

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

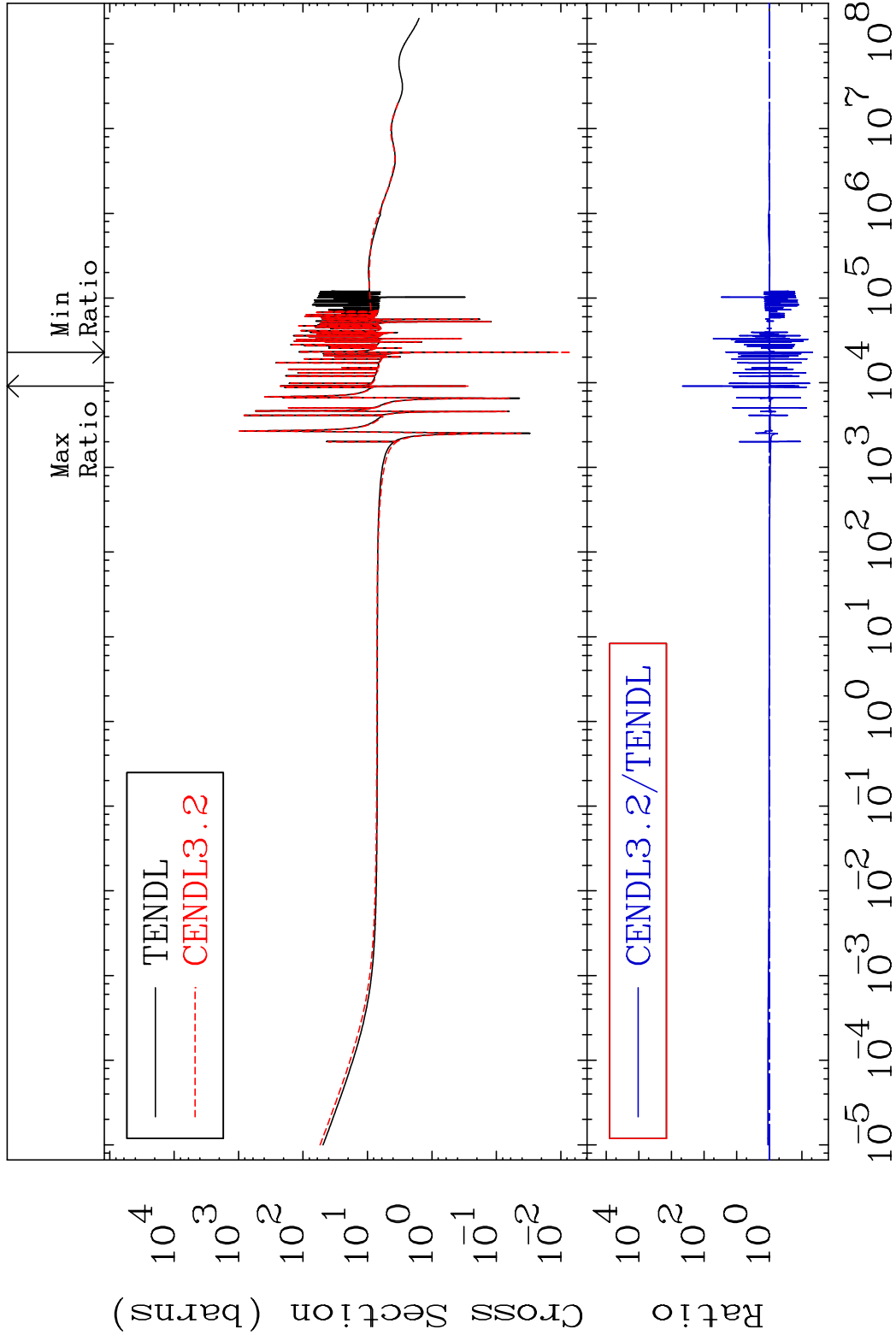
Press Mouse Button to Start

MAT 4031

Total

40-Zr-92

Cross Section -95.27 To 9999. %



1

Incident Energy (eV)

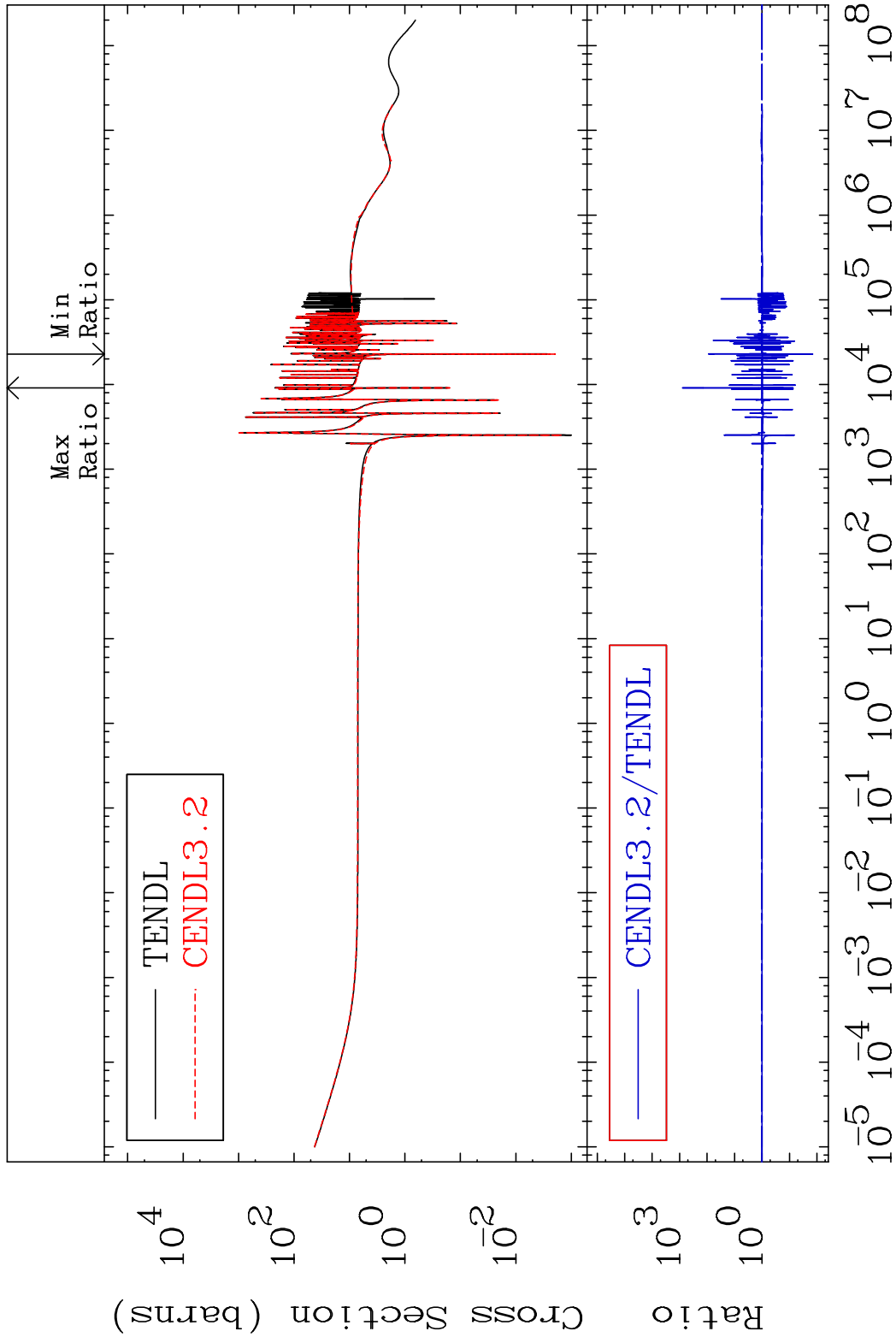
40-Zr-92

MAT 4031

Elastic

40-Zr-92

Cross Section -98.56 To 9999. %

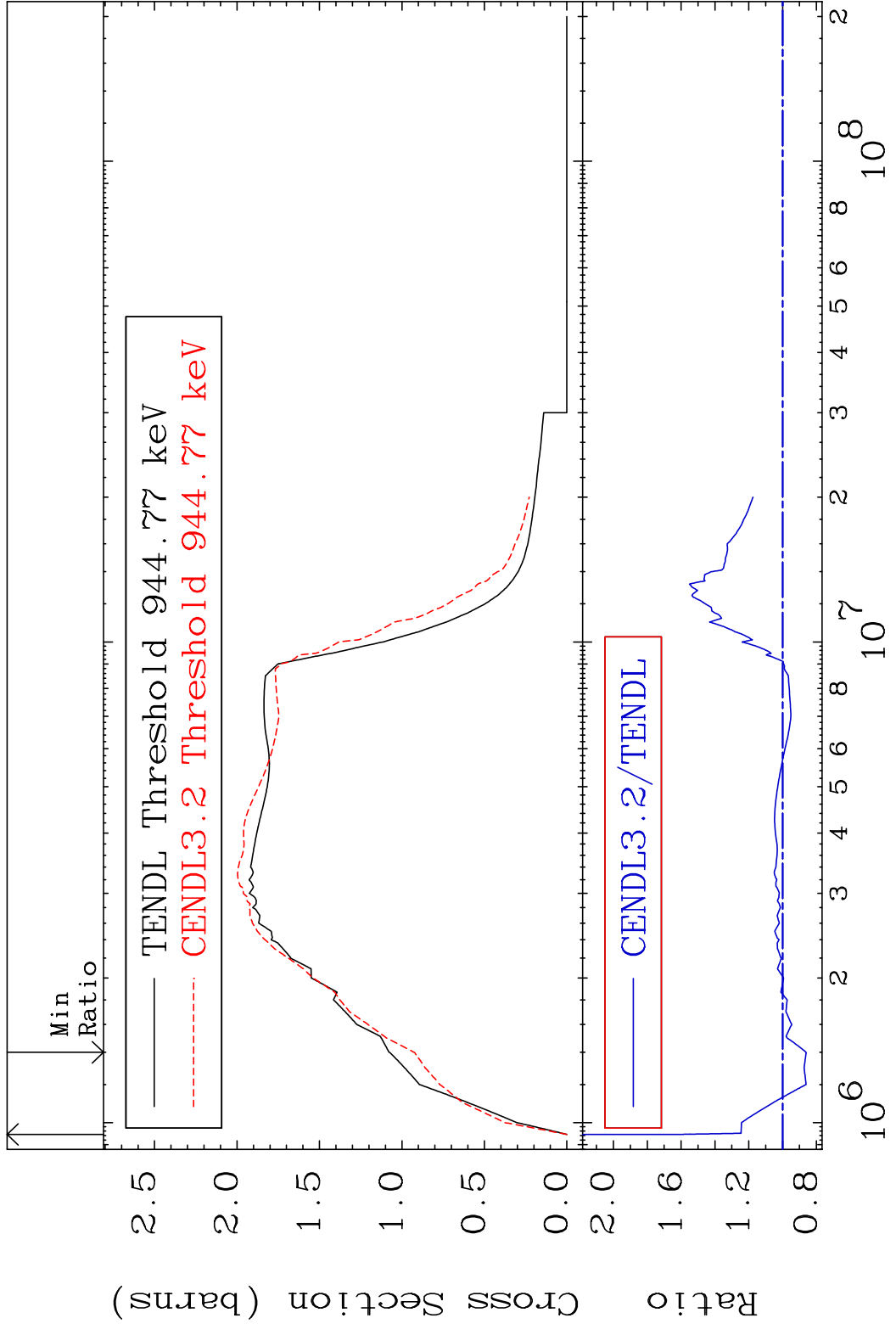


2

Incident Energy (eV)

40-Zr-92

MAT 4031 Inelastic 40-Zr-92
 Cross Section -14.05 To 62.31 %



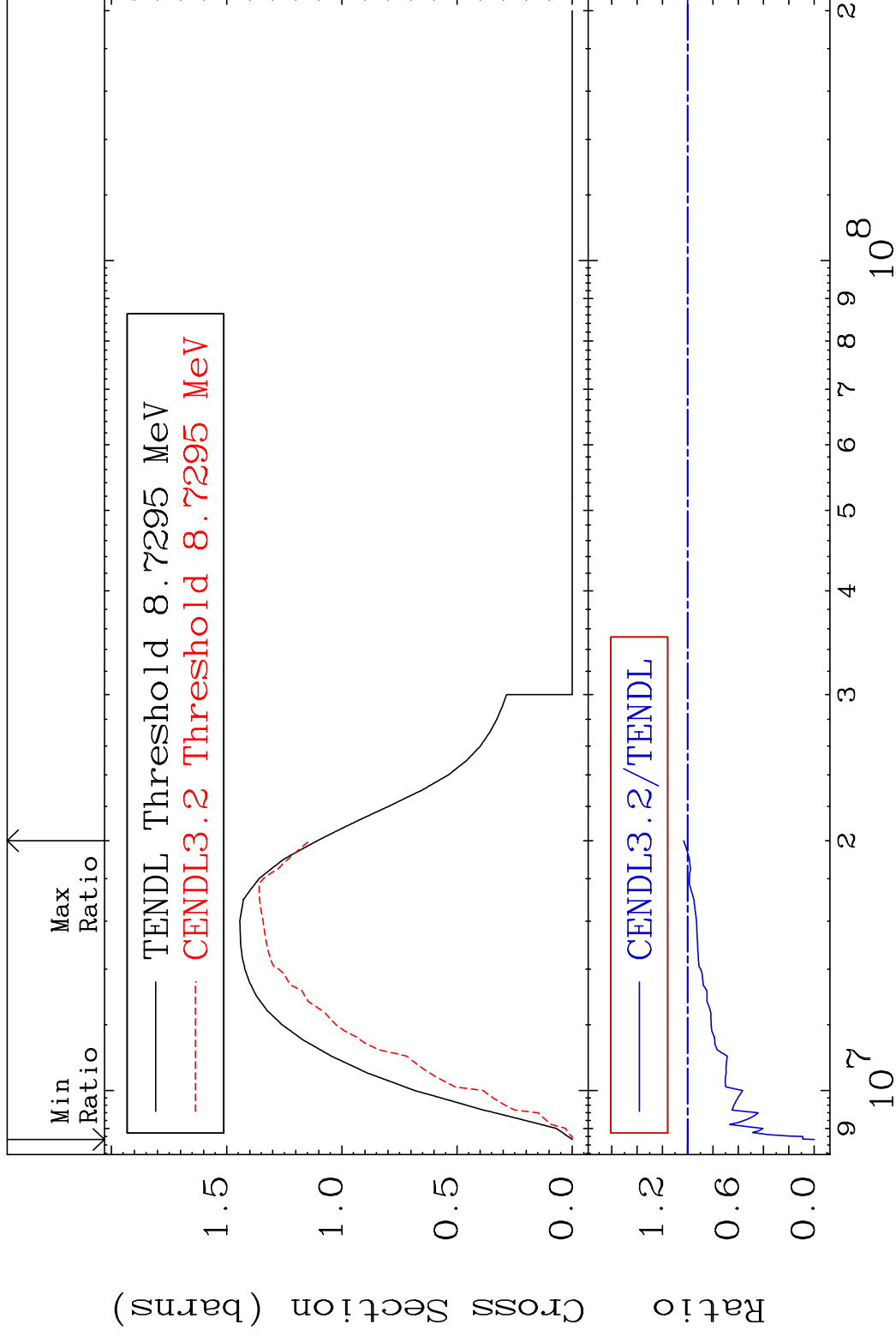
3 Incident Energy (eV) 40-Zr-92

MAT 4031

(n,2n)

40-Zr-92

Cross Section -100.0 To 3.170 %



4

Incident Energy (eV)

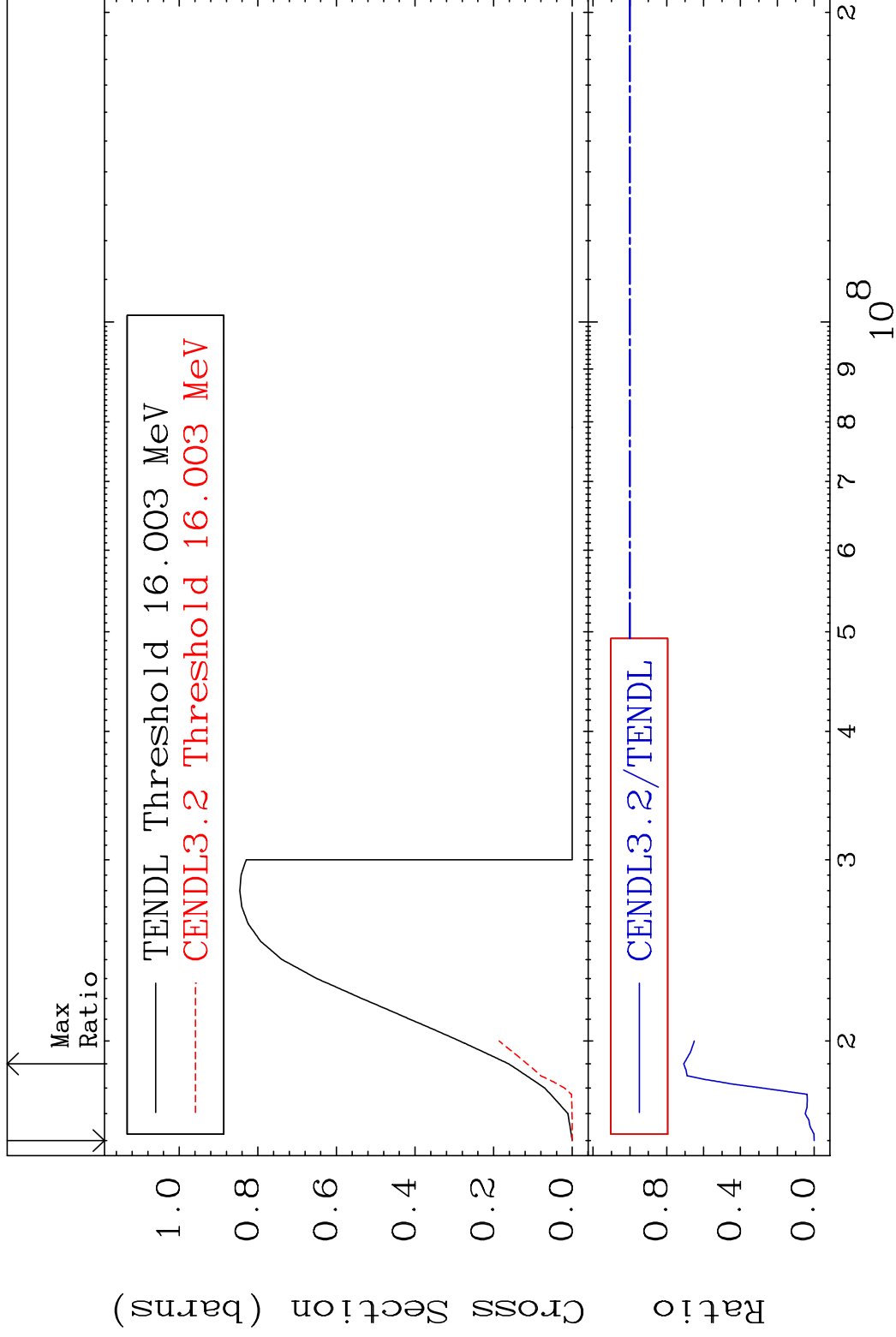
40-Zr-92

MAT 4031

(n,3n)

40-Zr-92

Cross Section -100.0 To -29.18%



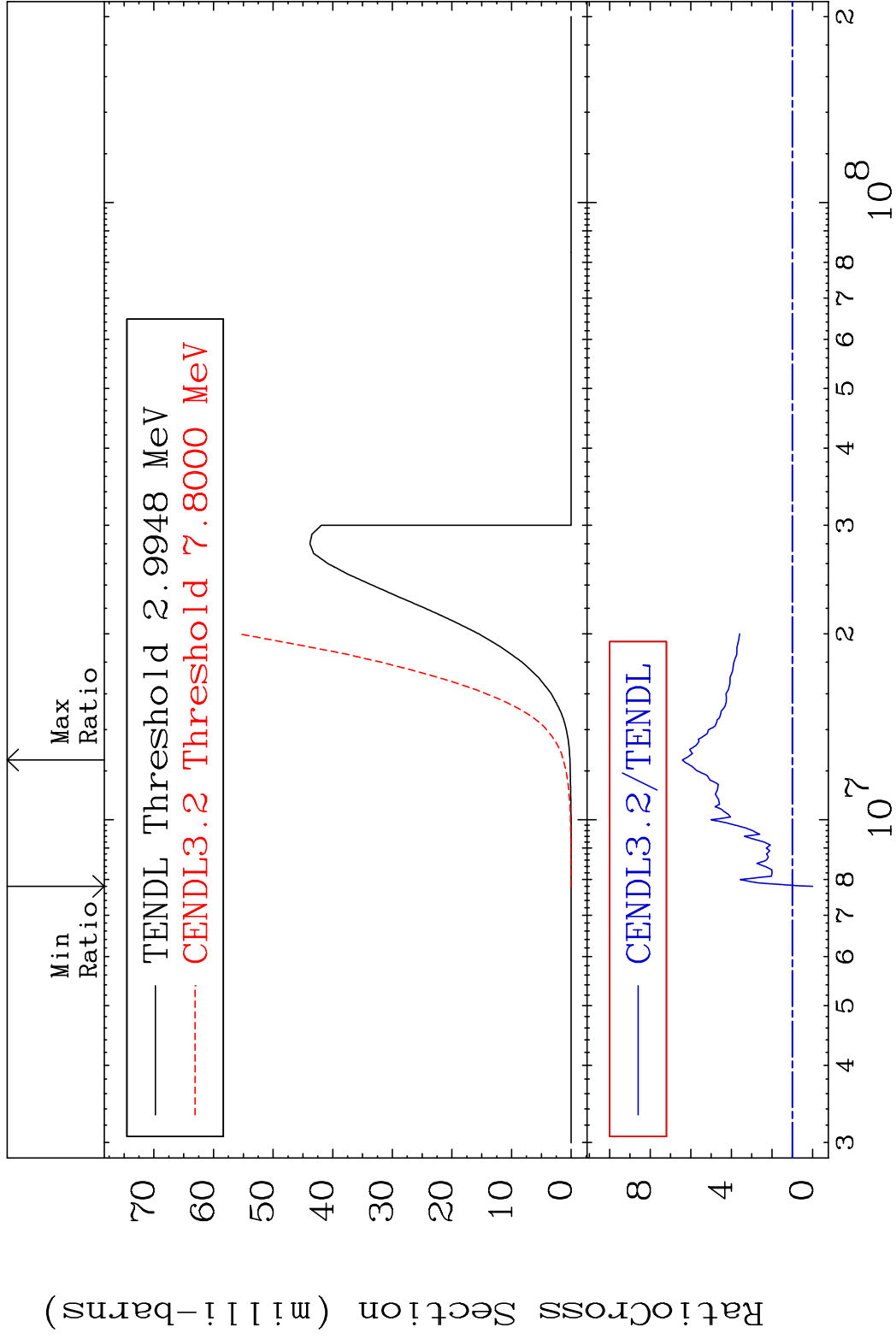
5

Incident Energy (eV)

