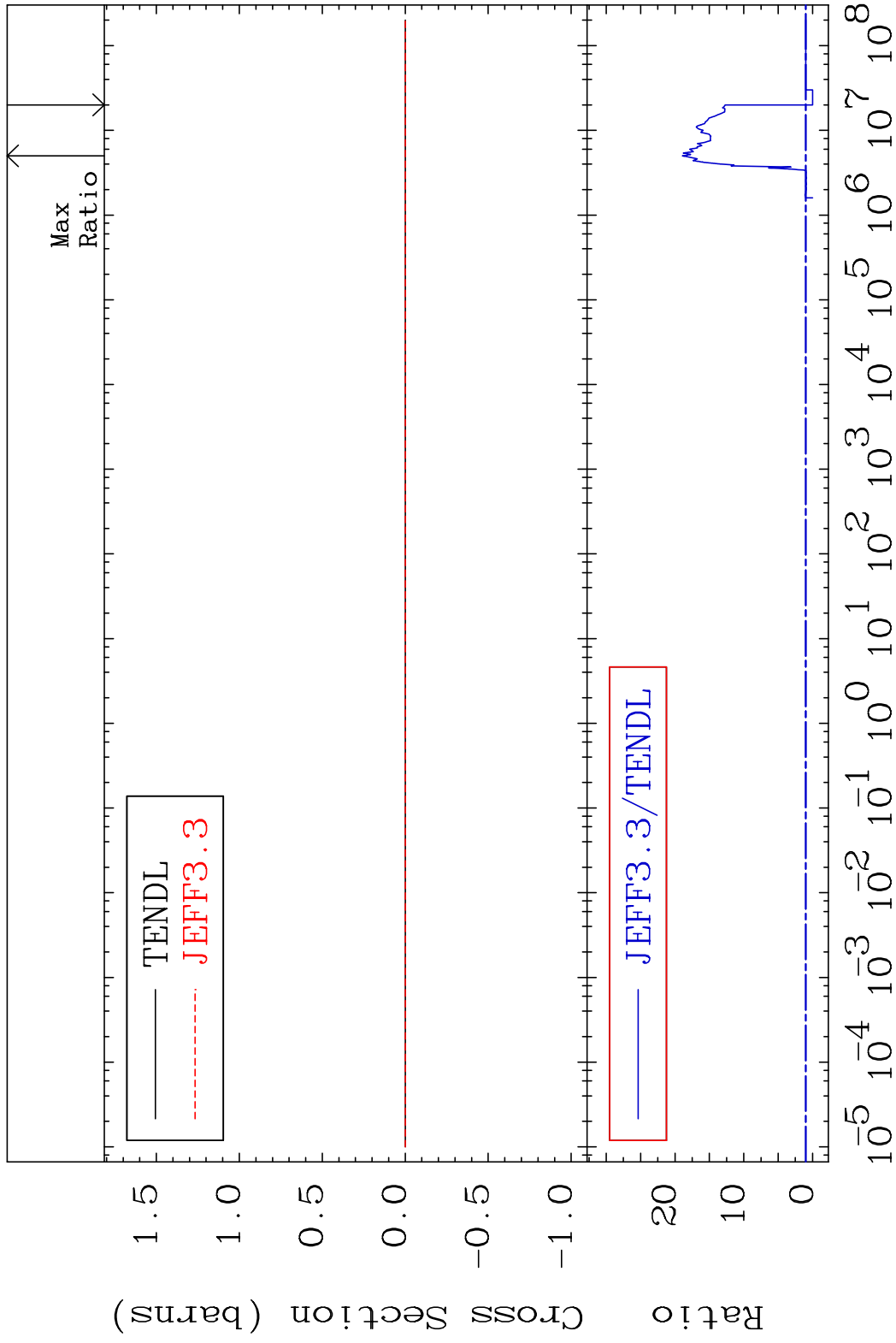
44 Incident Energy (eV) 40-Zr-96

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