40-Zr-92

MAT 4031

(n, n') α 40-Zr-92
Cross Section -100.0 To 541.4 %



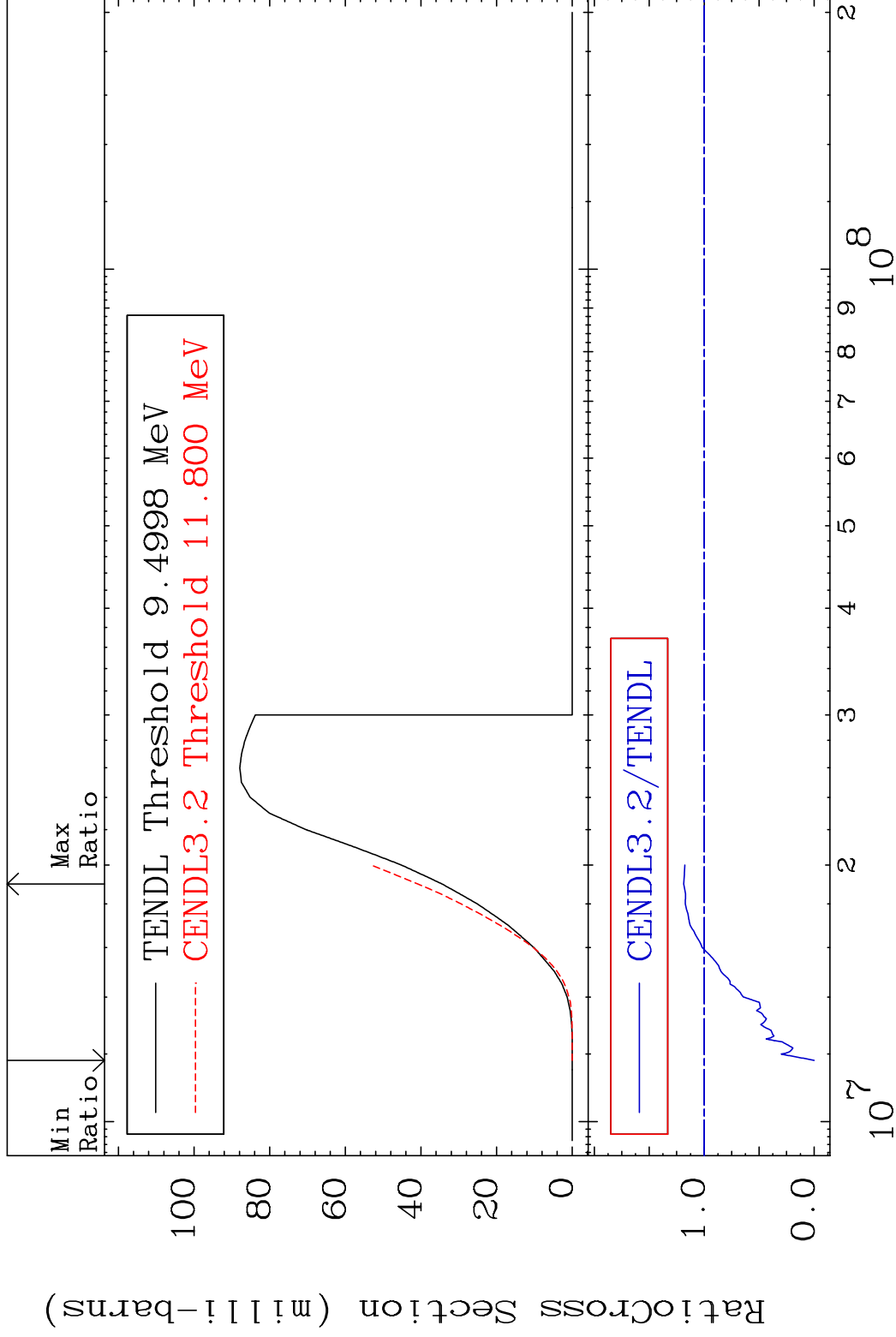
6

Incident Energy (eV)

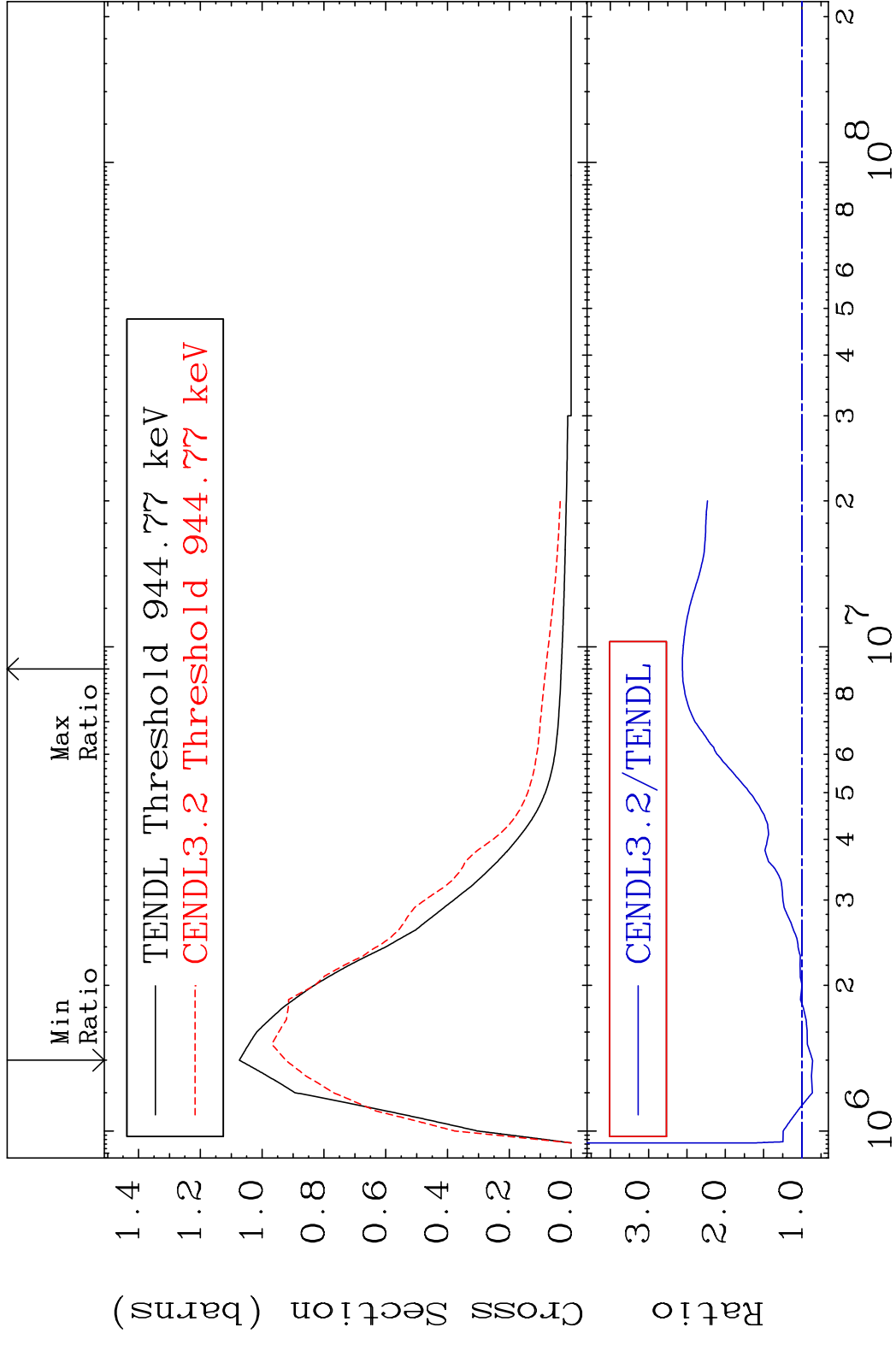
40-Zr-92

MAT 4031

(n, n') p
Cross Section -100.0 To 18.67 %
40-Zr-92

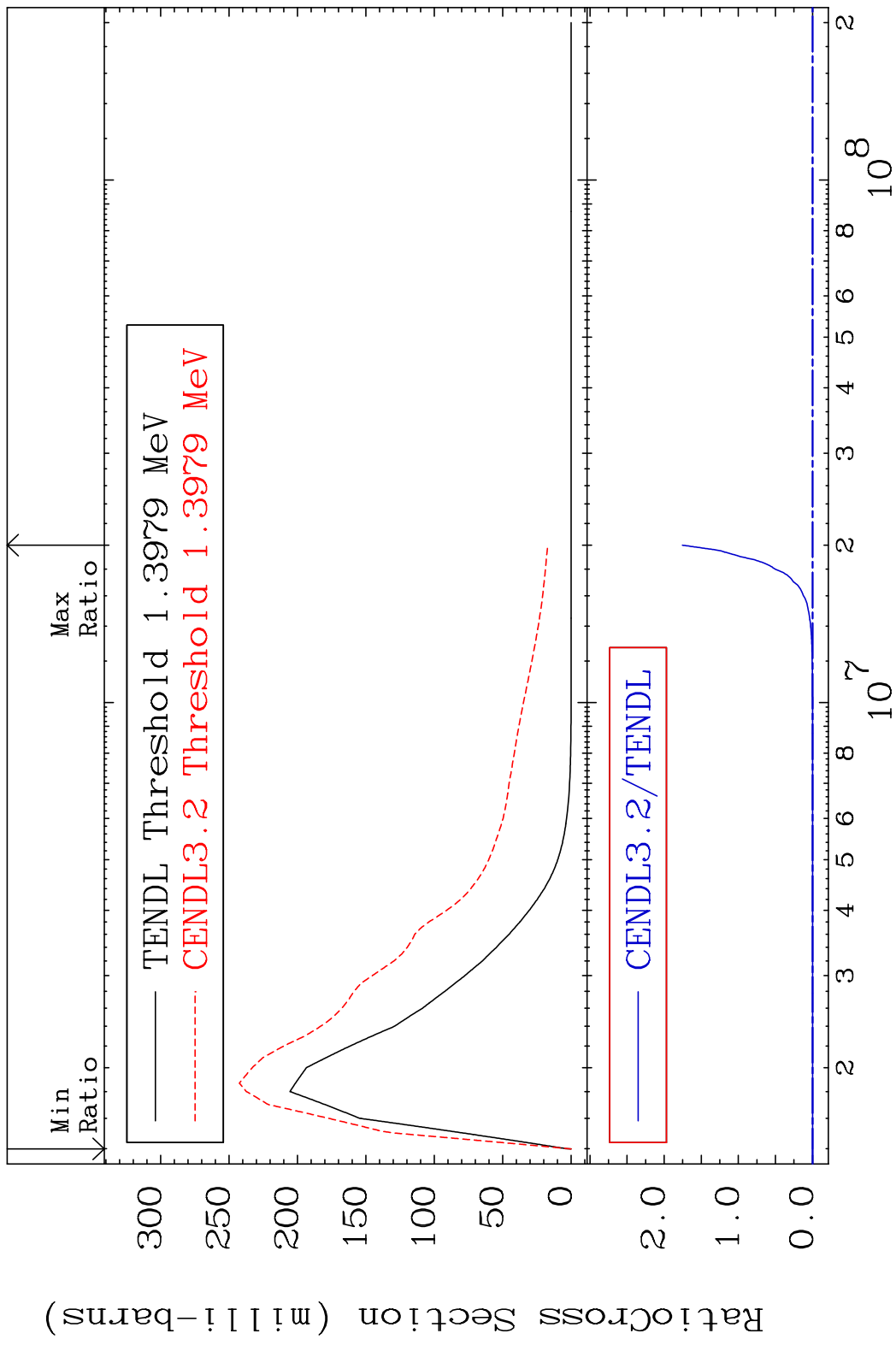


MAT 4031 MT= 51 (n, n') Level 40-Zr-92
 Cross Section -13.97 To 155.9 %

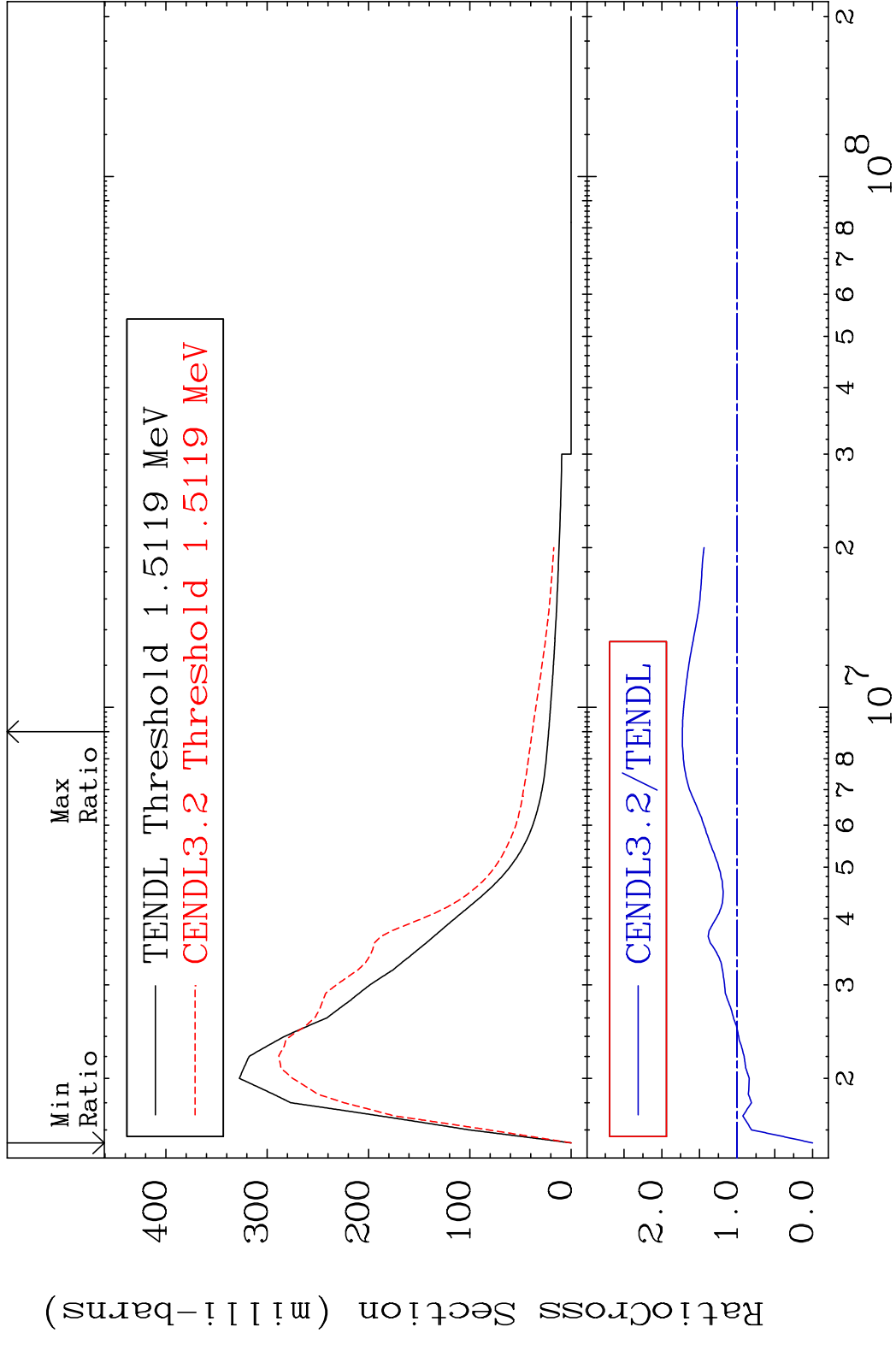


8 Incident Energy (eV) 40-Zr-92

MAT 4031 MT= 52 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 9999. %

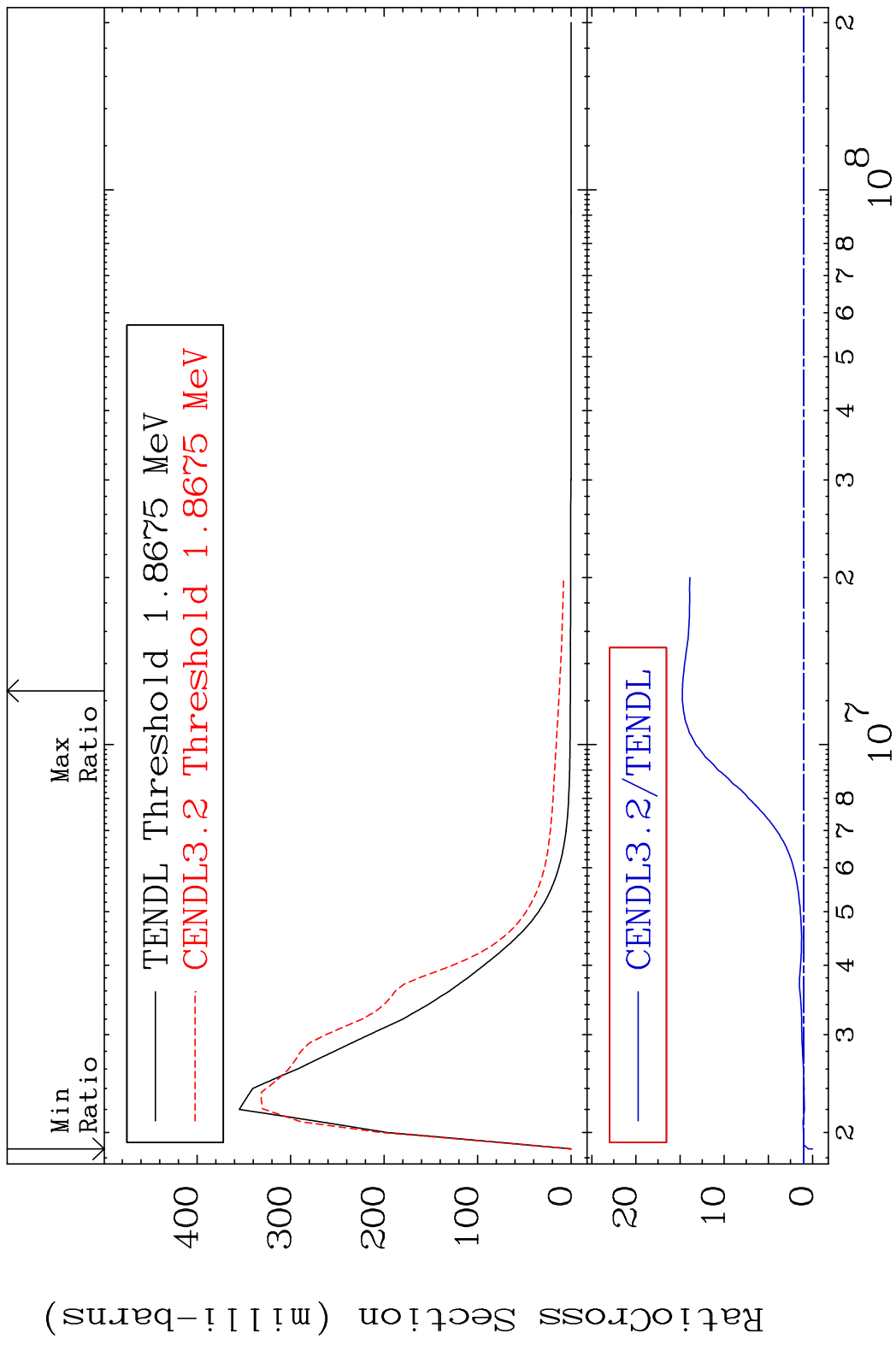


MAT 4031 MT= 53 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 72.71 %



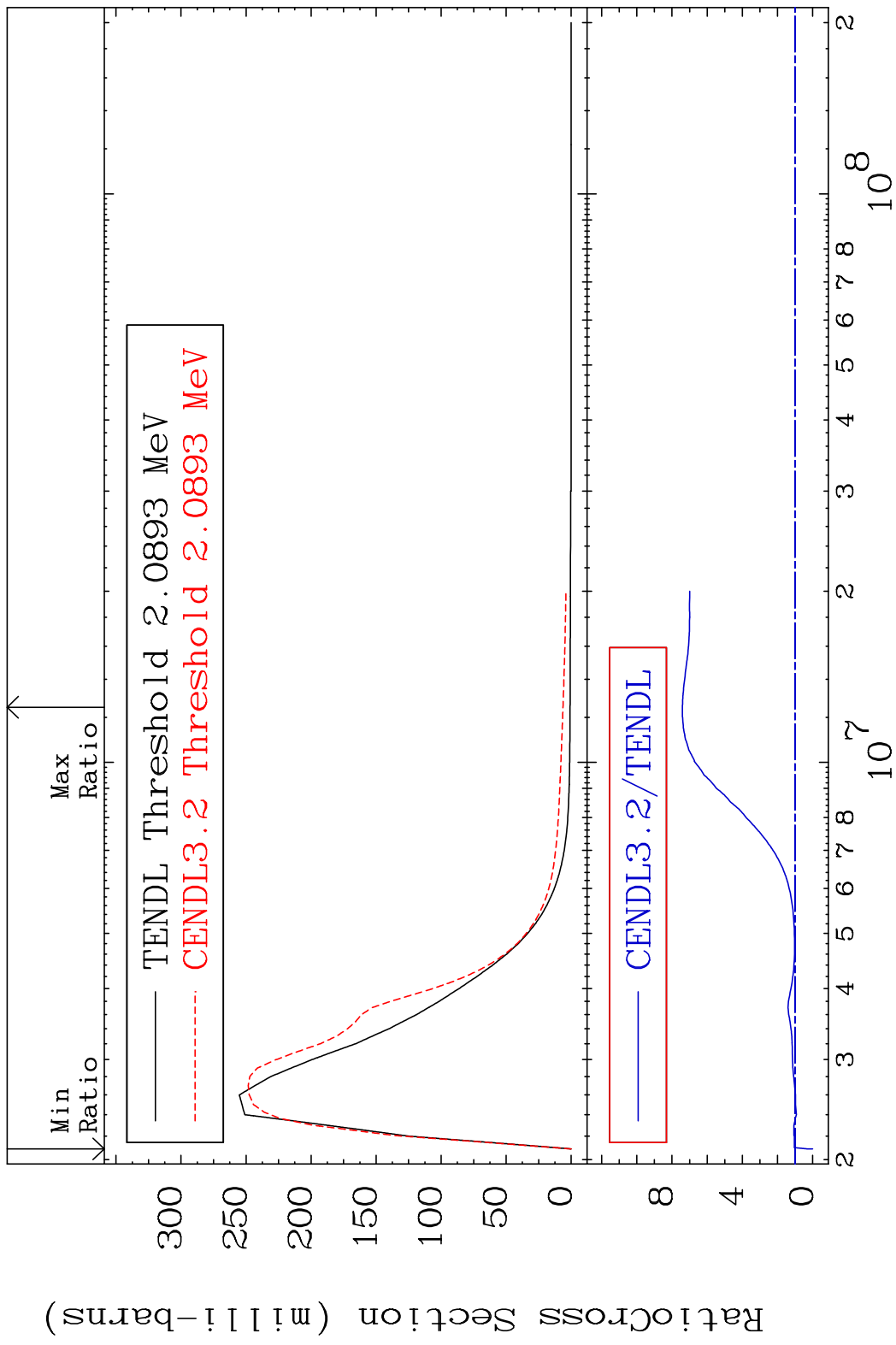
10 Incident Energy (eV) 40-Zr-92

MAT 4031 MT= 54 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 1374. %



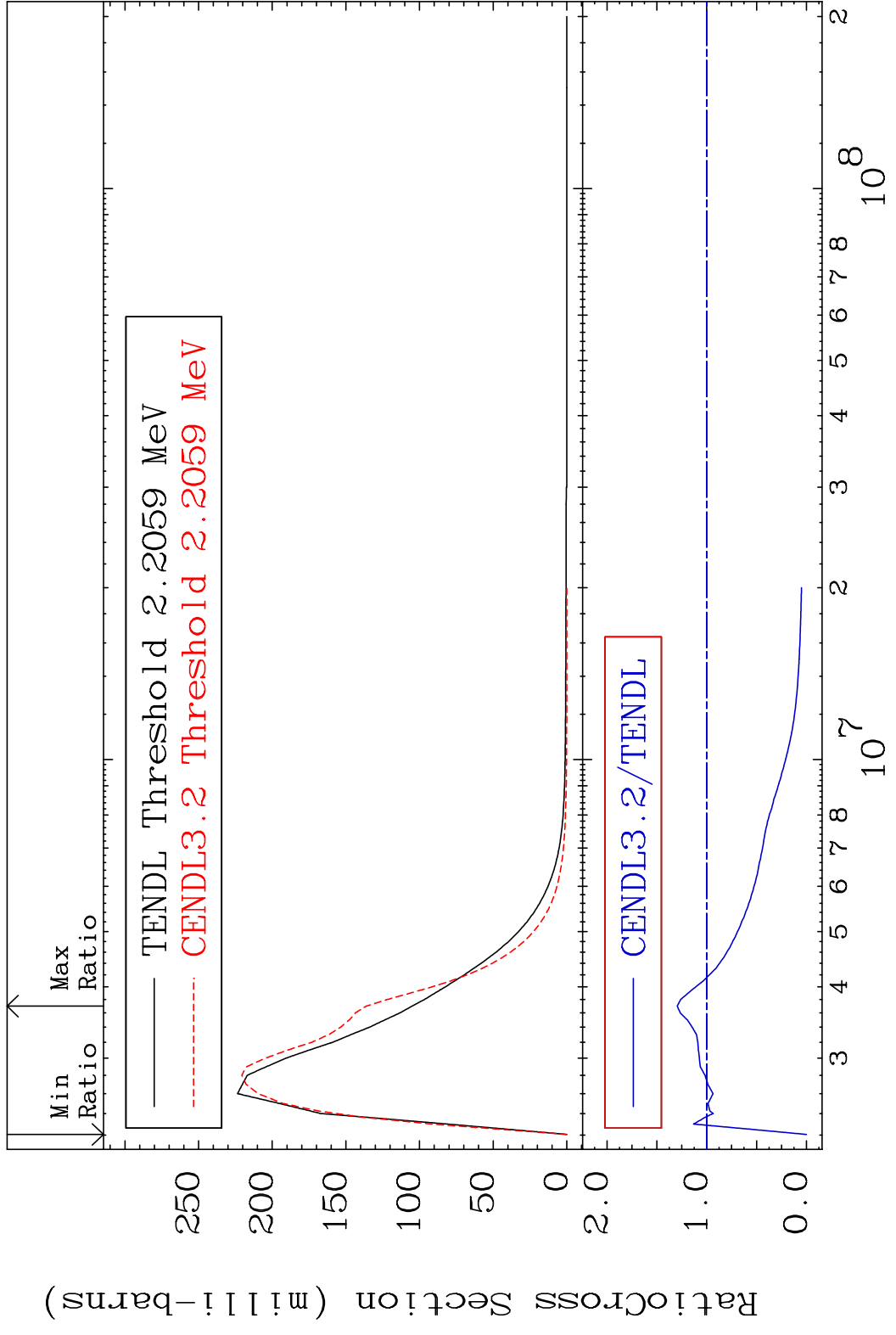
11 Incident Energy (eV) 40-Zr-92

MAT 4031 MT= 55 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 641.1 %

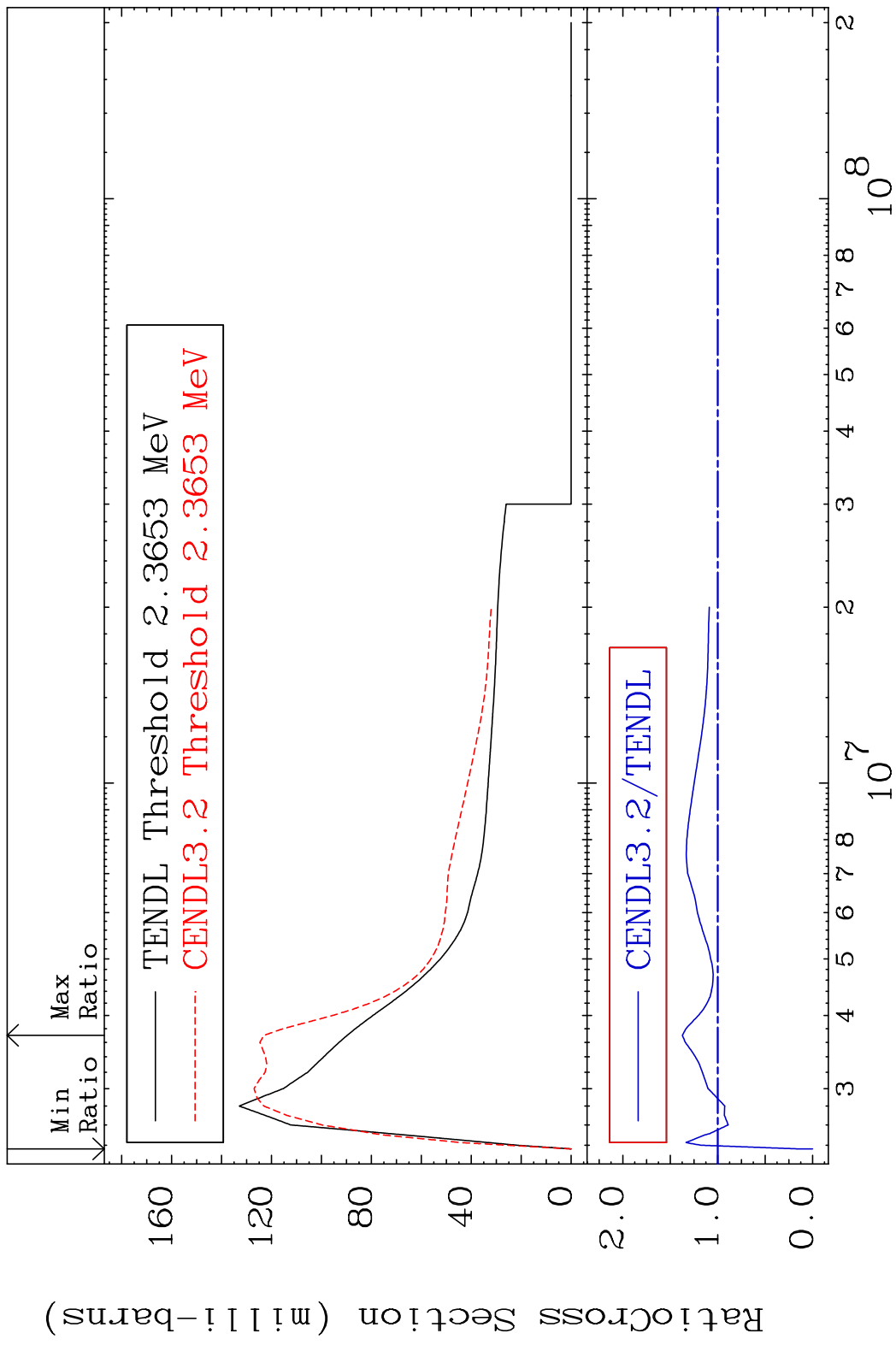


12 Incident Energy (eV) 40-Zr-92

MAT 4031 MT= 56 (n,n') Level 40-Zr-92
 Cross Section -100.0 To 29.62 %

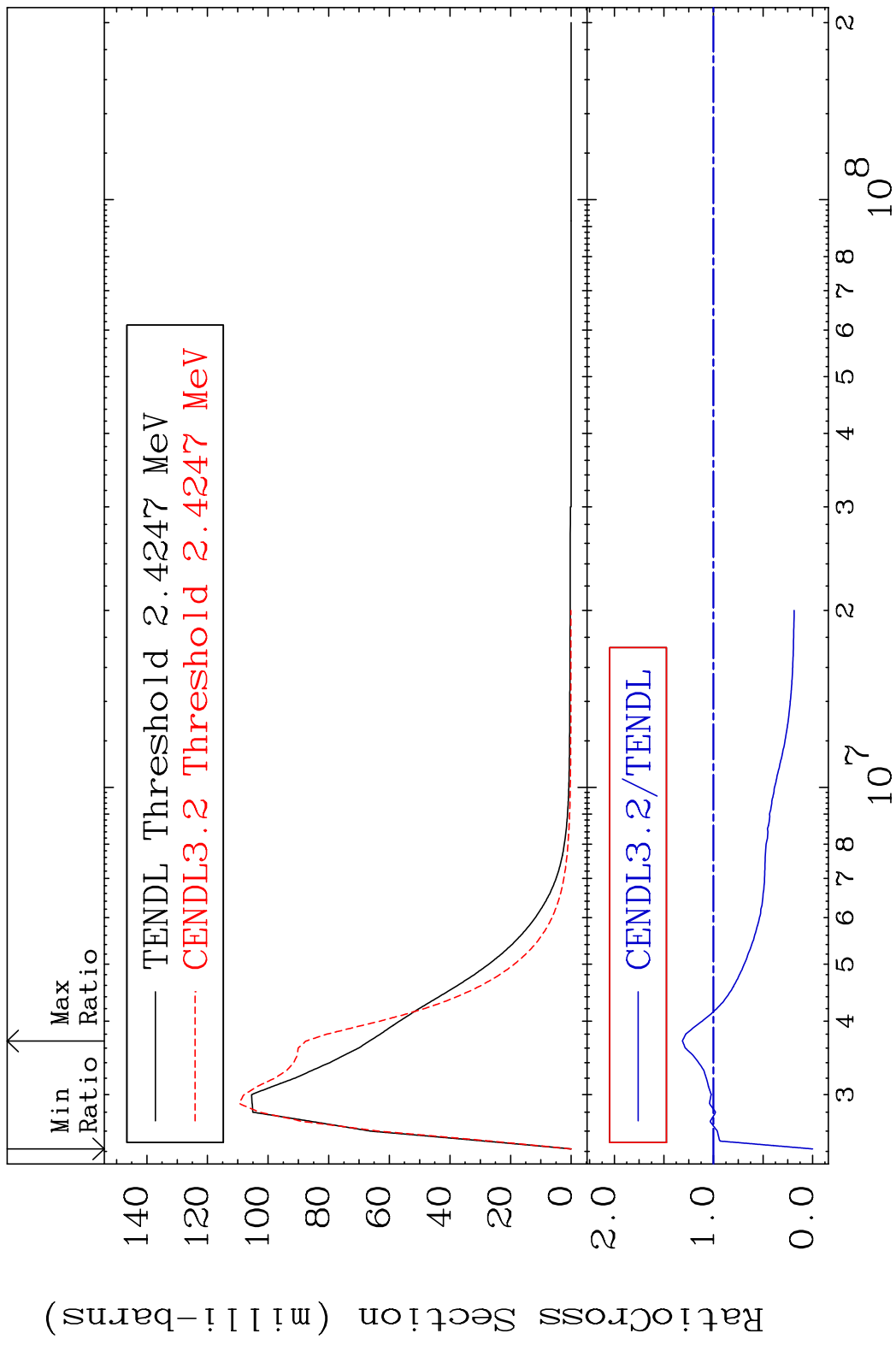


MAT 4031 MT= 57 (n,n') Level 40-Zr-92
 Cross Section -100.0 To 37.24 %



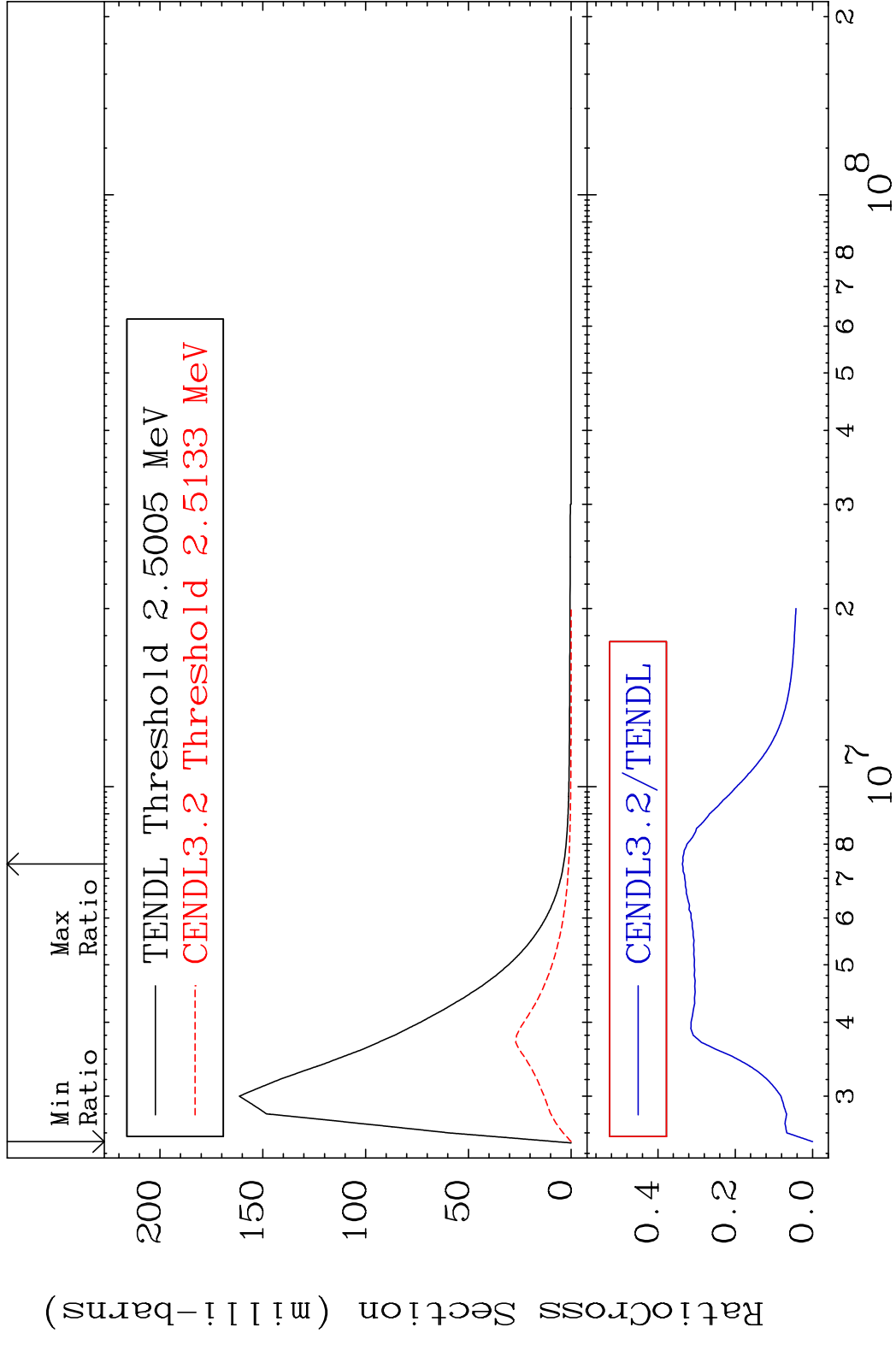
14 40-Zr-92

MAT 4031 MT= 58 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 31.41 %

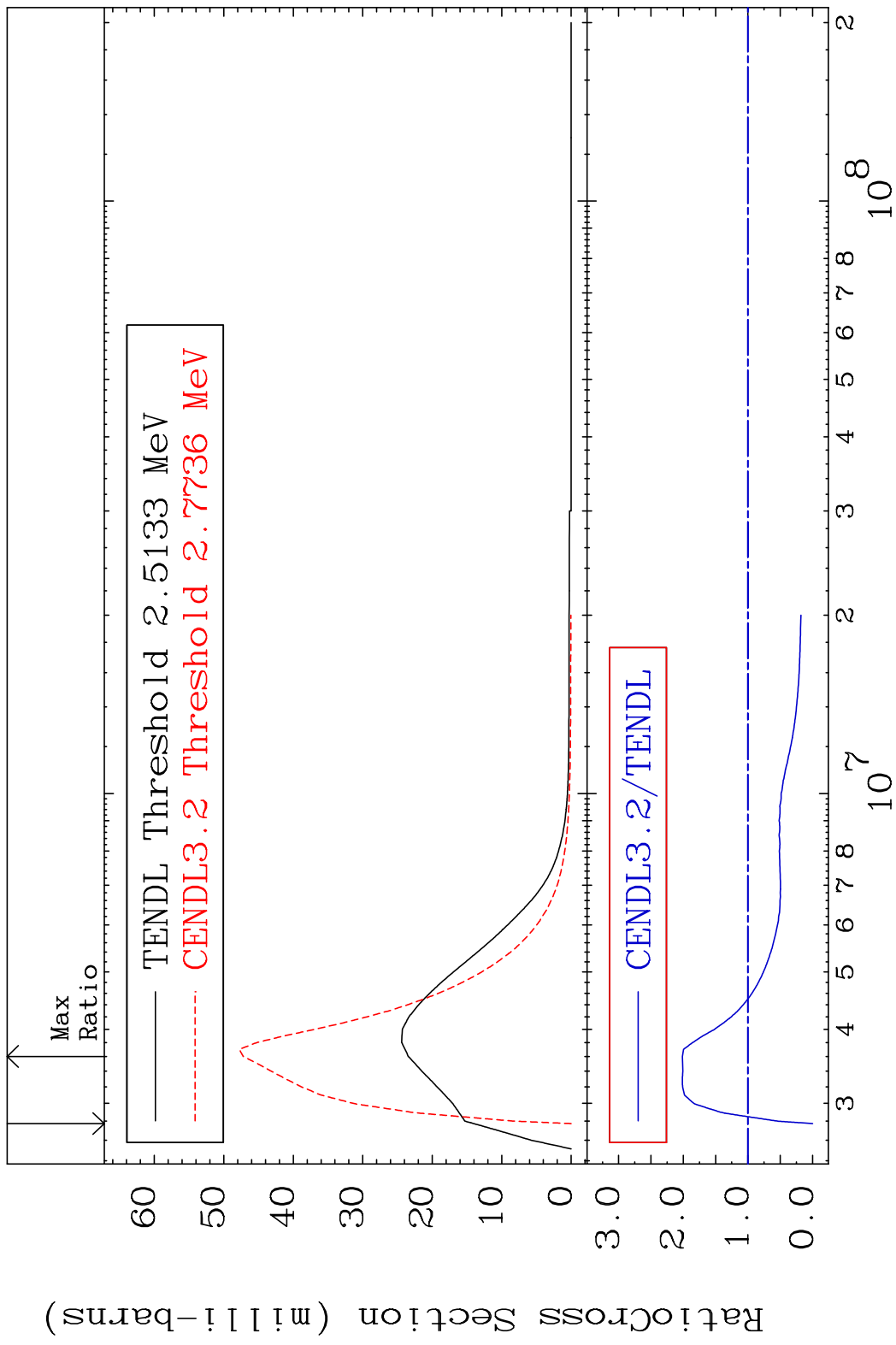


15 40-Zr-92

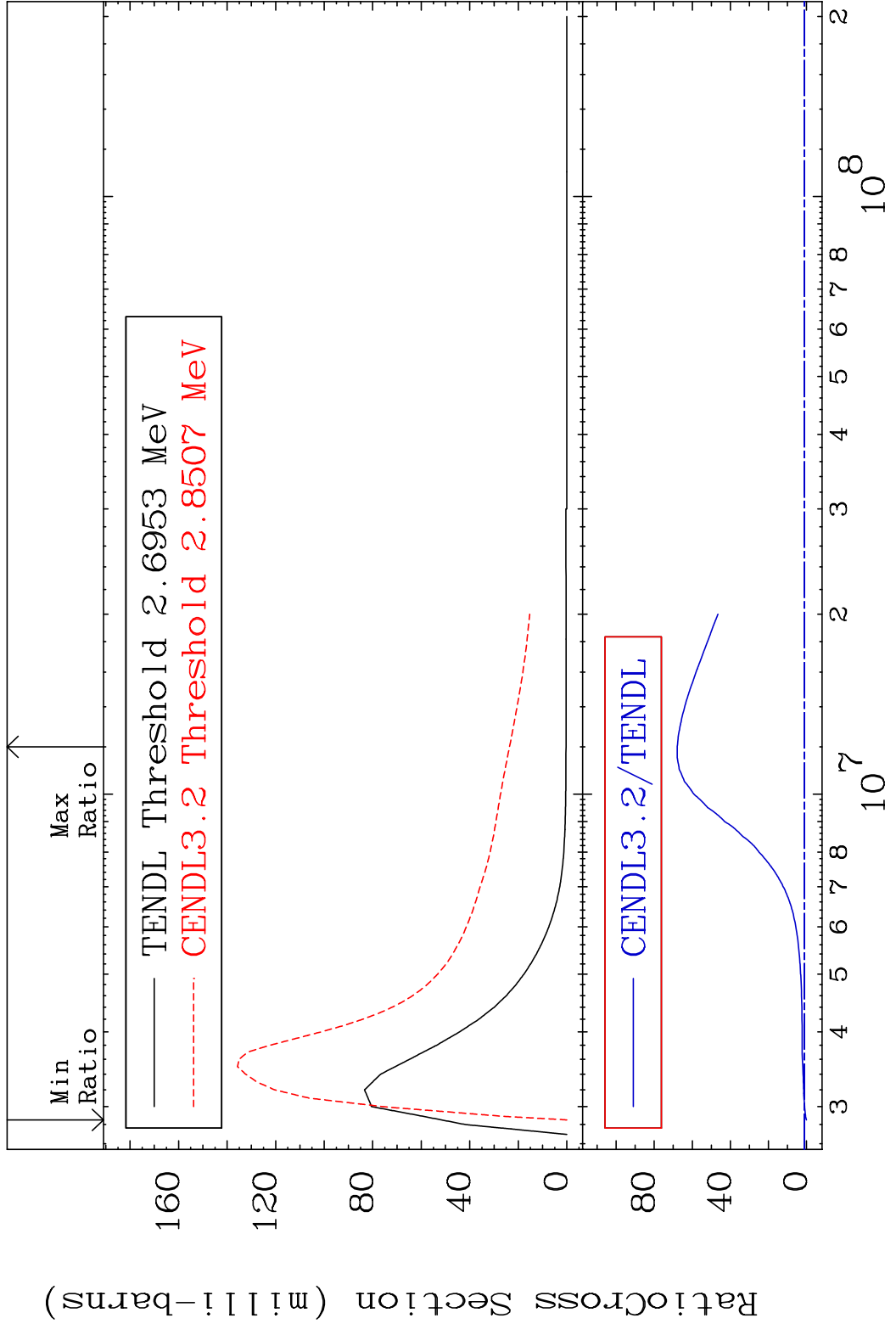
MAT 4031 MT= 59 (n, n') Level 40-Zr-92
 Cross Section -100.0 To -66.33%