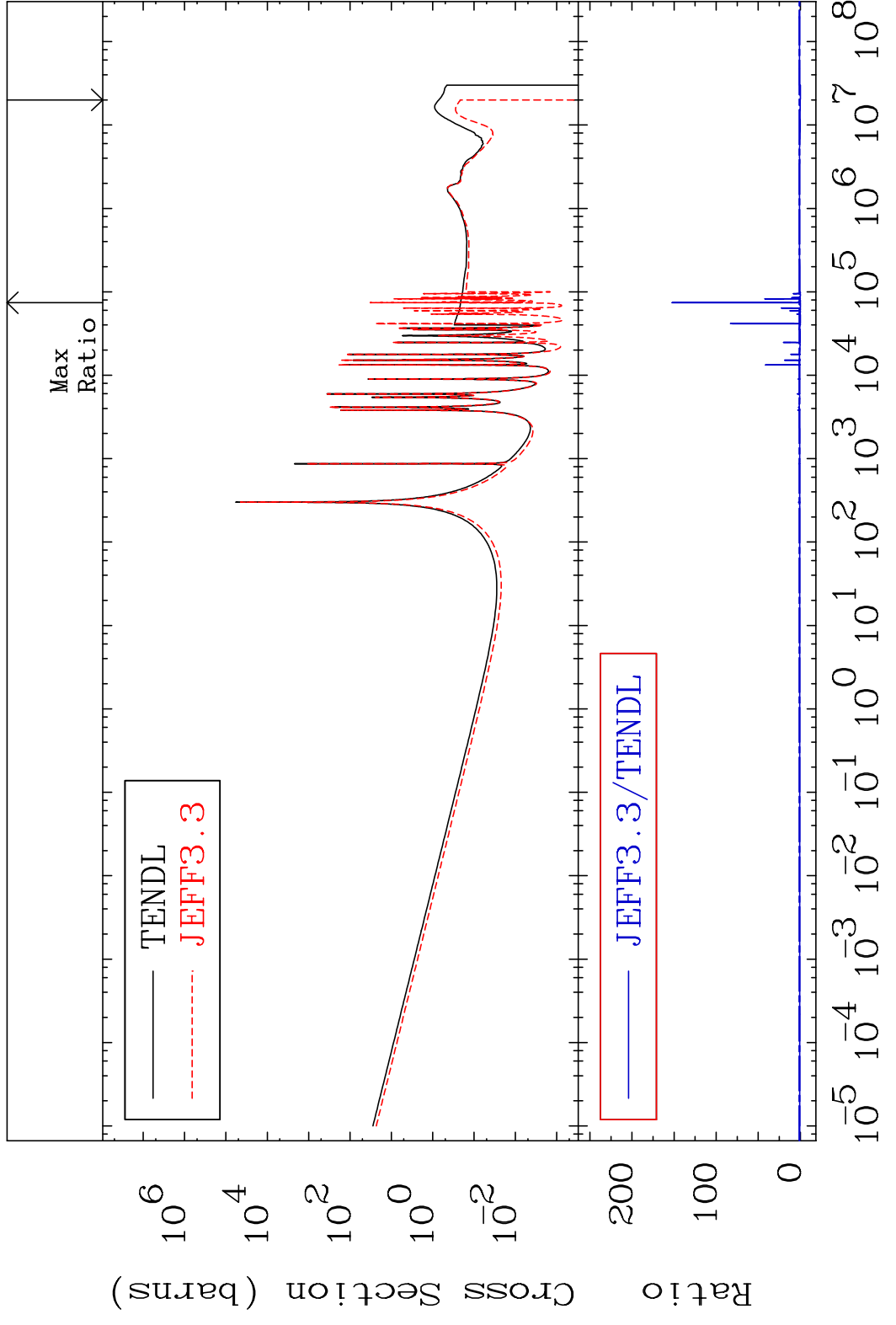


45 Incident Energy (eV) 40-Zr-96

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



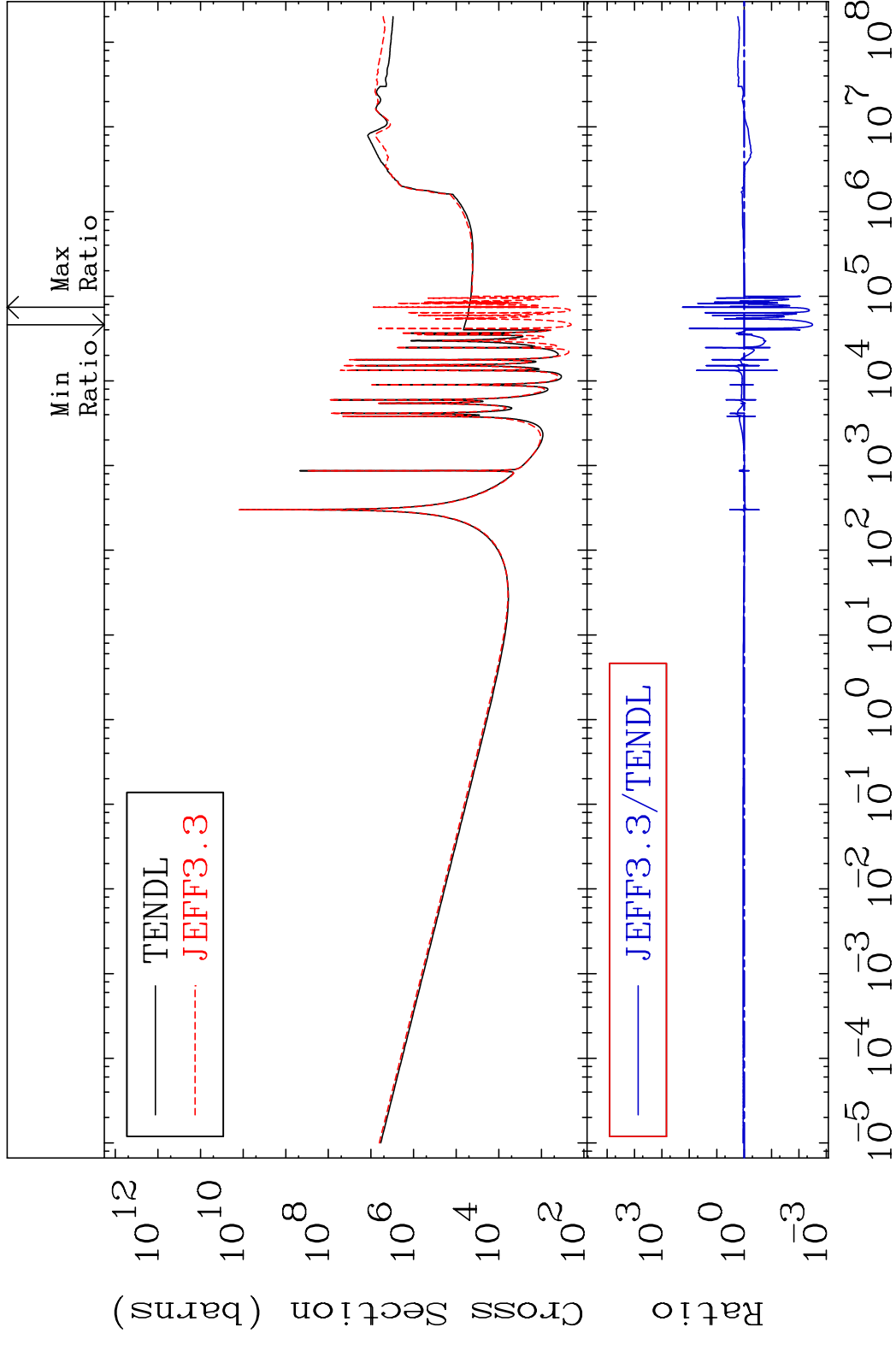
MAT 4043 Kerma capture (mt102) 40-Zr-96
 Cross Section -100.0 To 9999. %