MAT 4031 MT= 60 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 101.4 %

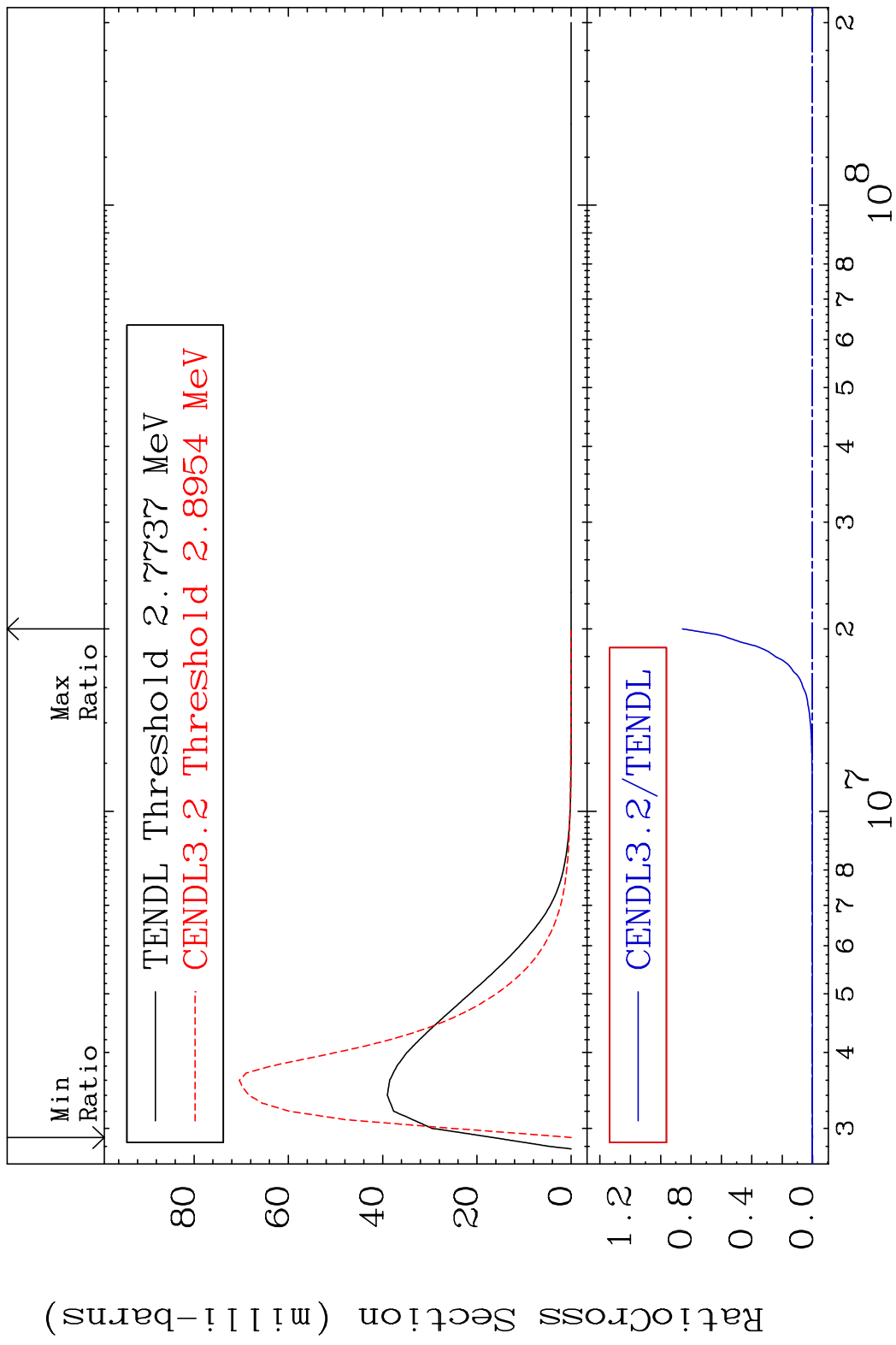


MAT 4031 MT= 61 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 6694. %

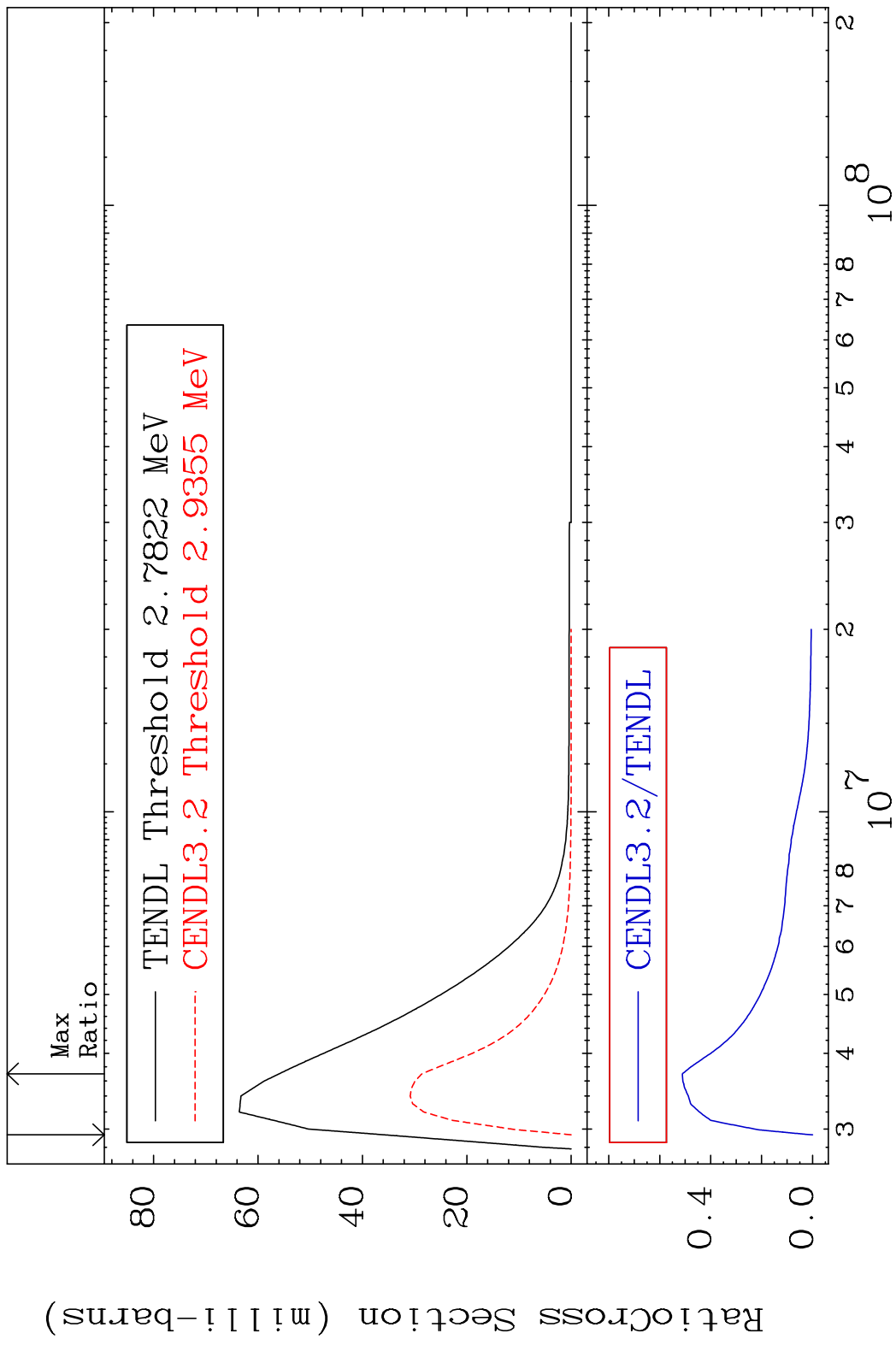


18 40-Zr-92

MAT 4031 MT= 62 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 9999. %

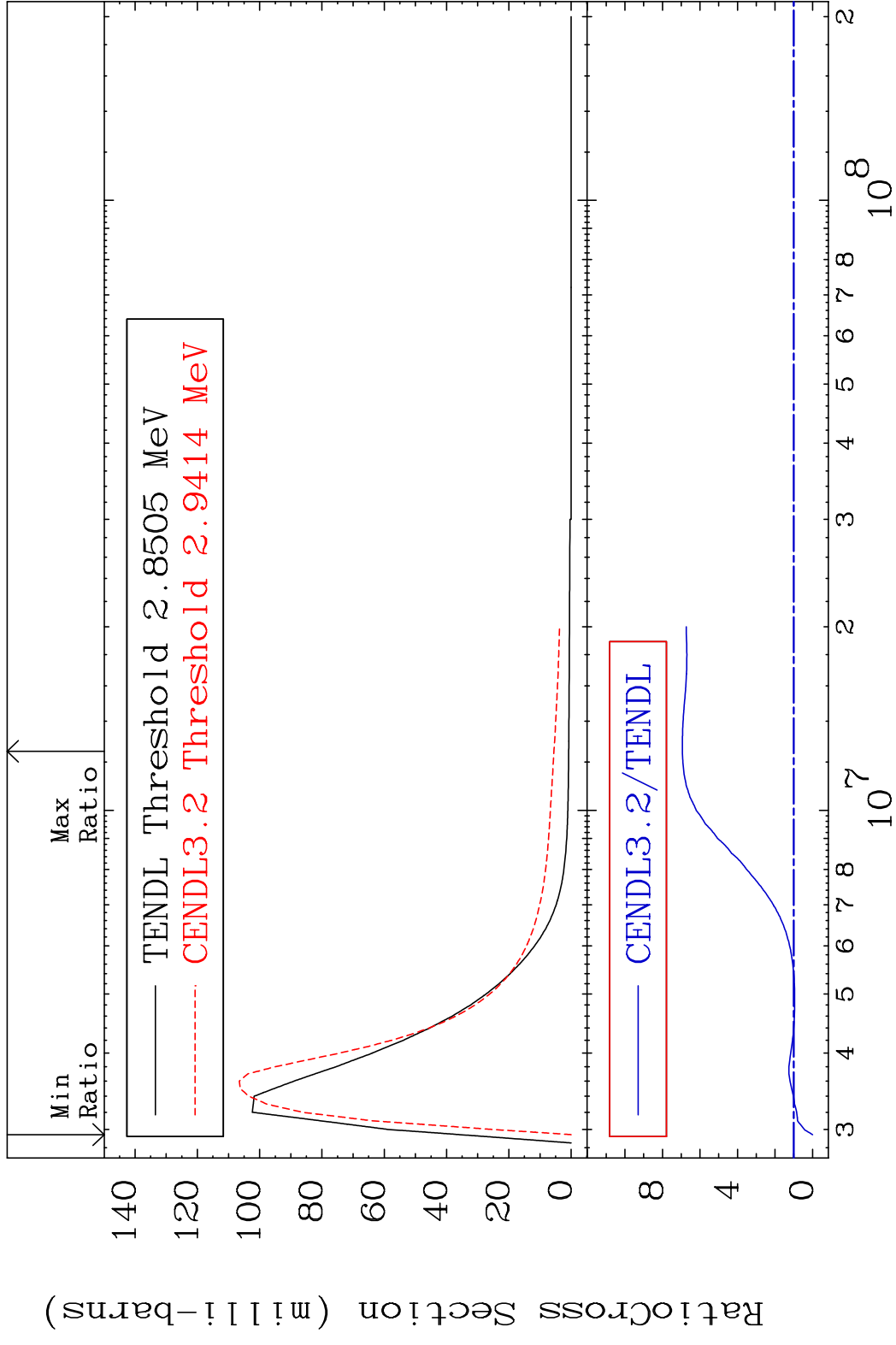


MAT 4031 MT= 63 (n, n') Level 40-Zr-92
 Cross Section -100.0 To -48.89%

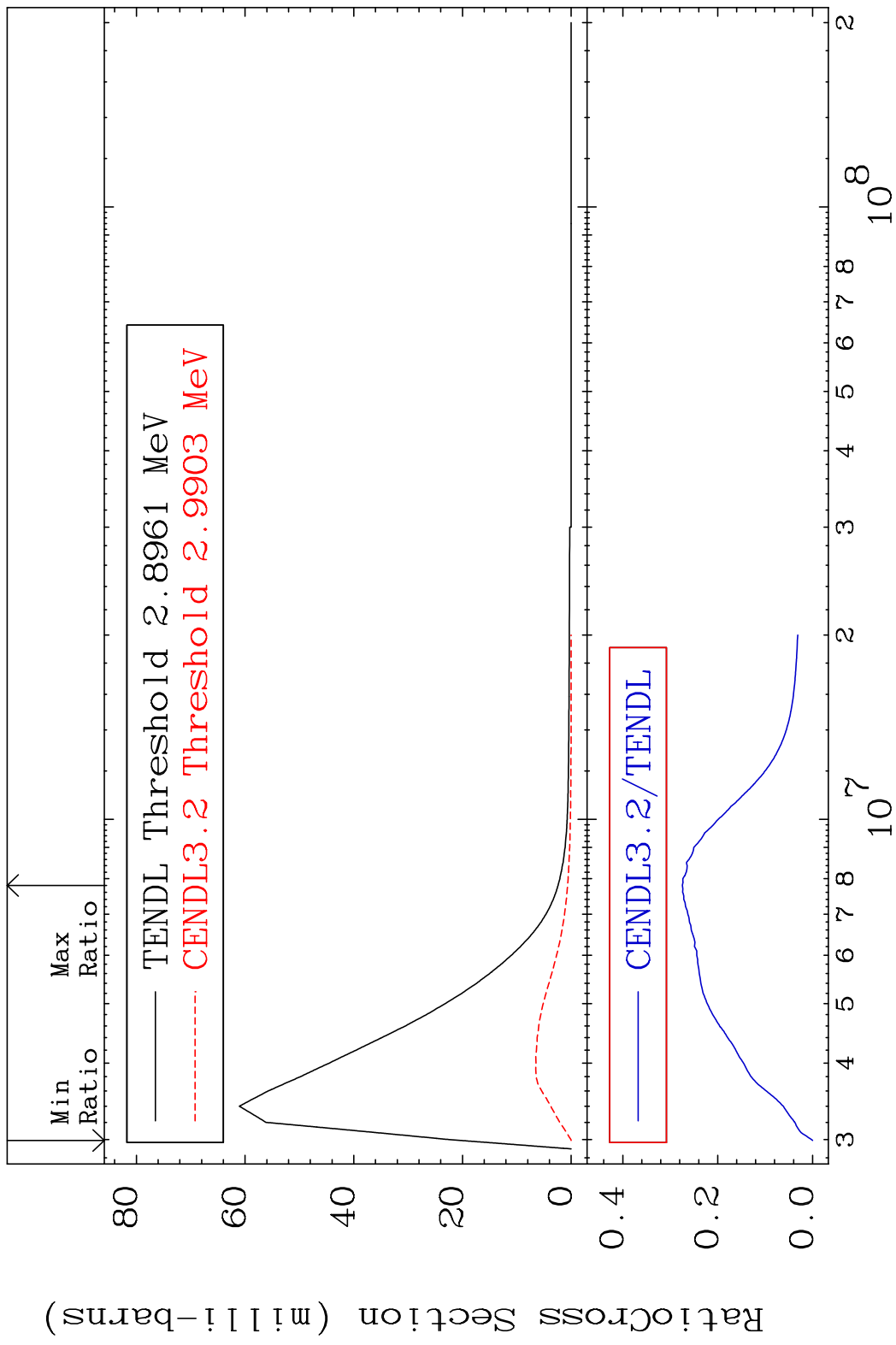


20 40-Zr-92

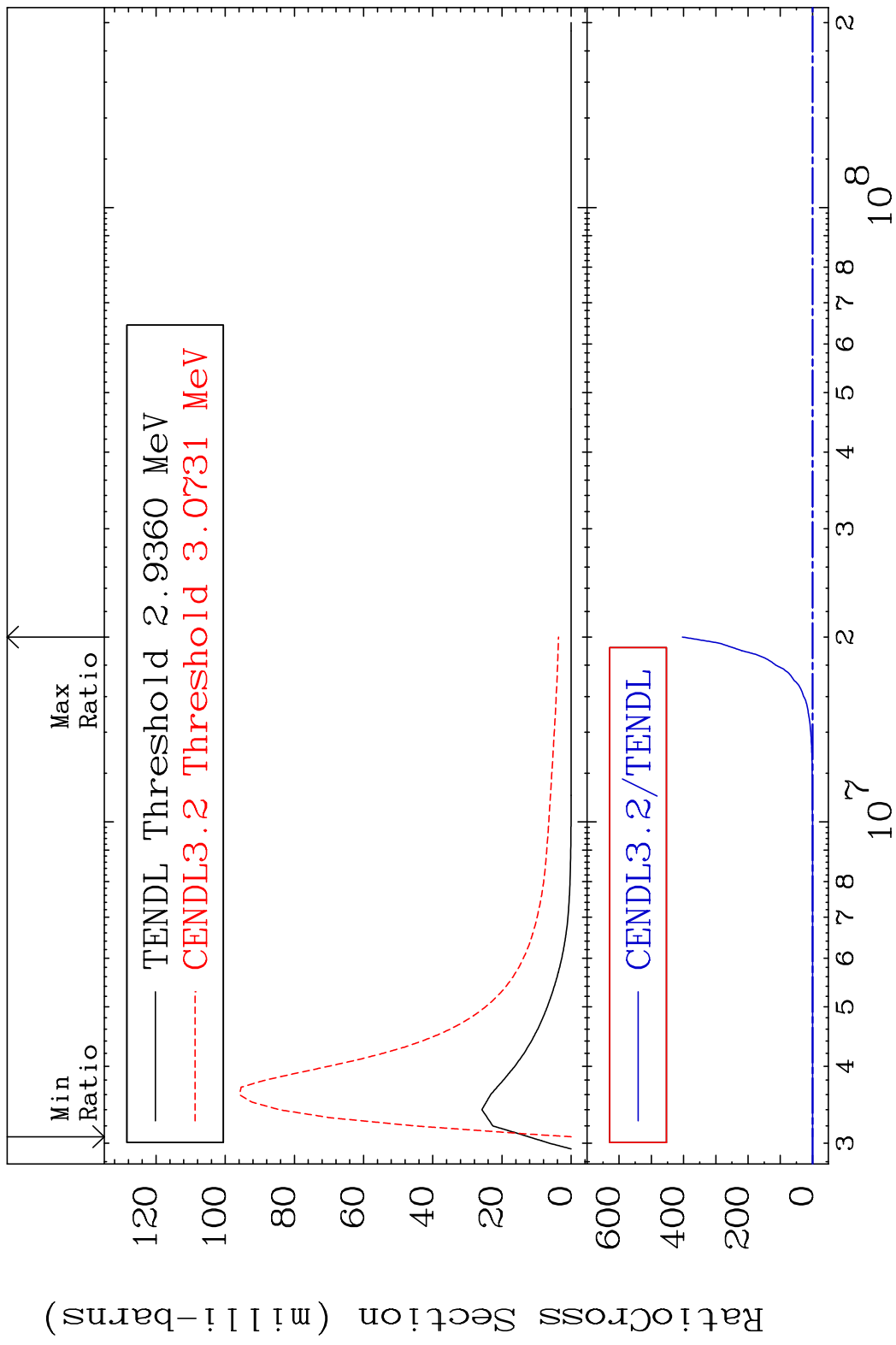
MAT 4031 MT= 64 (n,n') Level 40-Zr-92
 Cross Section -100.0 To 593.9 %



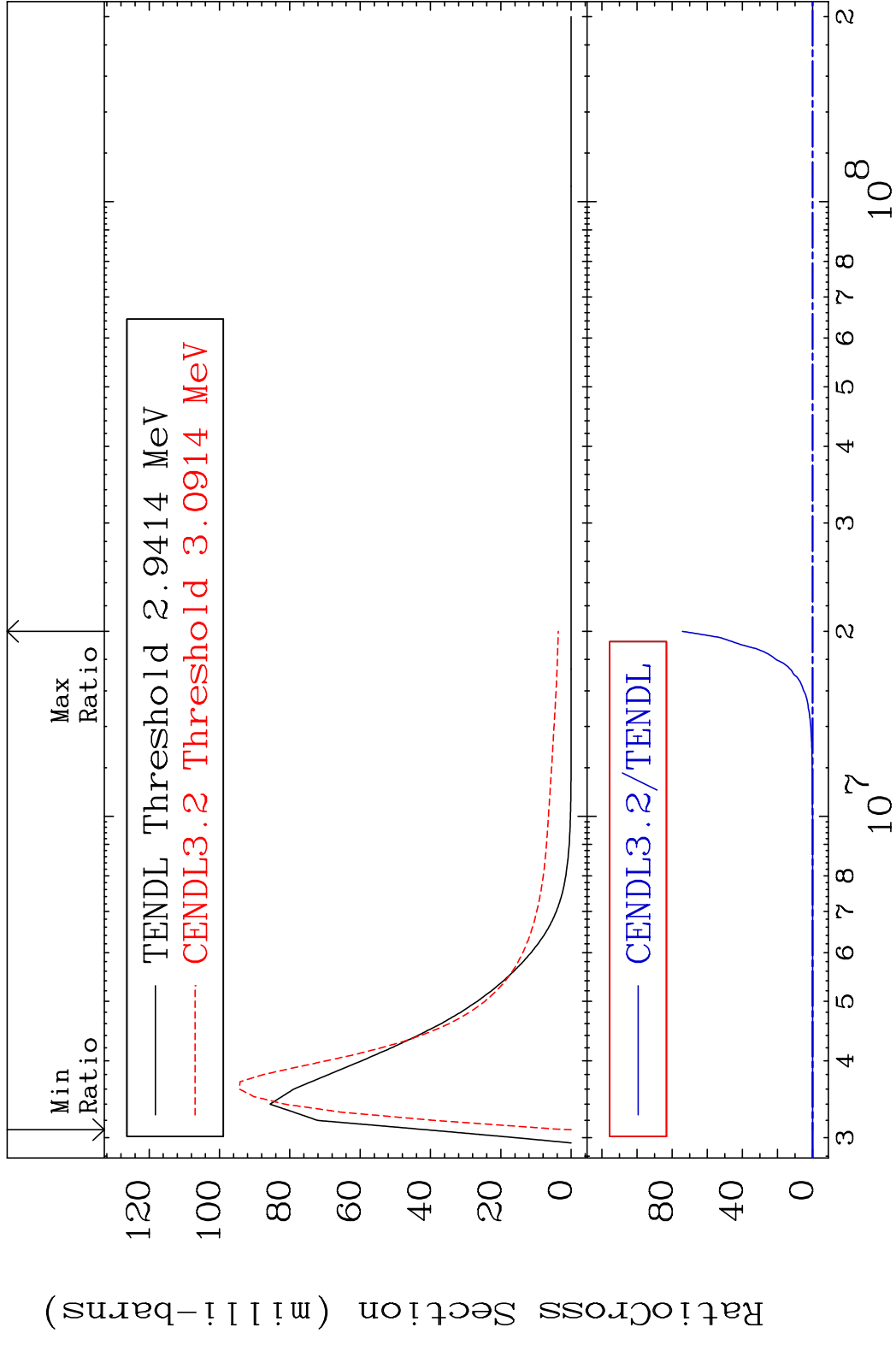
MAT 4031 MT= 65 (n,n') Level 40-Zr-92
 Cross Section -100.0 To -72.56%