47 Incident Energy (eV) 40-Zr-96

MAT 4043

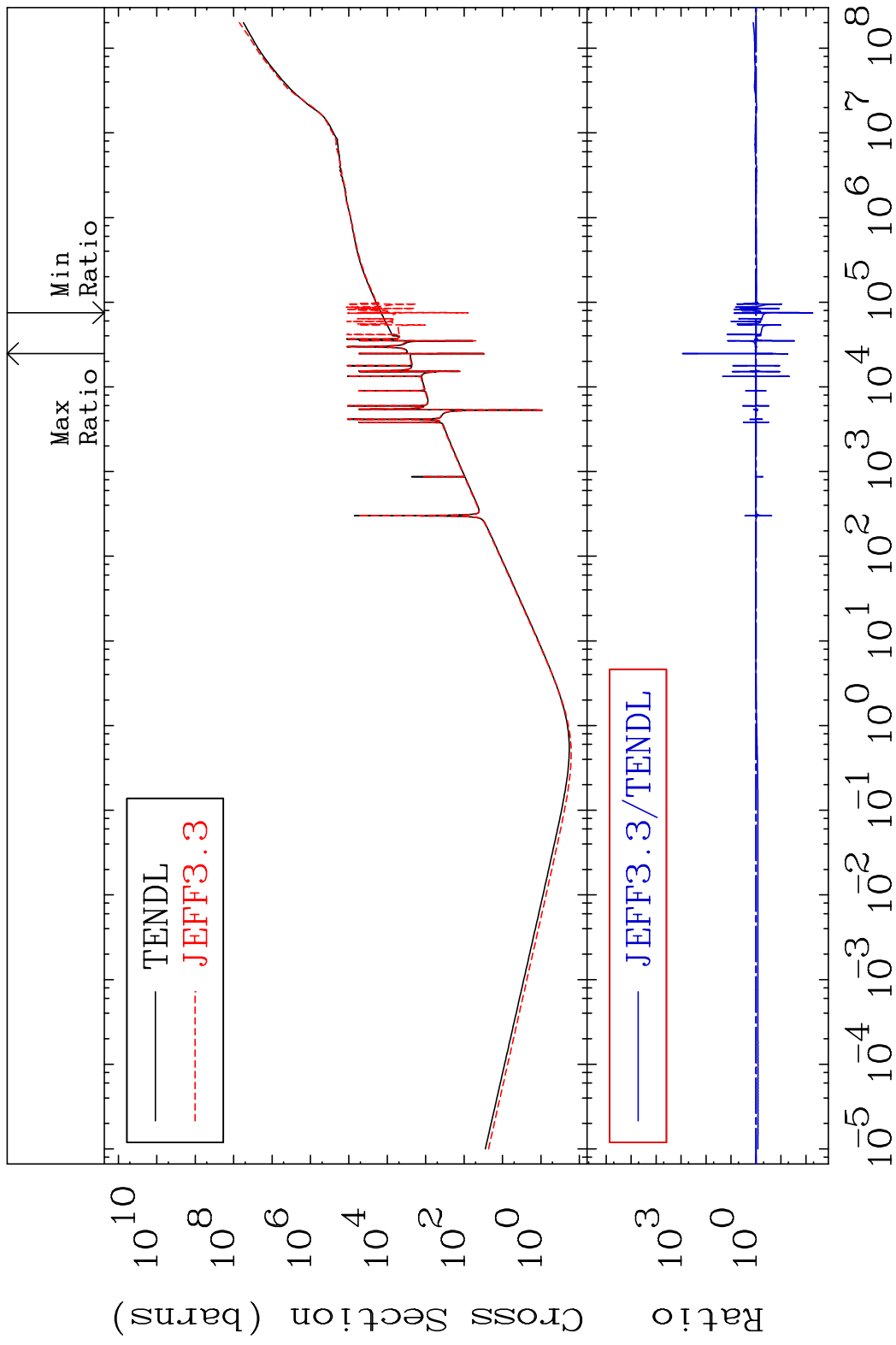
Total photon (eV-barns) 40-Zr-96
Cross Section -99.68 To 9999. %