MAT 4031 MT= 66 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 9999. %



MAT 4031 MT= 67 (n, n') Level 40-Zr-92
 Cross Section -100.0 To 9999. %

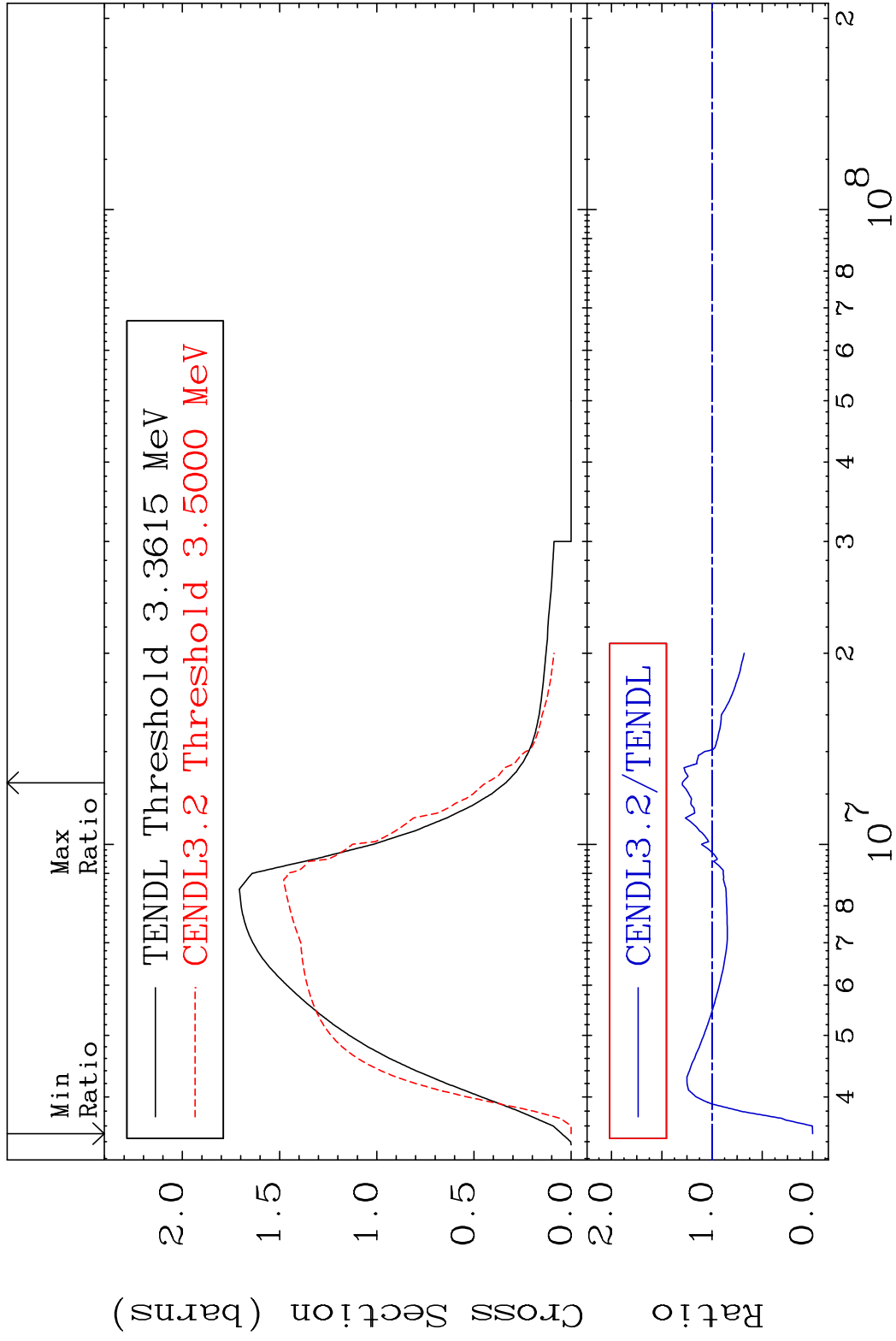


MAT 4031

(n,n') Continuum

40-Zr-92

Cross Section -100.0 To 29.54 %



25

Incident Energy (eV)

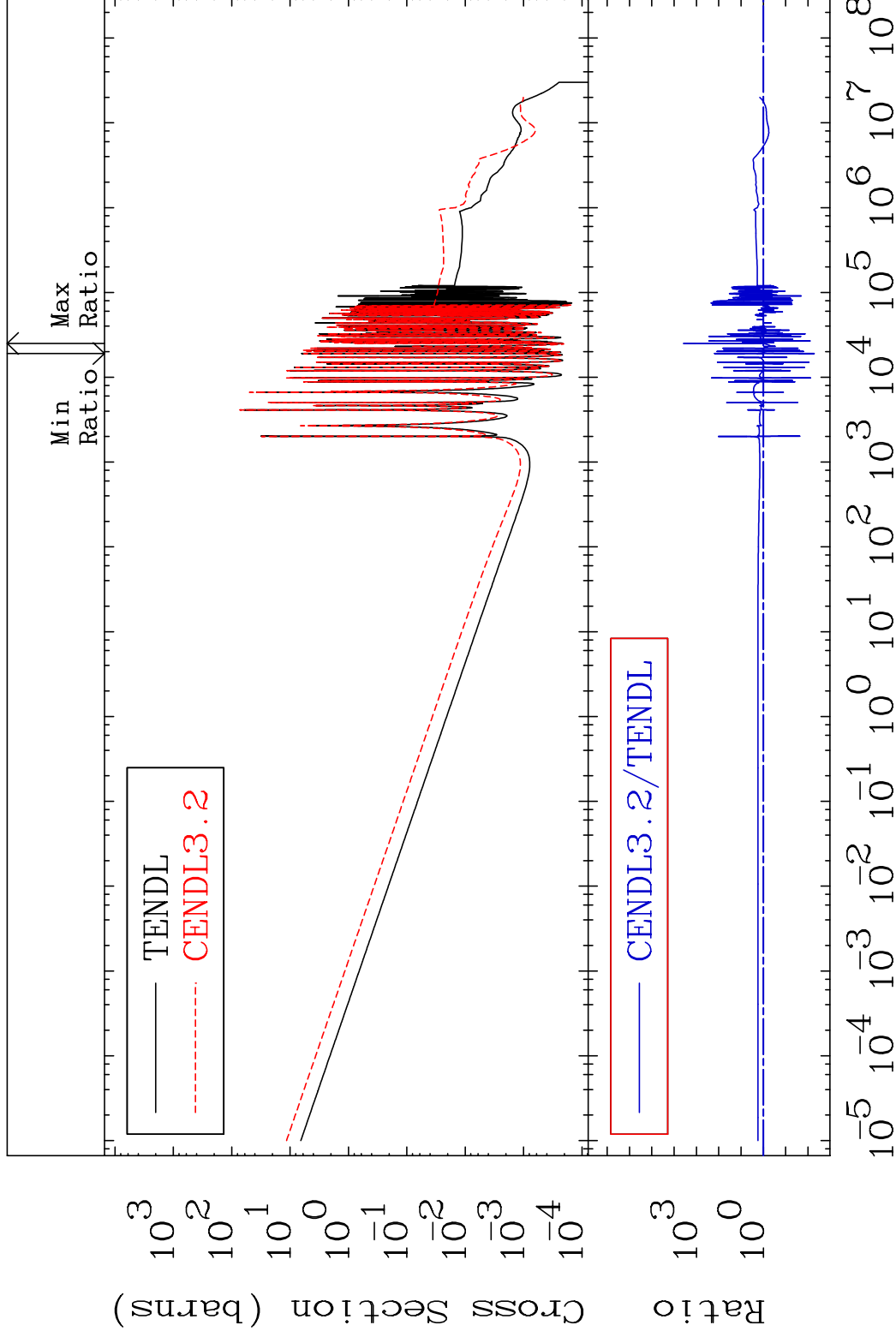
40-Zr-92

MAT 4031

(n, γ)

40-Zr-92

Cross Section -99.47 To 9999. %



26

Incident Energy (eV)

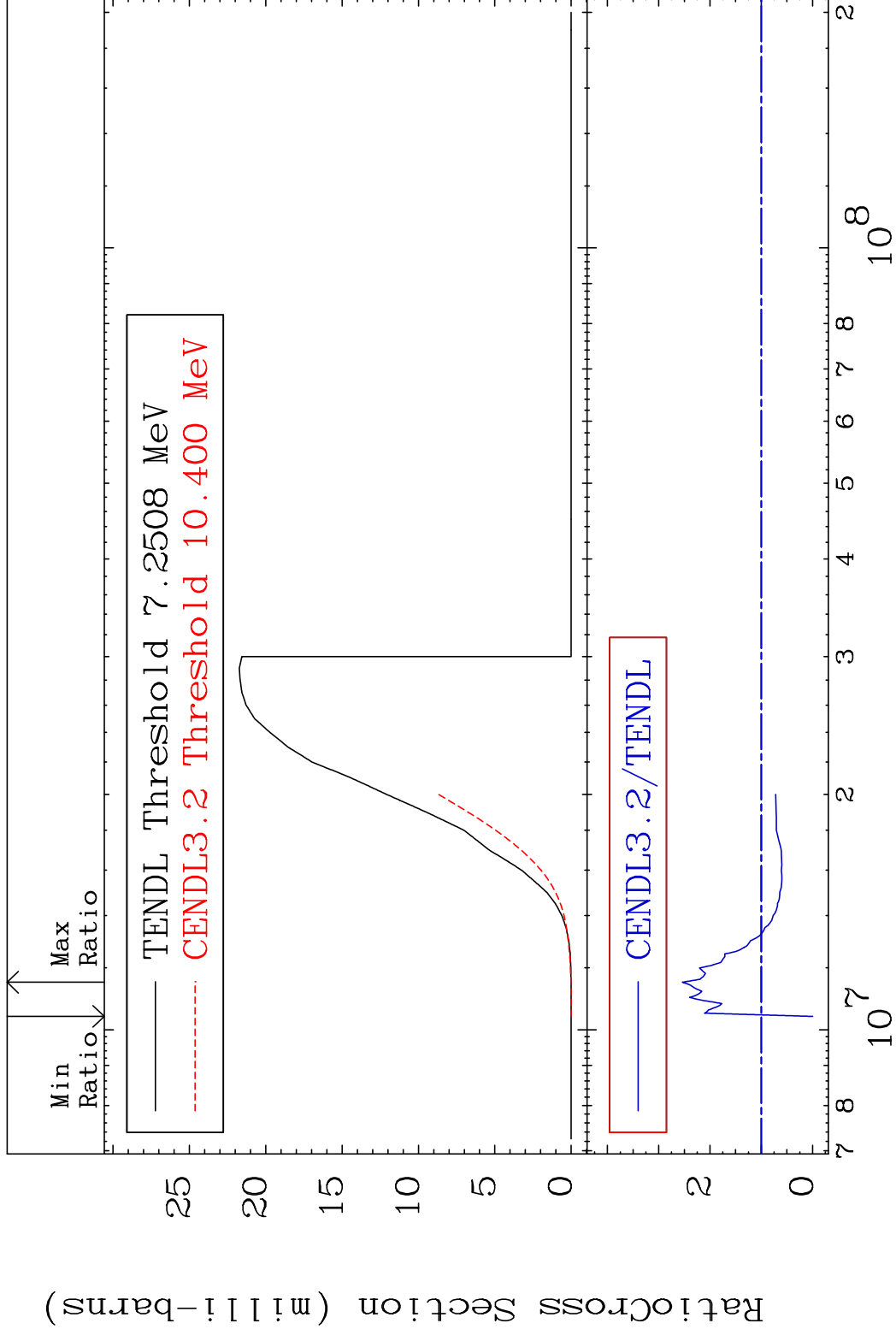
40-Zr-92

MAT 4031

(n, d)

40-Zr-92

Cross Section -100.0 To 153.9 %



28

Incident Energy (eV)

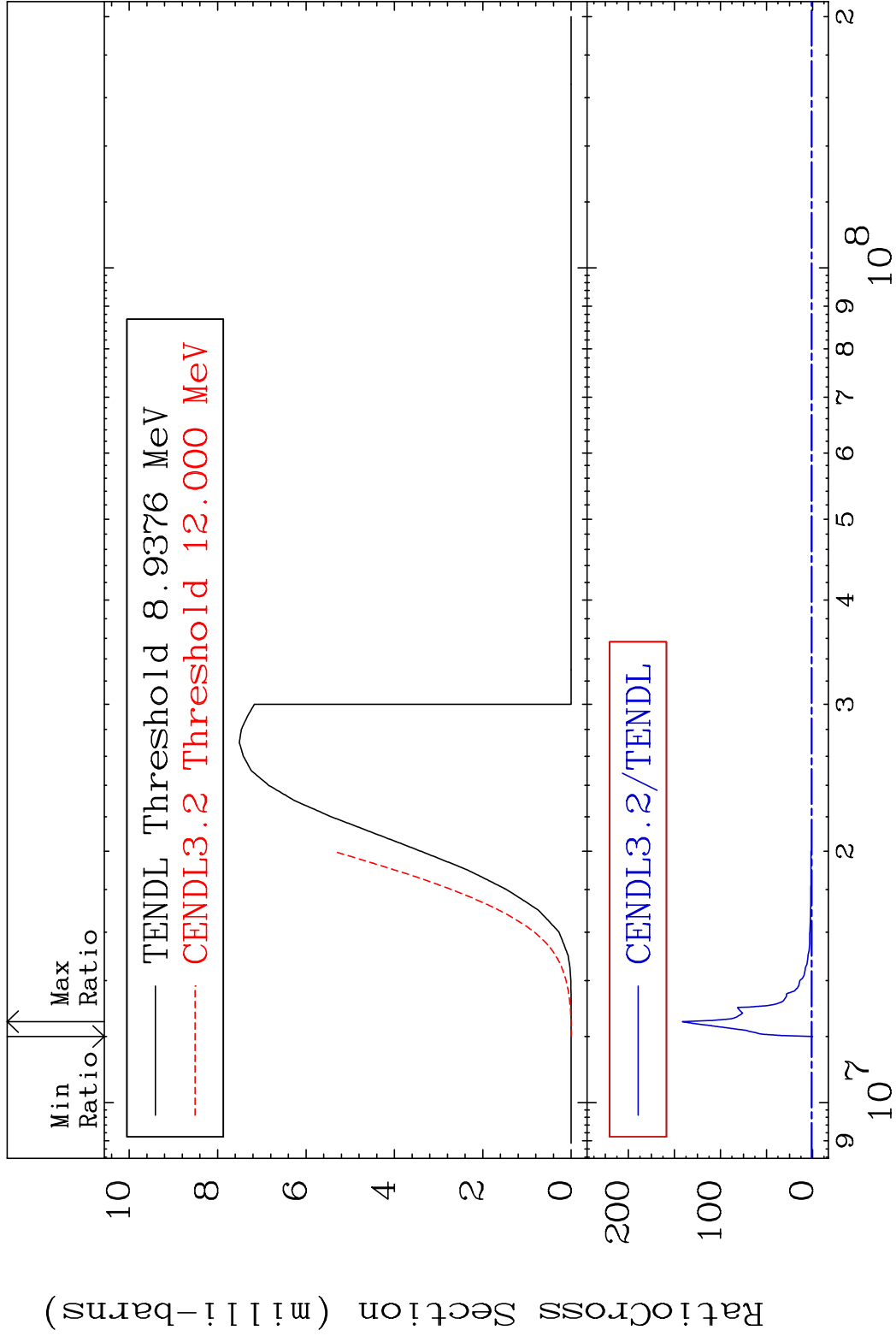
40-Zr-92

MAT 4031

(n, t)

40-Zr-92

Cross Section -100.0 To 9999. %



29

Incident Energy (eV)

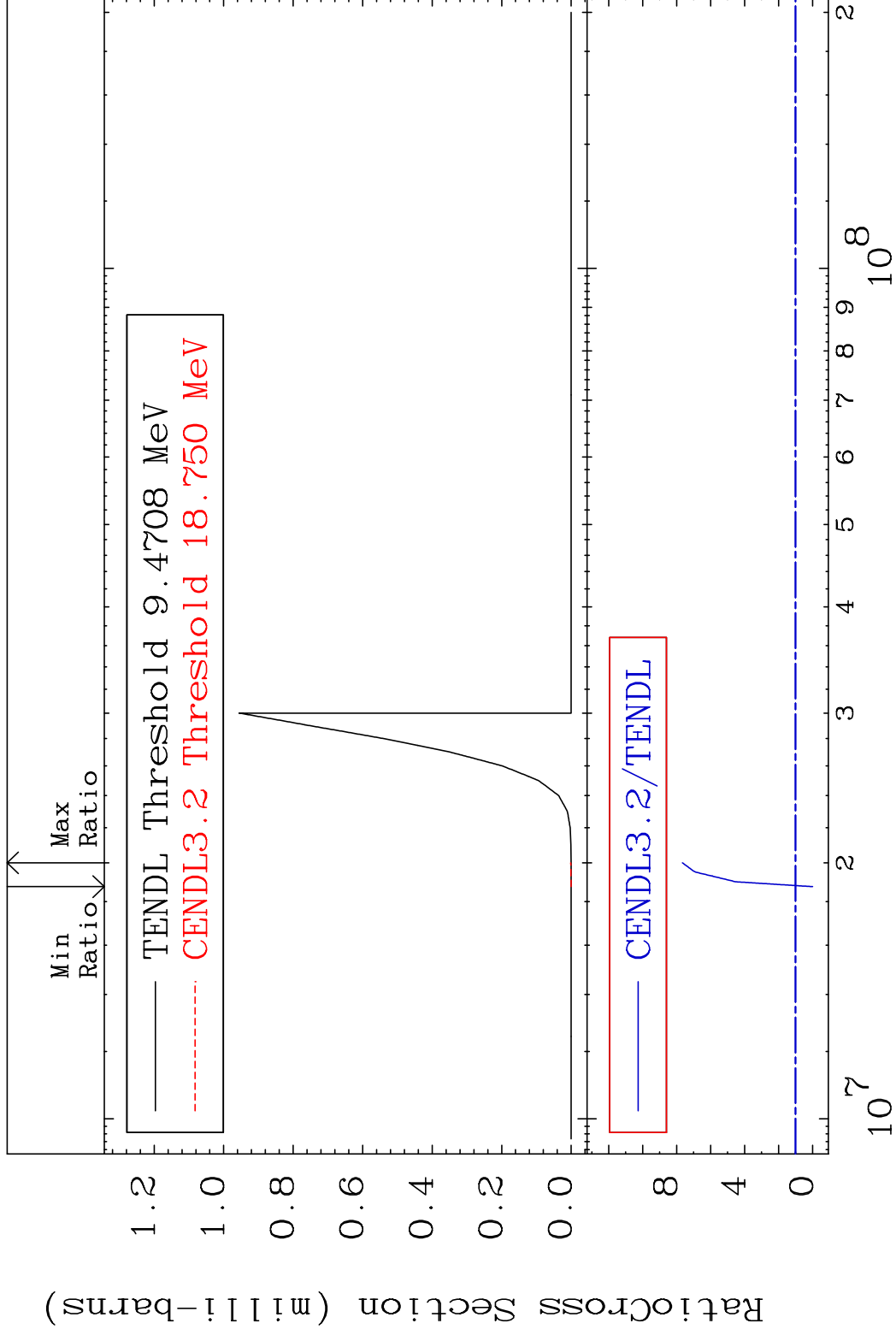
40-Zr-92

MAT 4031

(n, He-3)

40-Zr-92

Cross Section -100.0 To 666.5 %



30

Incident Energy (eV)

40-Zr-92

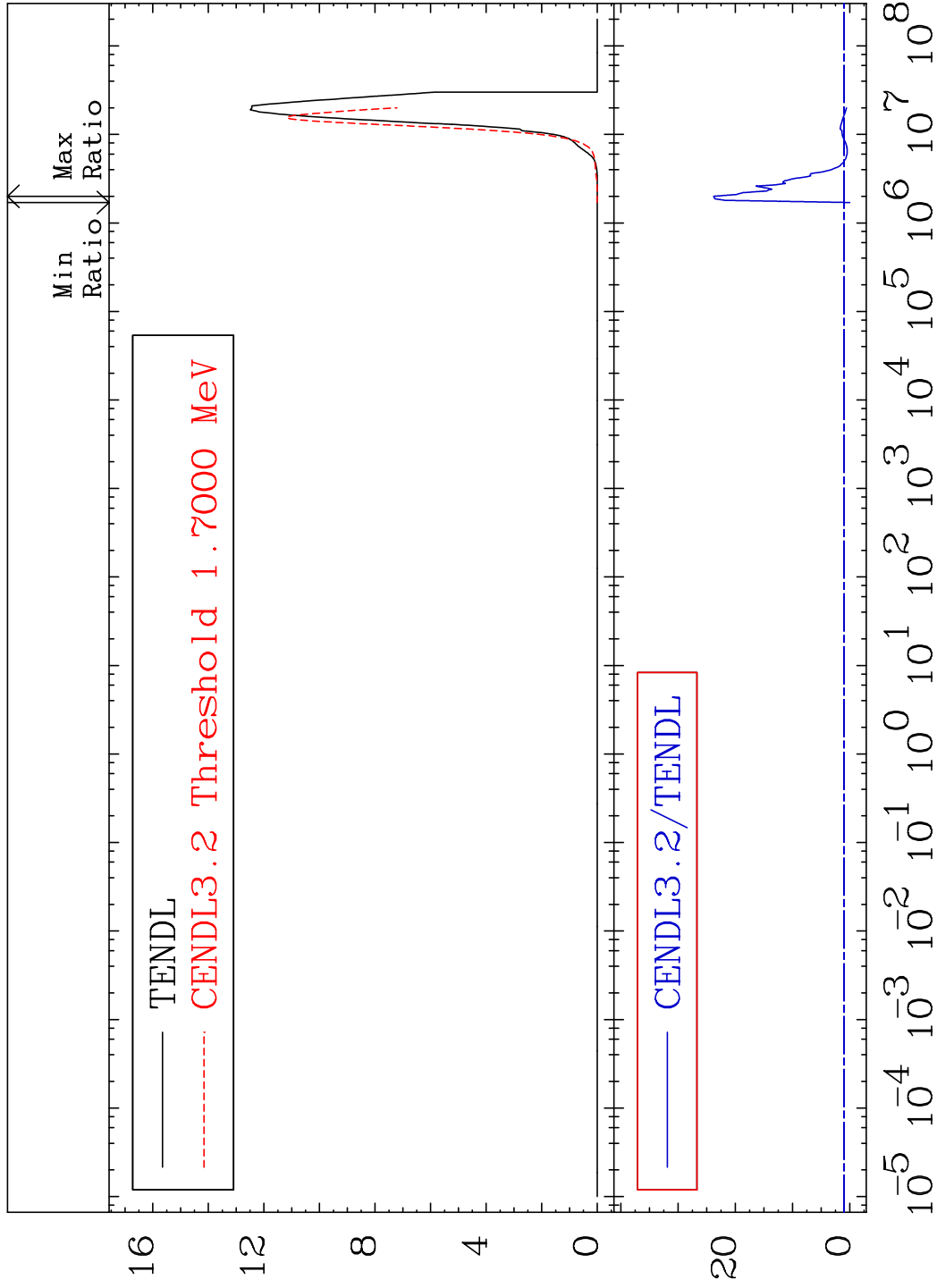
MAT 4031

(n, α)

40-Zr-92

Cross Section -100.0 To 2278. %

RatioCross Section (milli-barns)



31

Incident Energy (eV)

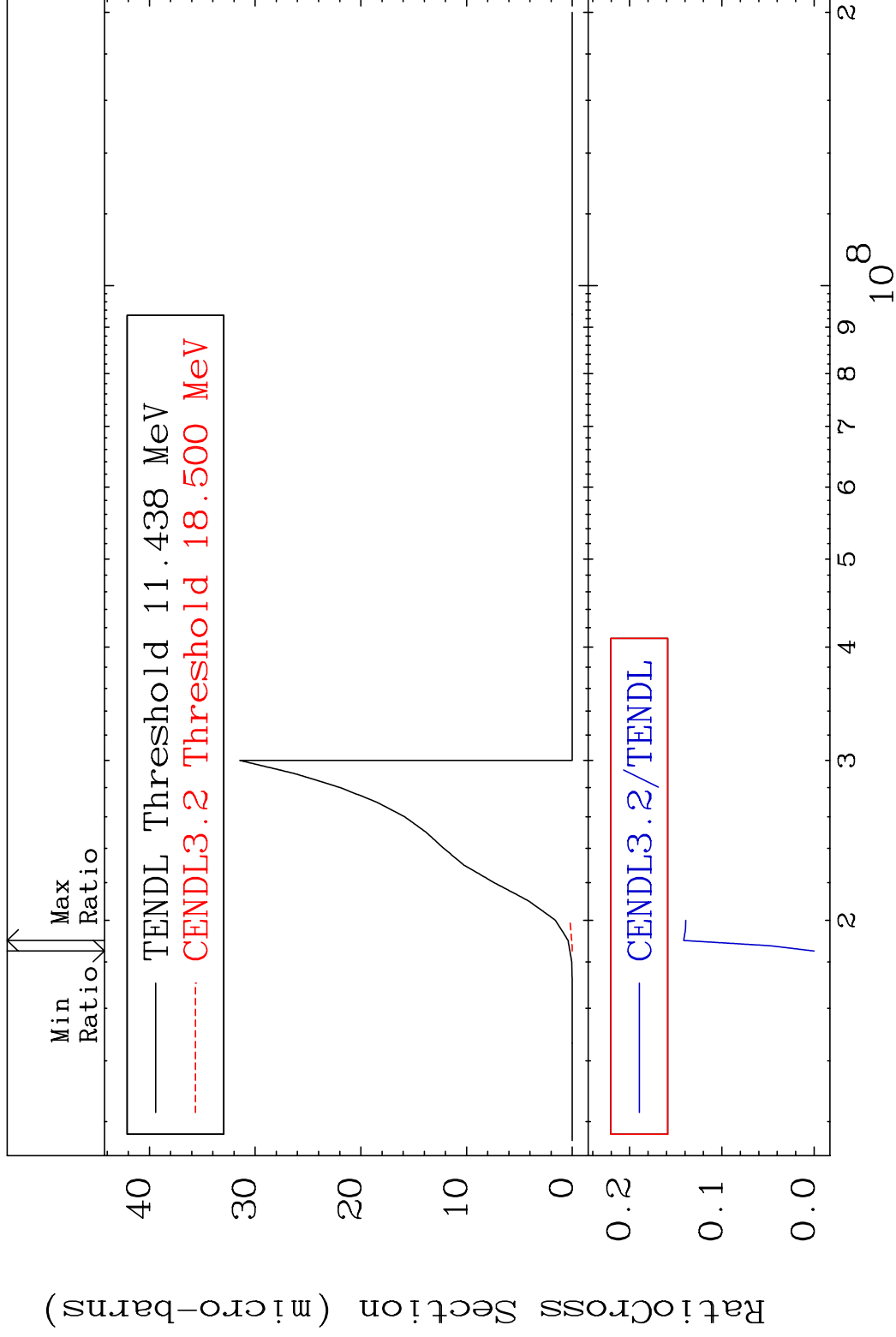
40-Zr-92

MAT 4031

(n,2p)

40-Zr-92

Cross Section -100.0 To -85.86%

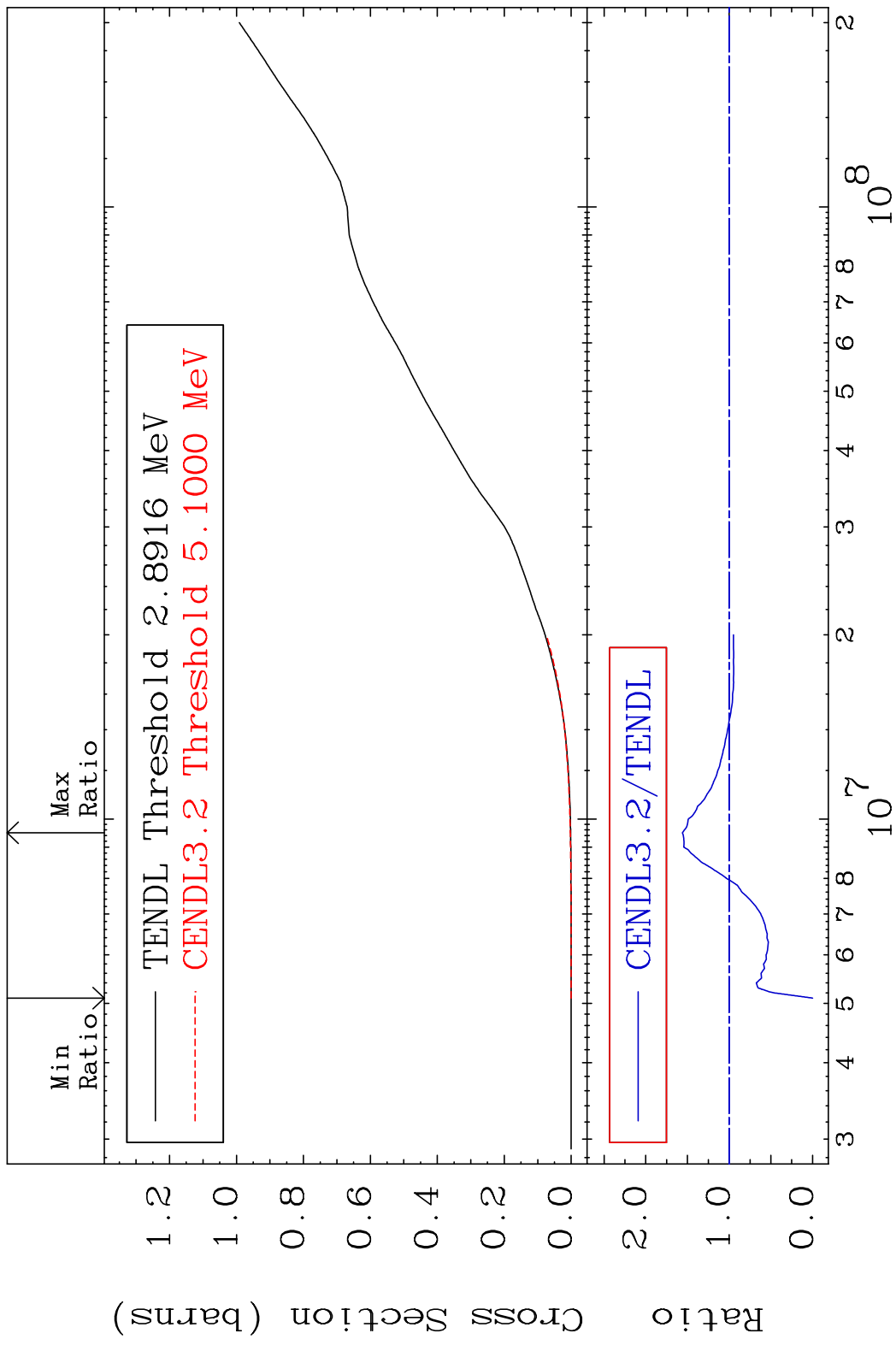


32

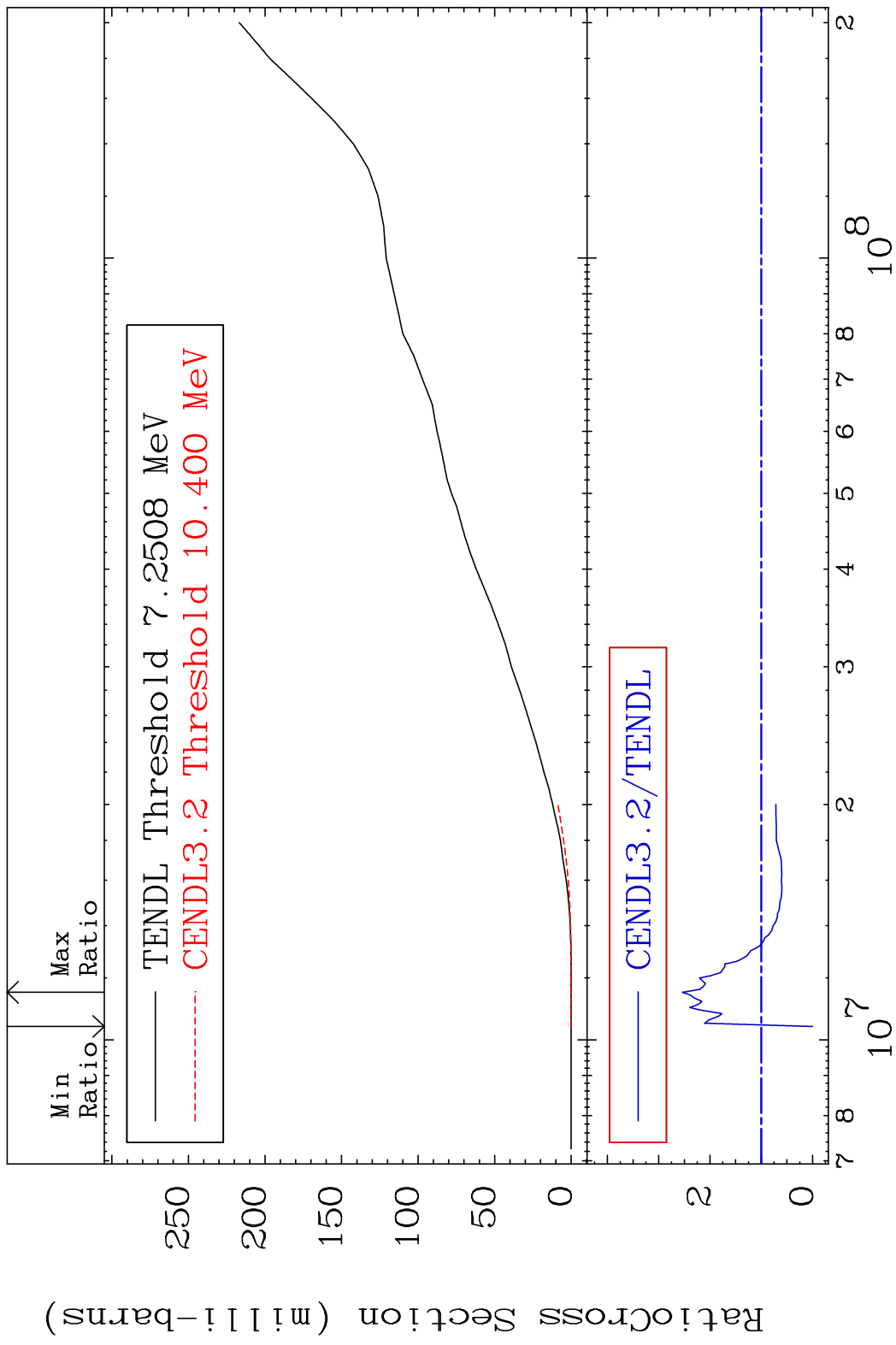
Incident Energy (eV)

40-Zr-92

MAT 4031 Hydrogen Production 40-Zr-92
 Cross Section -100.0 To 56.14 %

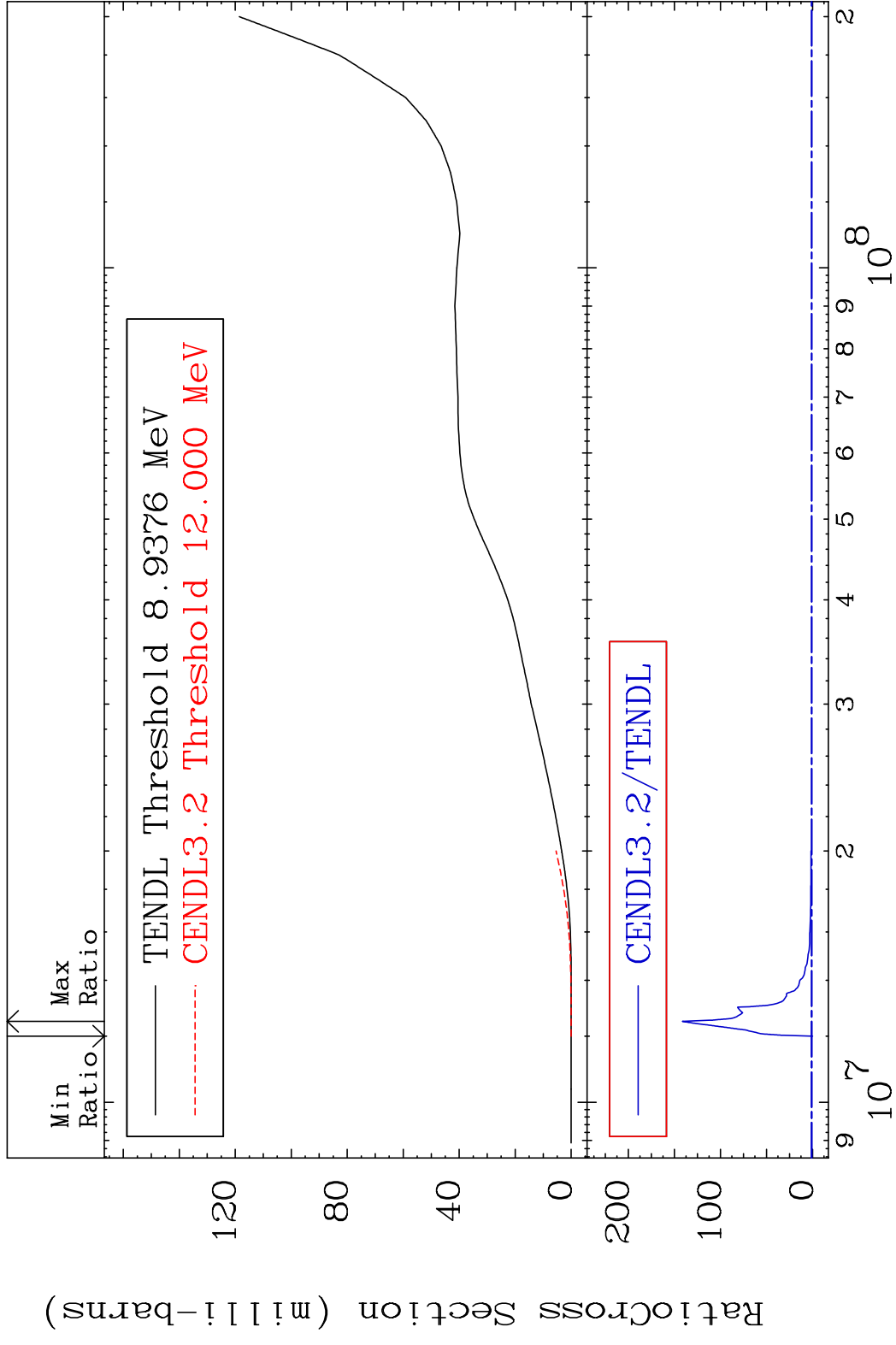


MAT 4031 Deuterium Production 40-Zr-92
 Cross Section -100.0 To 153.9 %



34 Incident Energy (eV) 40-Zr-92

MAT 4031 Tritium Production 40-Zr-92
 Cross Section -100.0 To 9999. %



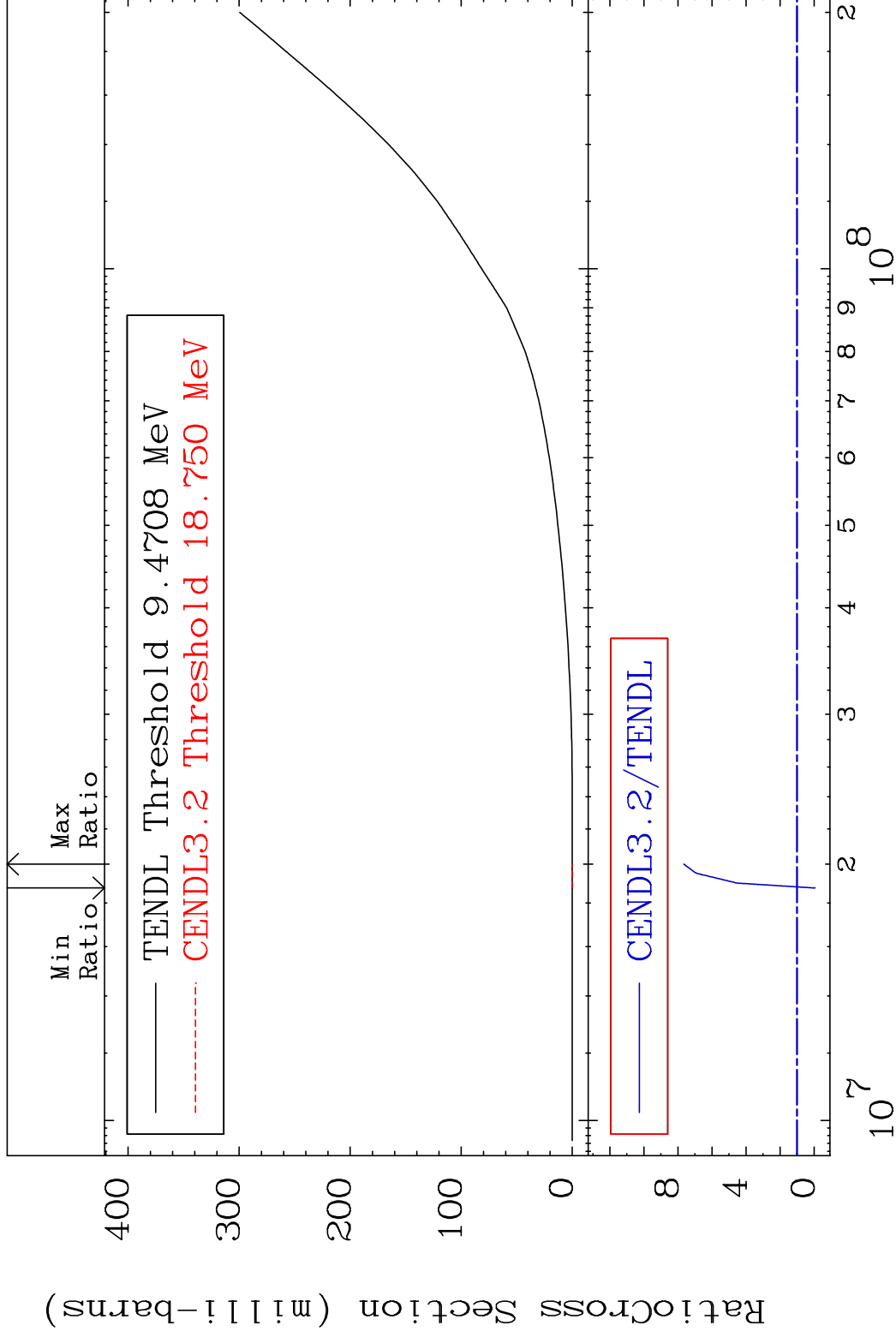
35 Incident Energy (eV) 40-Zr-92

MAT 4031

He-3 Production

40-Zr-92

Cross Section -100.0 To 666.5 %



36

Incident Energy (eV)