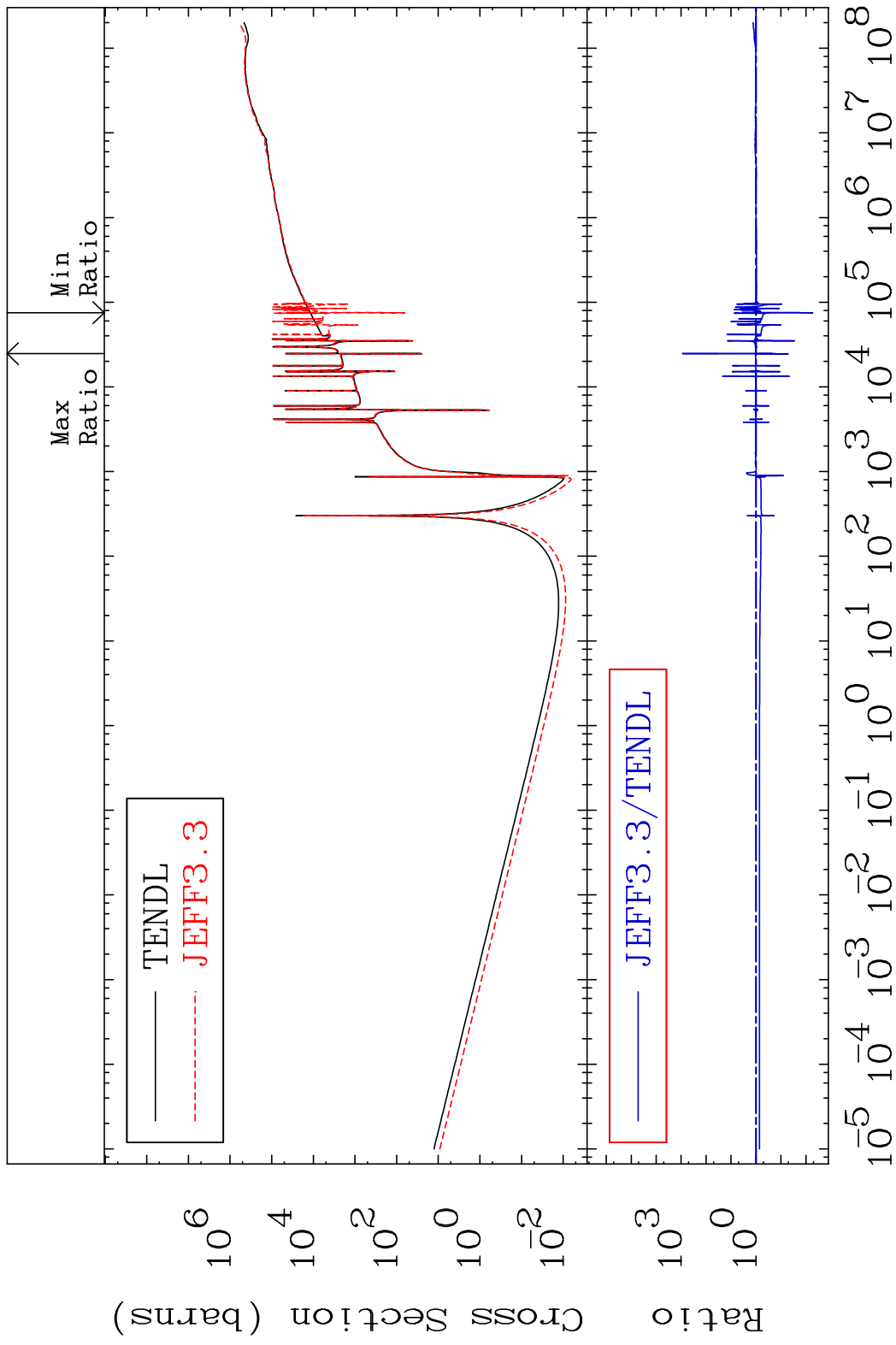
48

Incident Energy (eV) 40-Zr-96

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



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



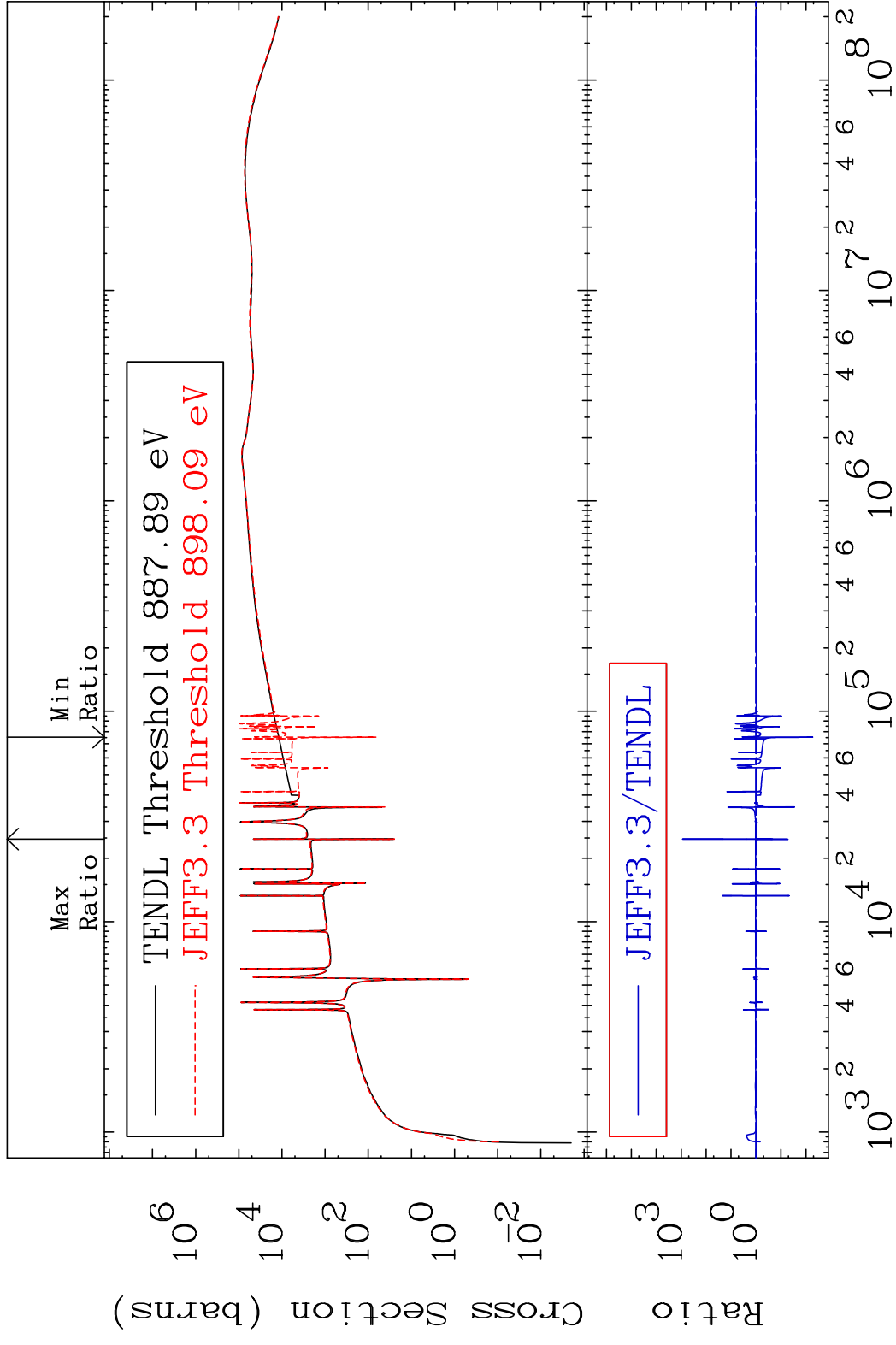
50 Incident Energy (eV) 40-Zr-96

MAT 4043

Dpa elastic (mt2)