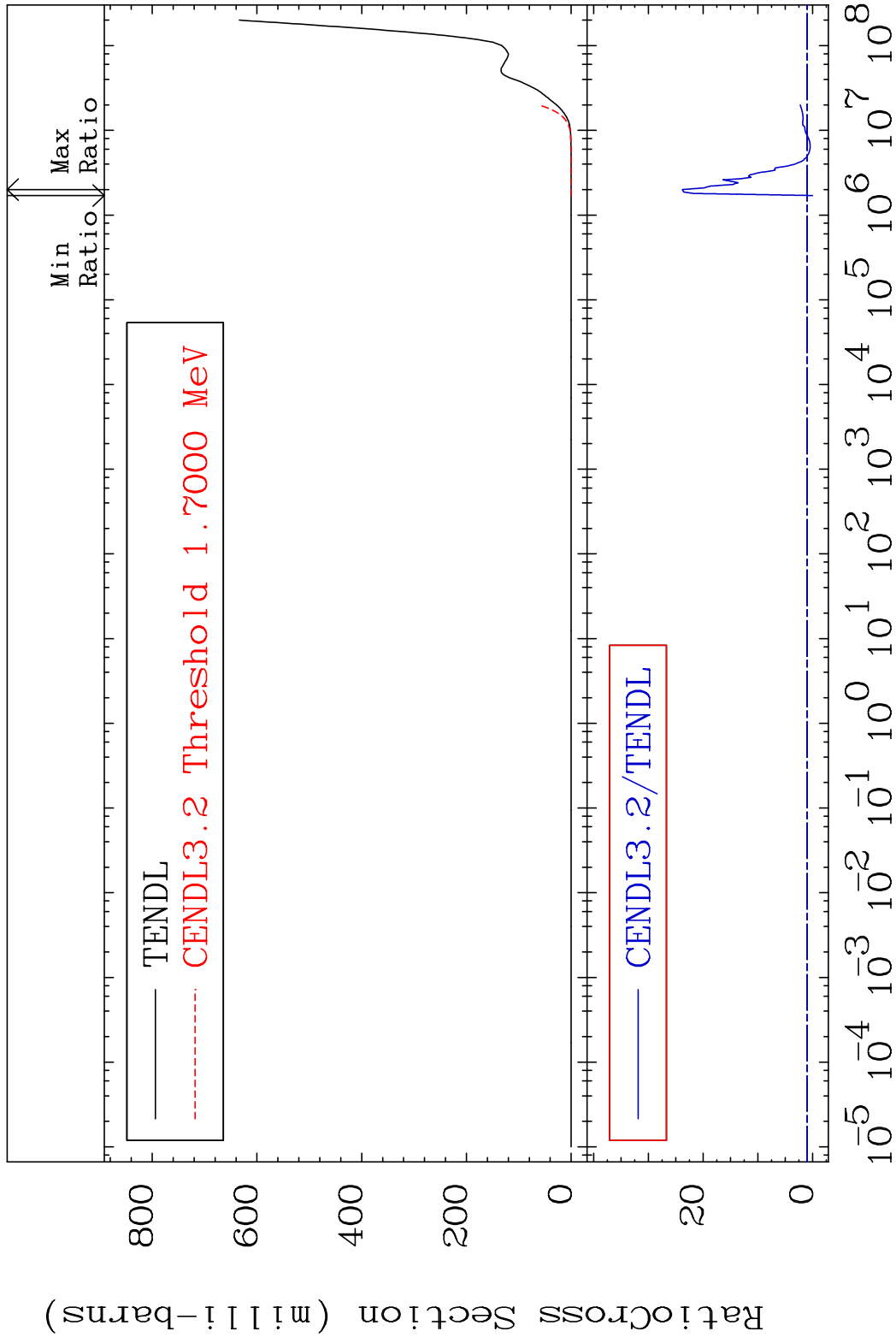
40-Zr-92

MAT 4031

He-4 Production

40-Zr-92

Cross Section -100.0 To 2278. %

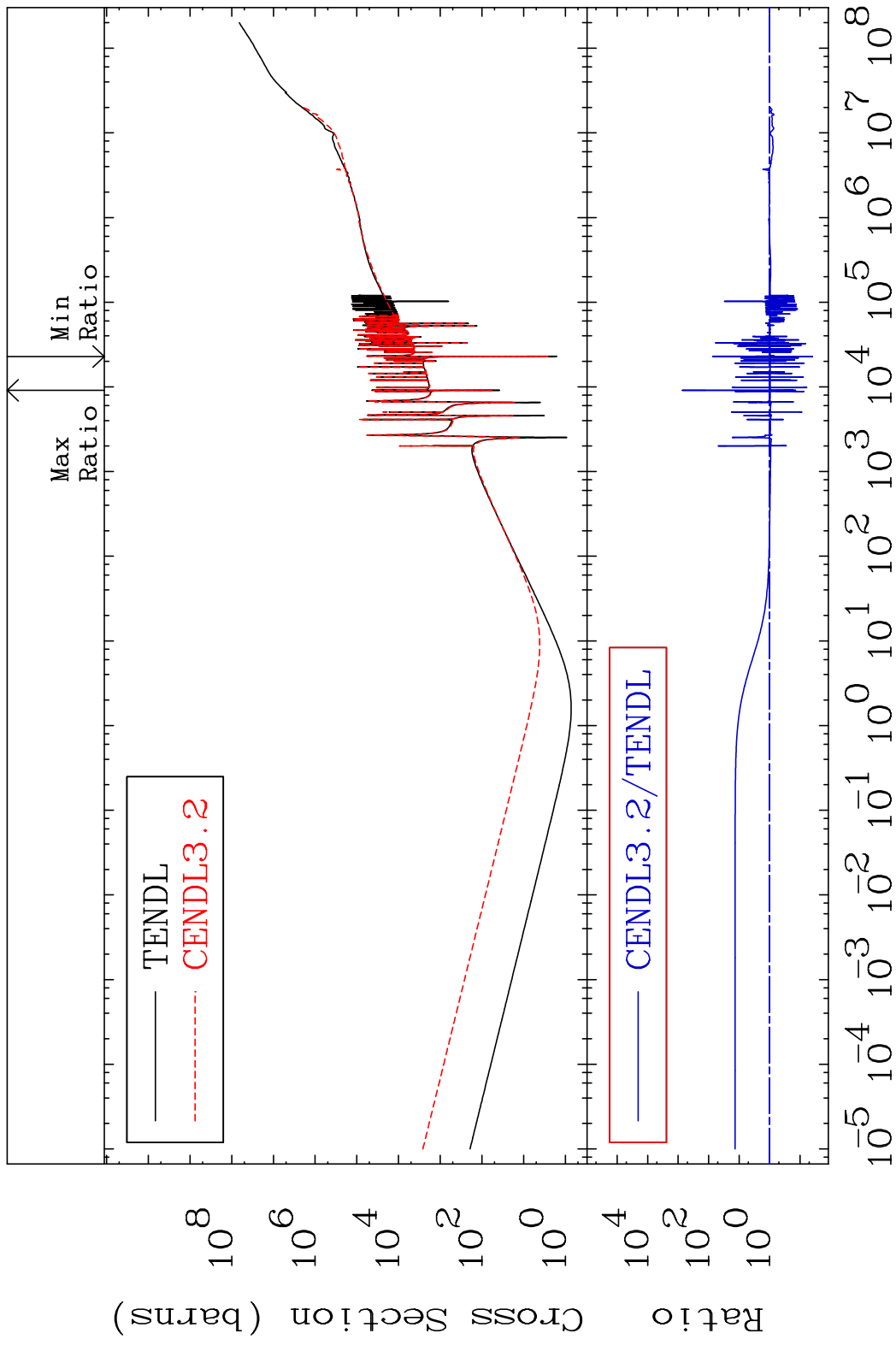


37

Incident Energy (eV)

40-Zr-92

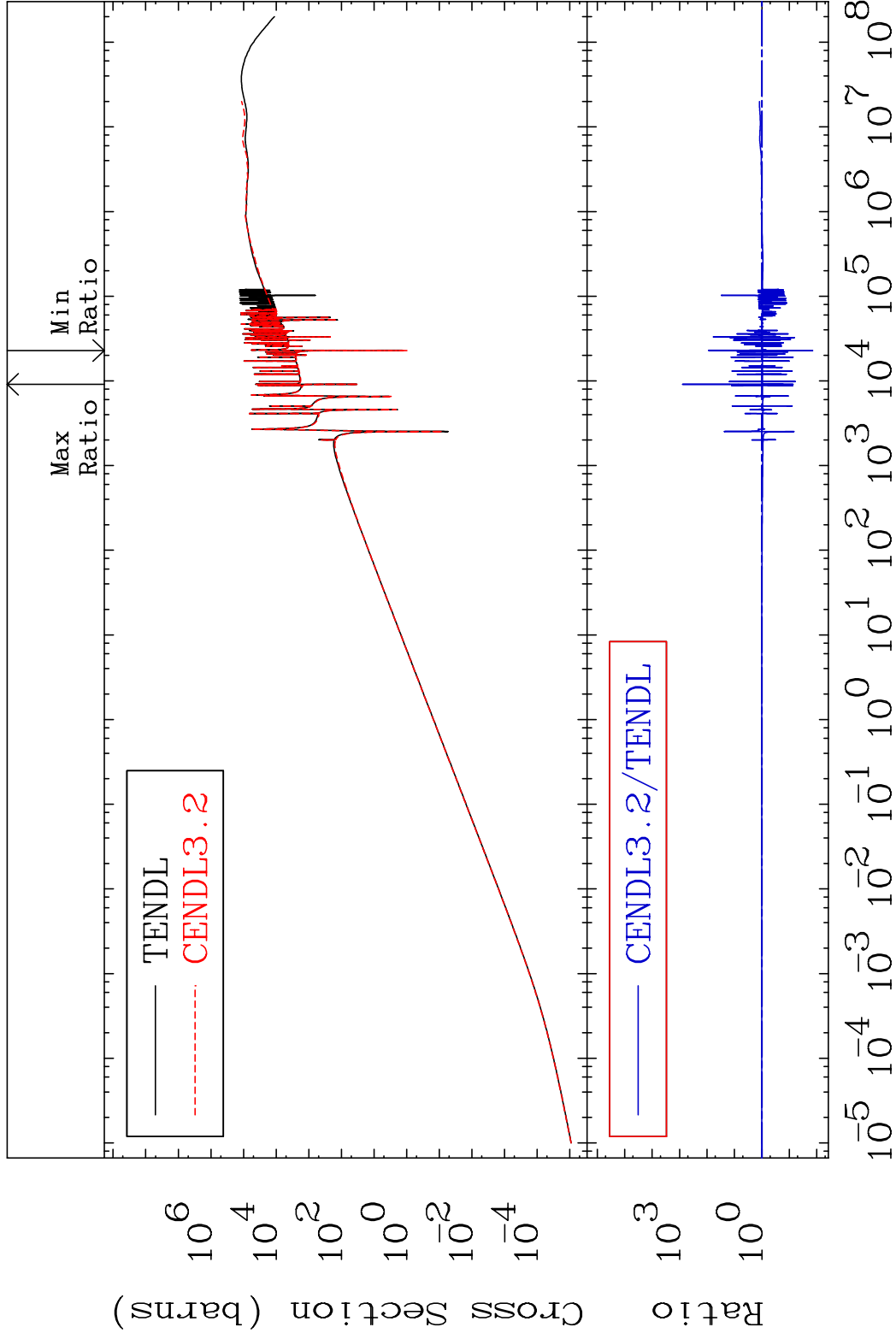
MAT 4031 Kerma total (eV-barns) 40-Zr-92
 Cross Section -96.12 To 9999. %



MAT 4031

Kerma elastic
Cross Section

40-Zr-92
-98.57 To 9999. %

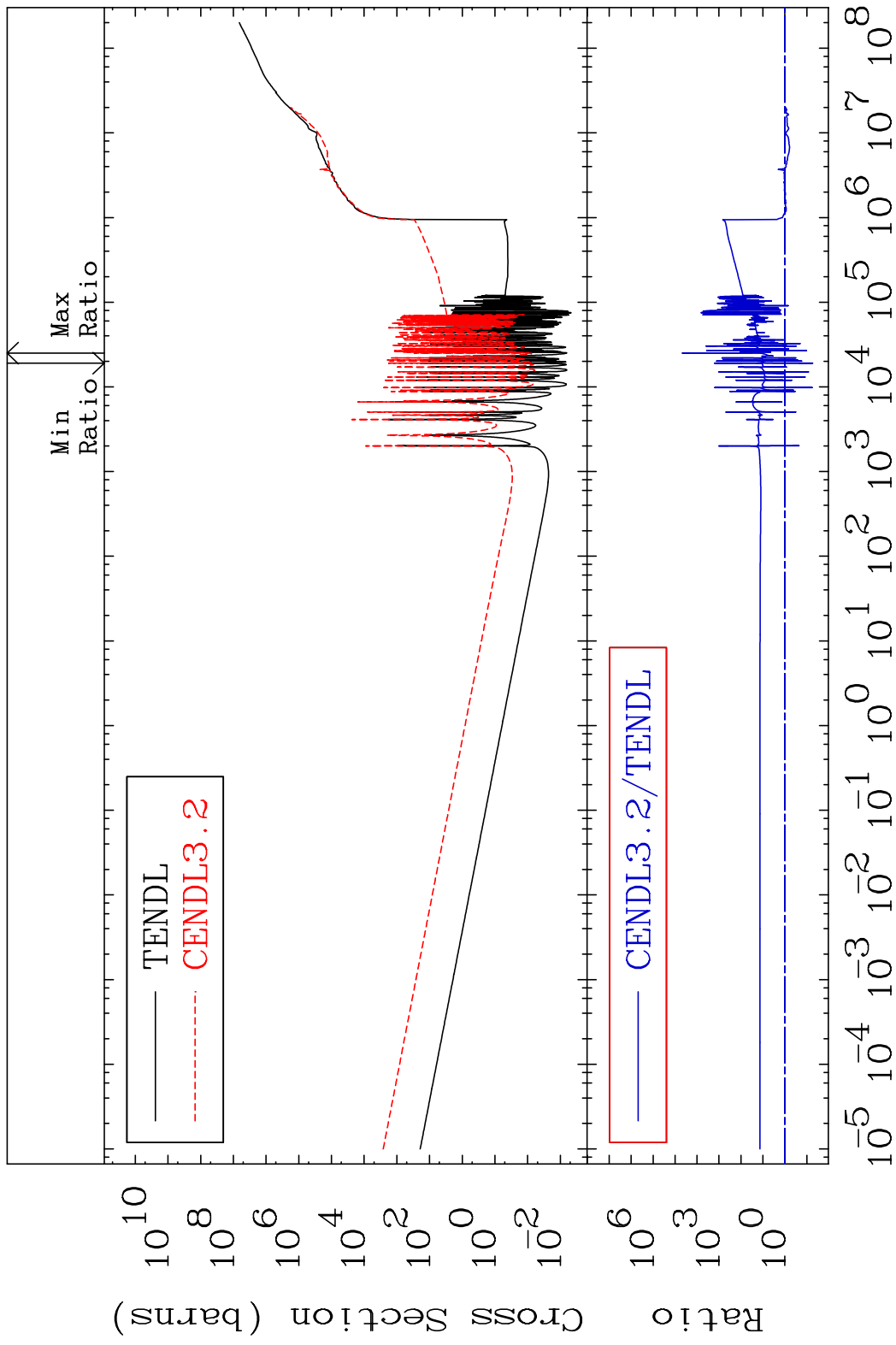


39

Incident Energy (eV)

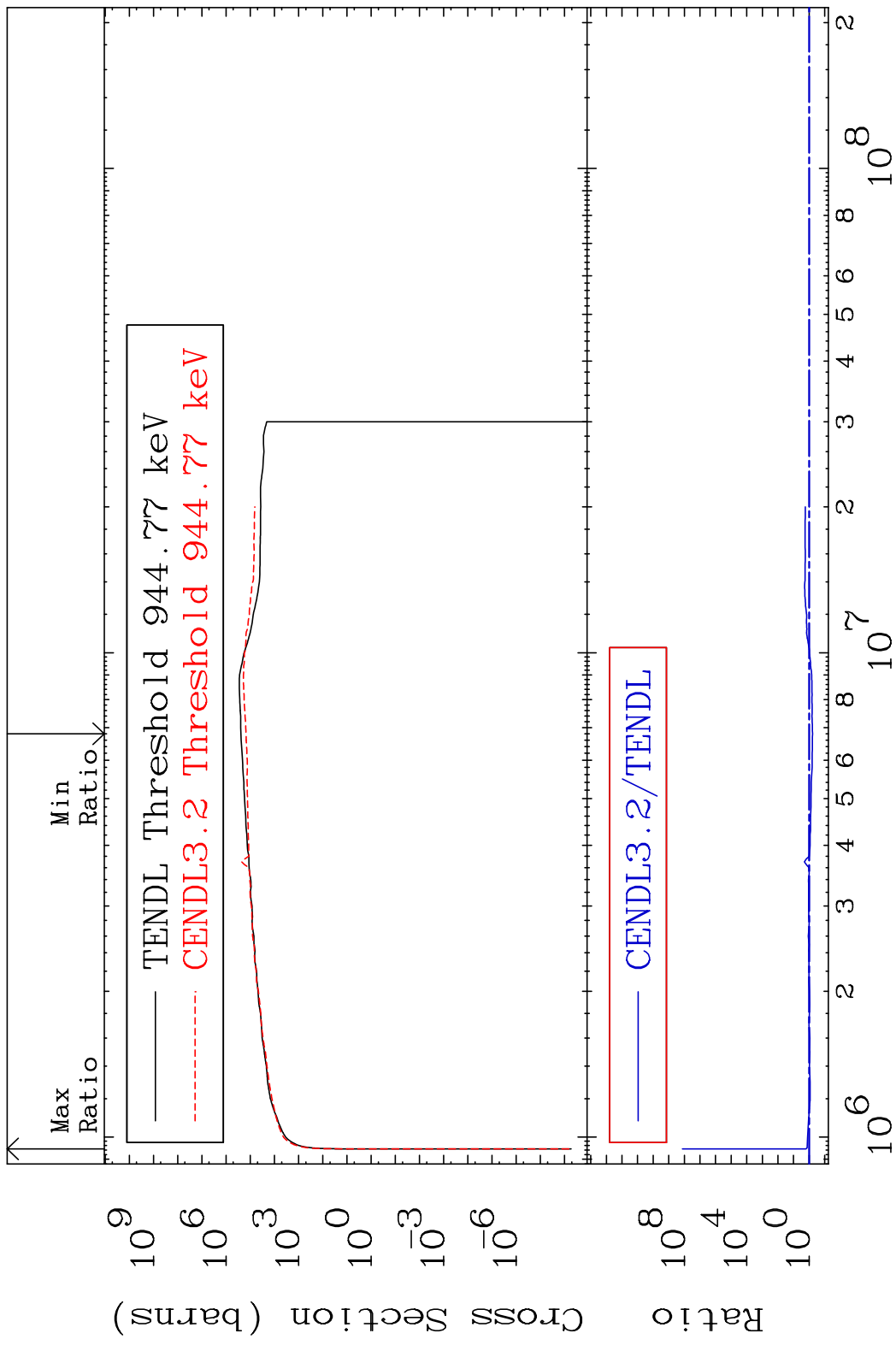
40-Zr-92

MAT 4031 Kerma non-elastic (all but mt2) 40-Zr-92
 Cross Section -94.54 To 9999. %



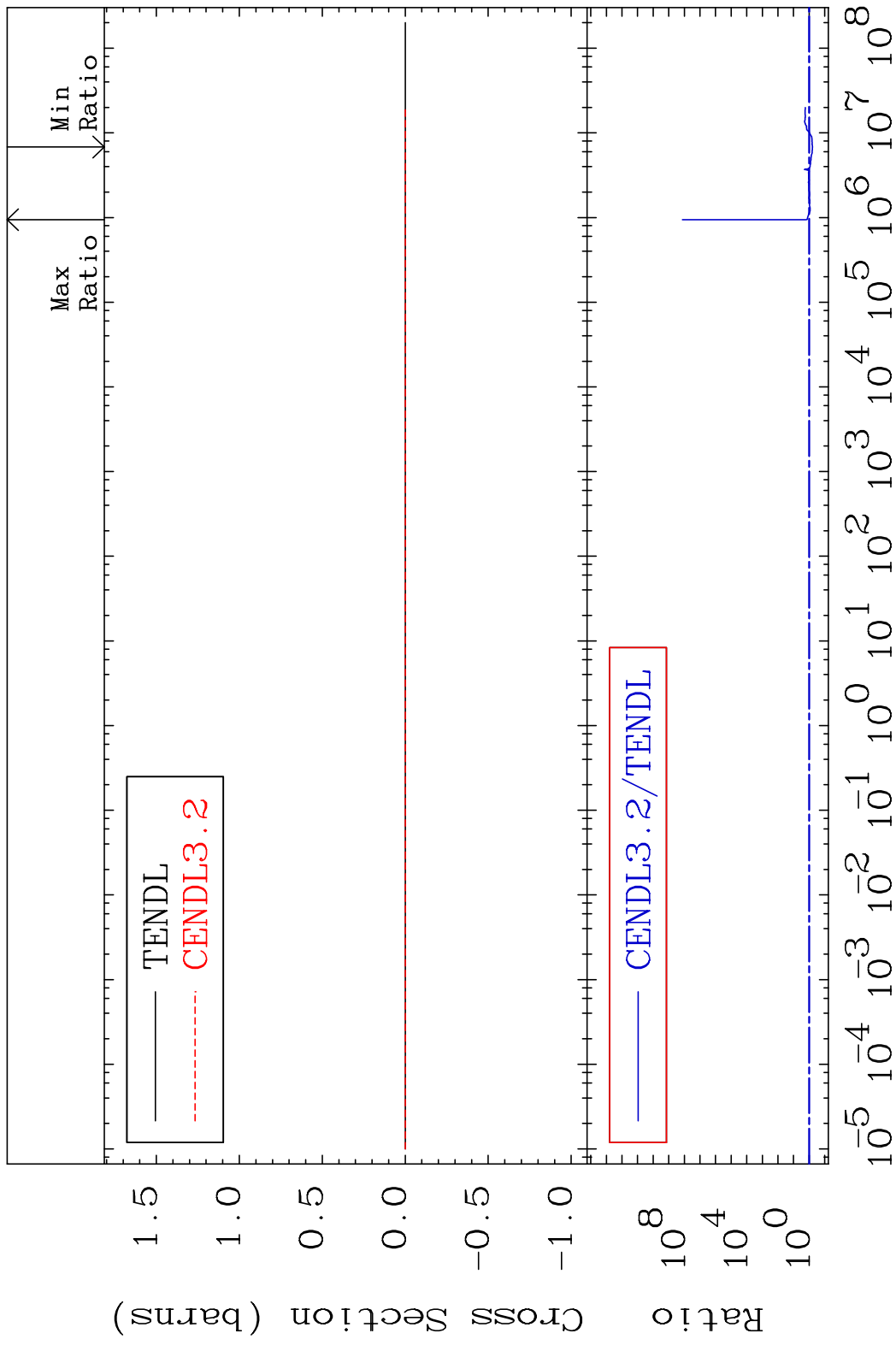
40 Incident Energy (eV) 40-Zr-92

MAT 4031 Kerma inelastic (mt51-91) 40-Zr-92
 Cross Section -39.62 To 9999. %



41 Incident Energy (eV) 40-Zr-92

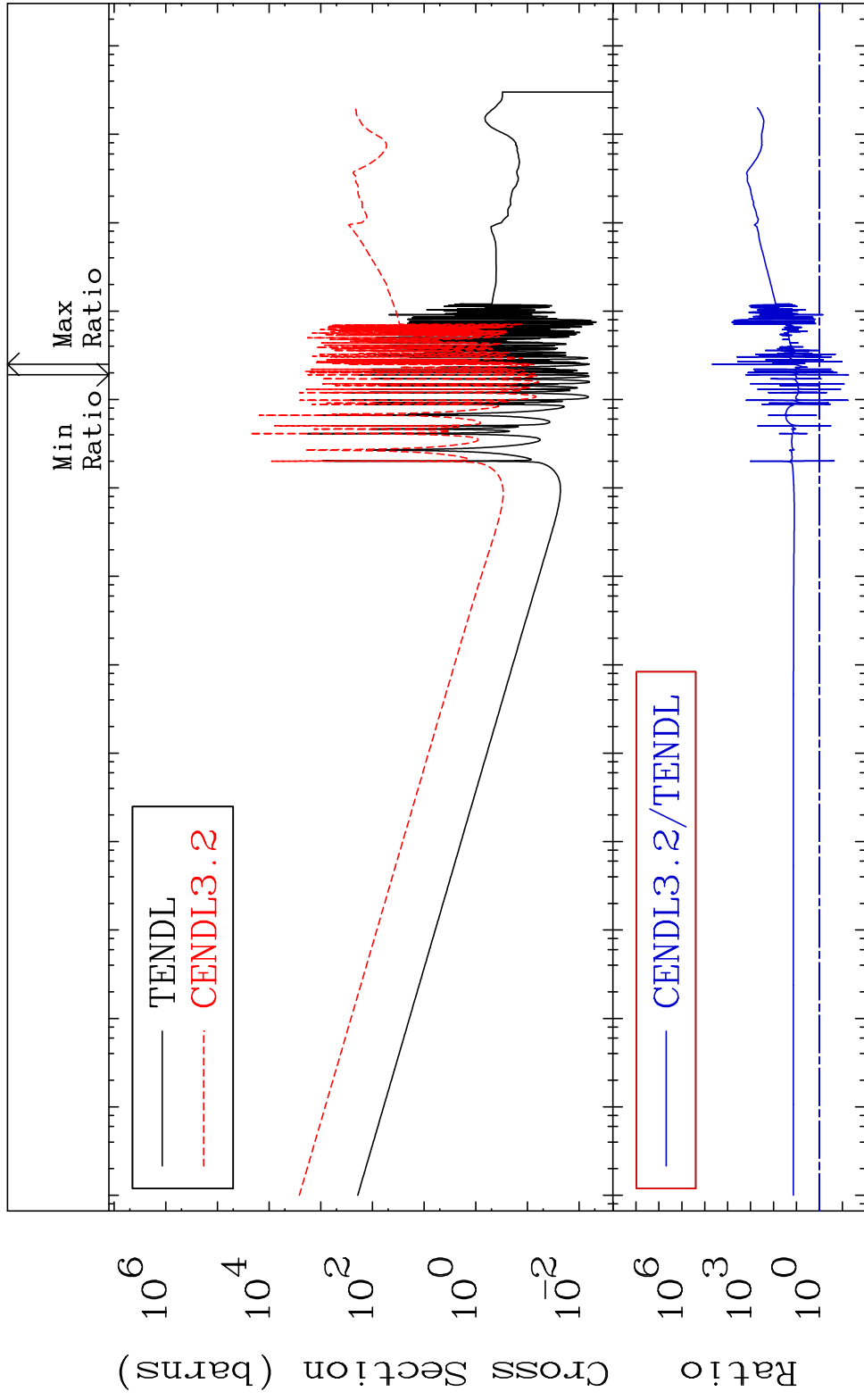
MAT 4031 Kerma fission (mt18 or mt19-20-21-38) 40-Zr-92
 Cross Section -39.62 To 9999. %