40-Zr-96

Cross Section -99.46 To 9999. %

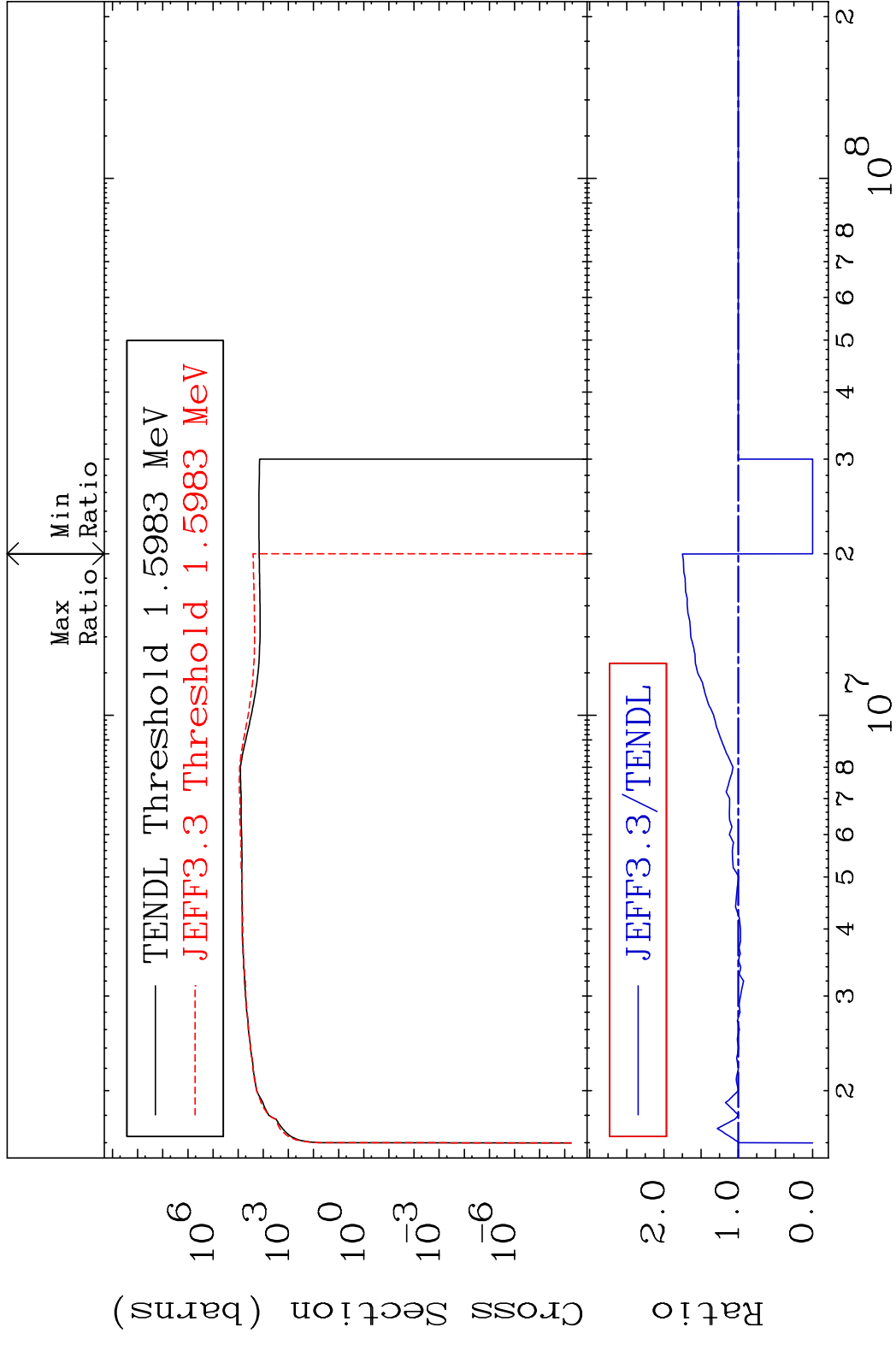


51

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. %