MAT 4031

Kerma capture (mt102) 40-Zr-92

Cross Section -94.54 To 9999. %

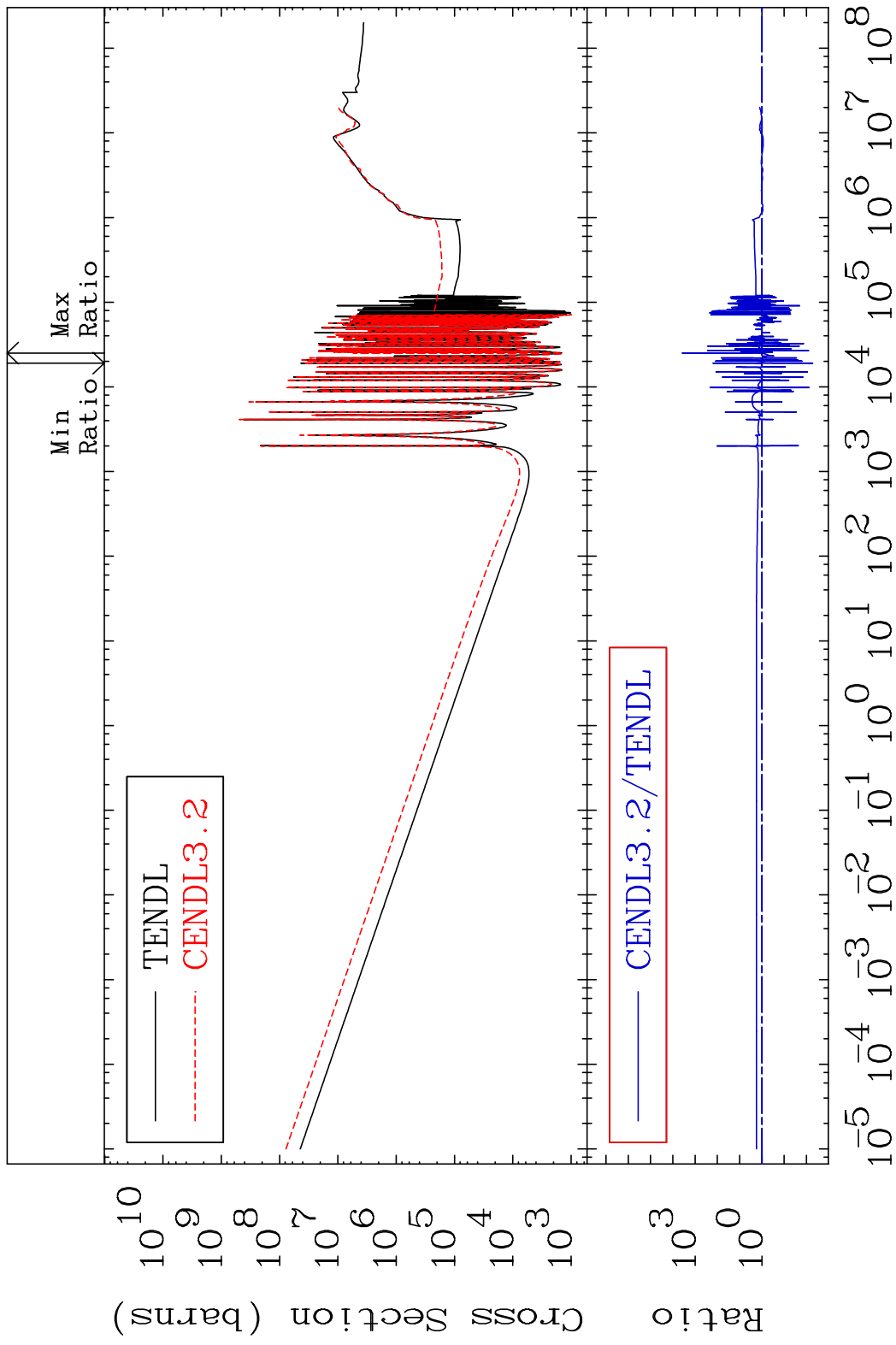


43

Incident Energy (eV)

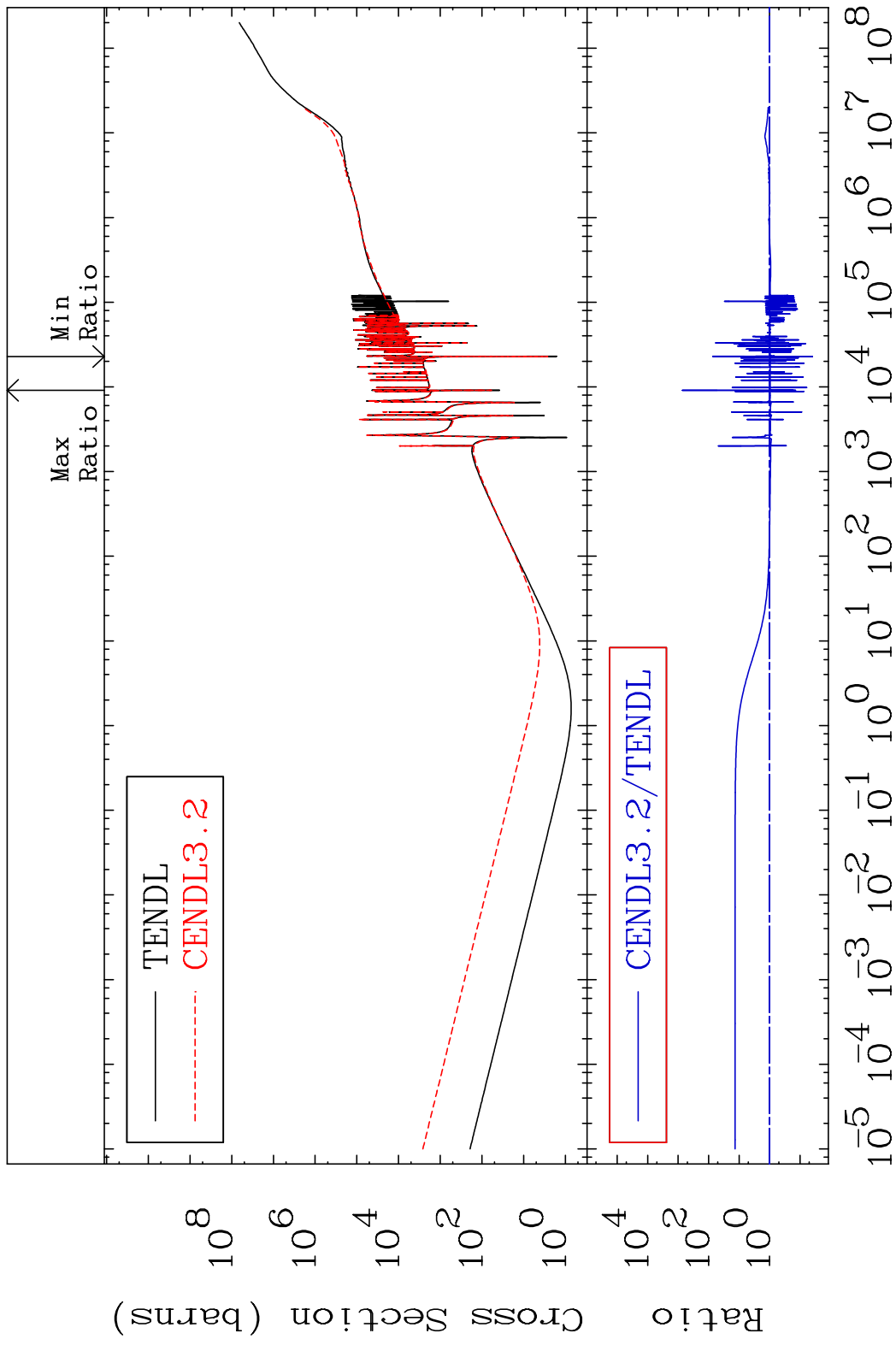
40-Zr-92

MAT 4031 Total photon (eV-barns) 40-Zr-92
 Cross Section -99.47 To 9999. %



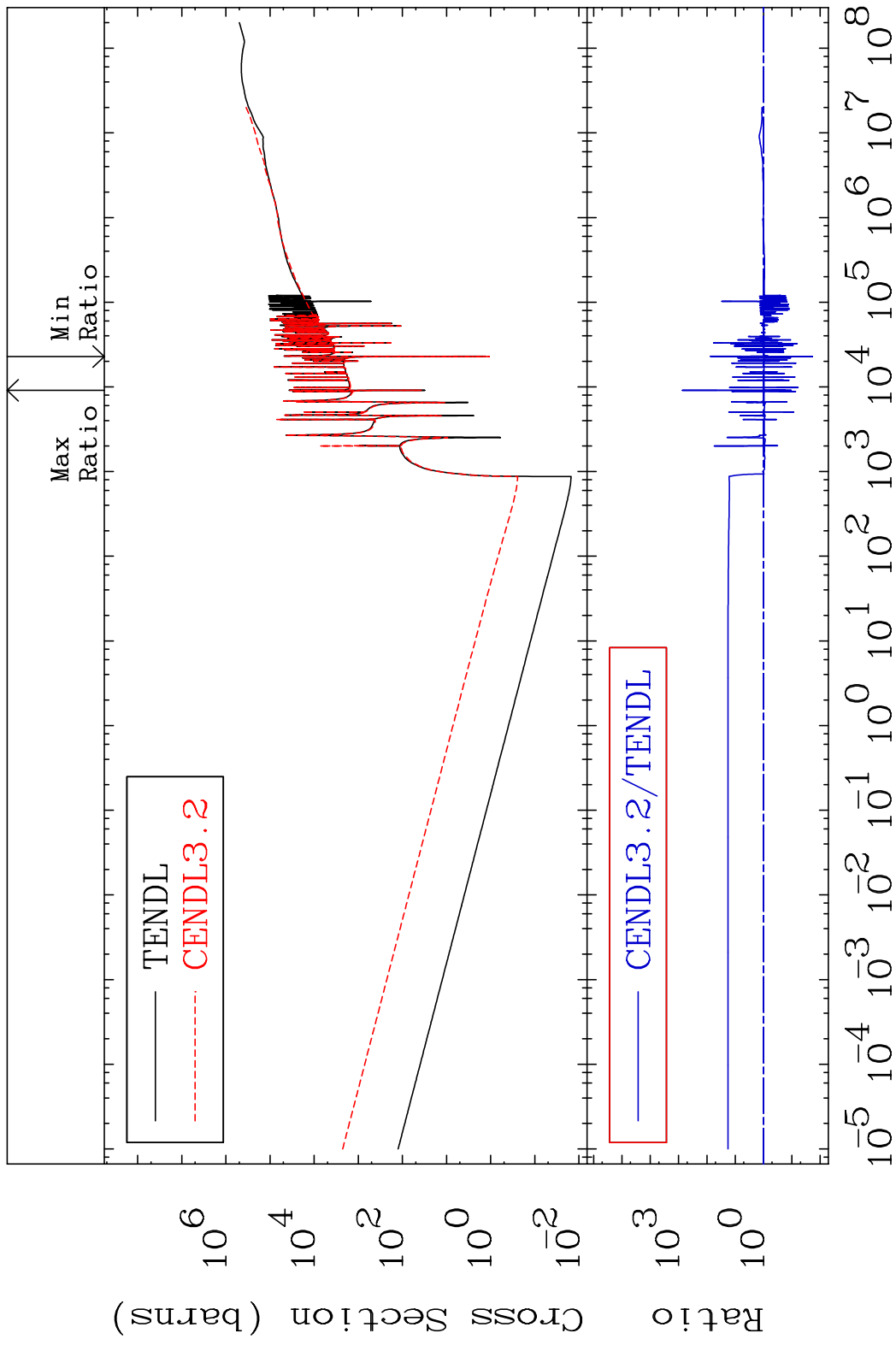
44 Incident Energy (eV) 40-Zr-92

MAT 4031 Total kinematic kerma (high limit) 40-Zr-92
 Cross Section -96.12 To 9999. %



45 Incident Energy (eV) 40-Zr-92

MAT 4031 Dpa total (eV-barns) 40-Zr-92
 Cross Section -98.13 To 9999. %



46 Incident Energy (eV) 40-Zr-92

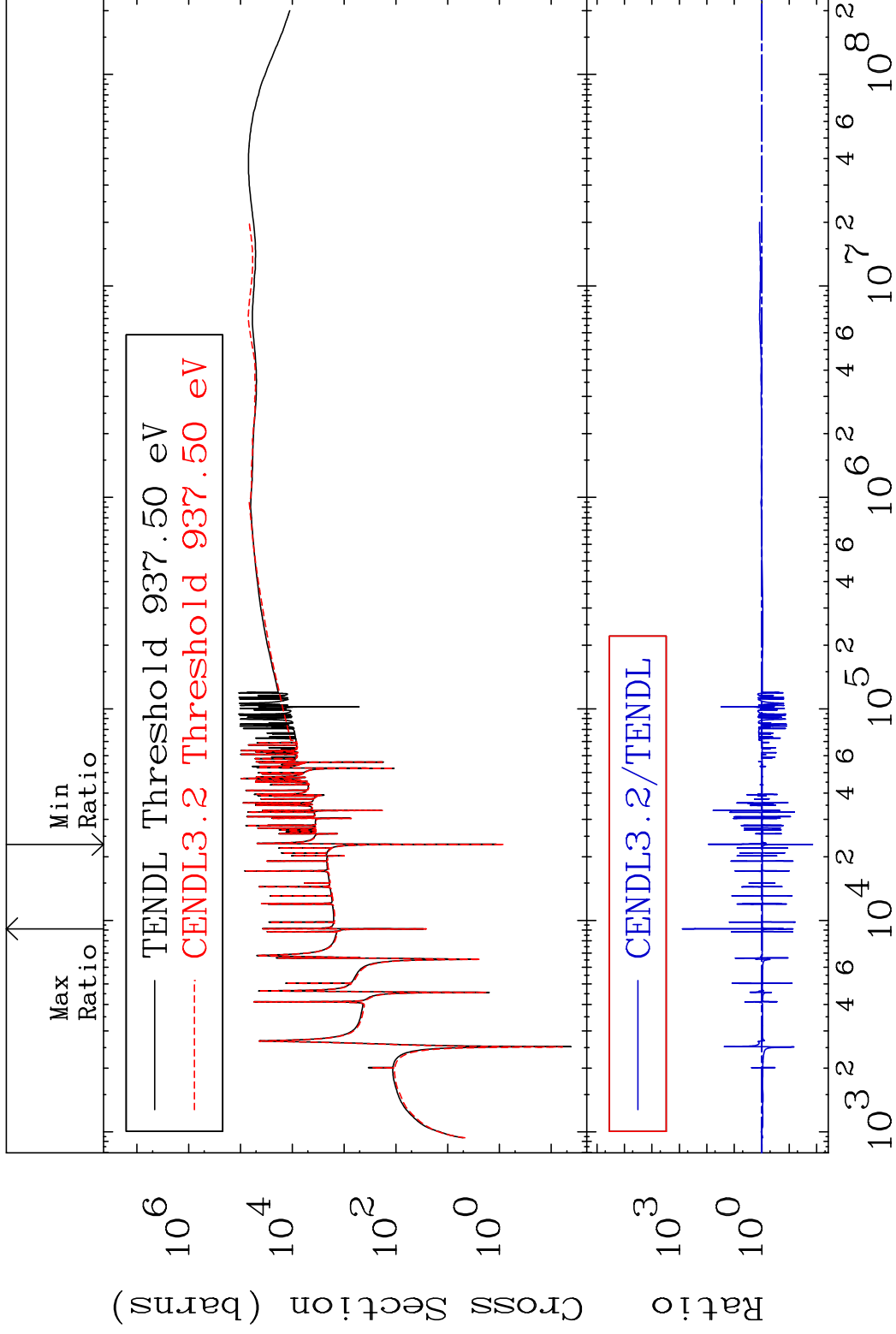
MAT 4031

Dpa elastic (mt2)

40-Zr-92

Cross Section

-98.57 To 9999. %

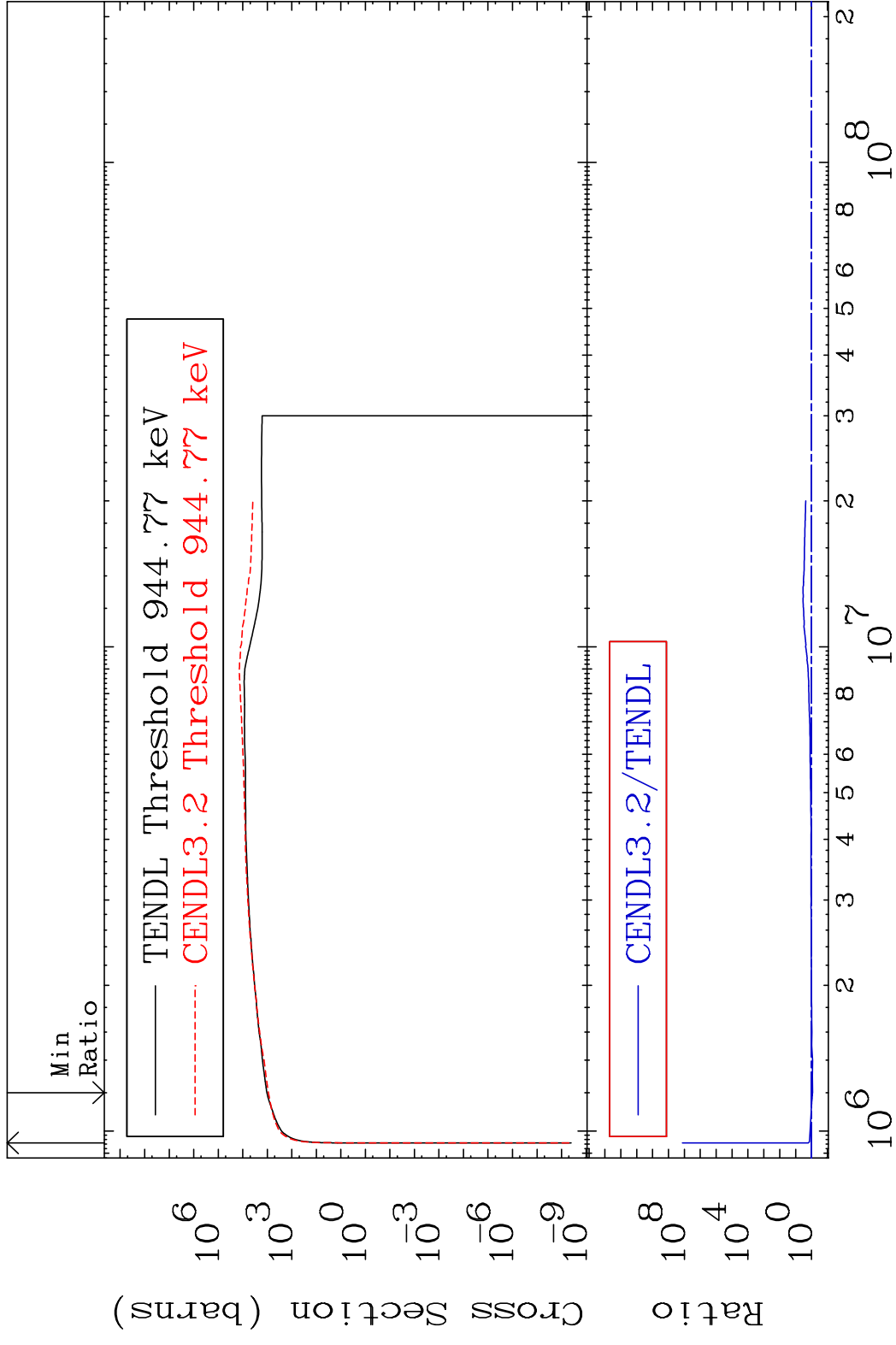


47

Incident Energy (eV)

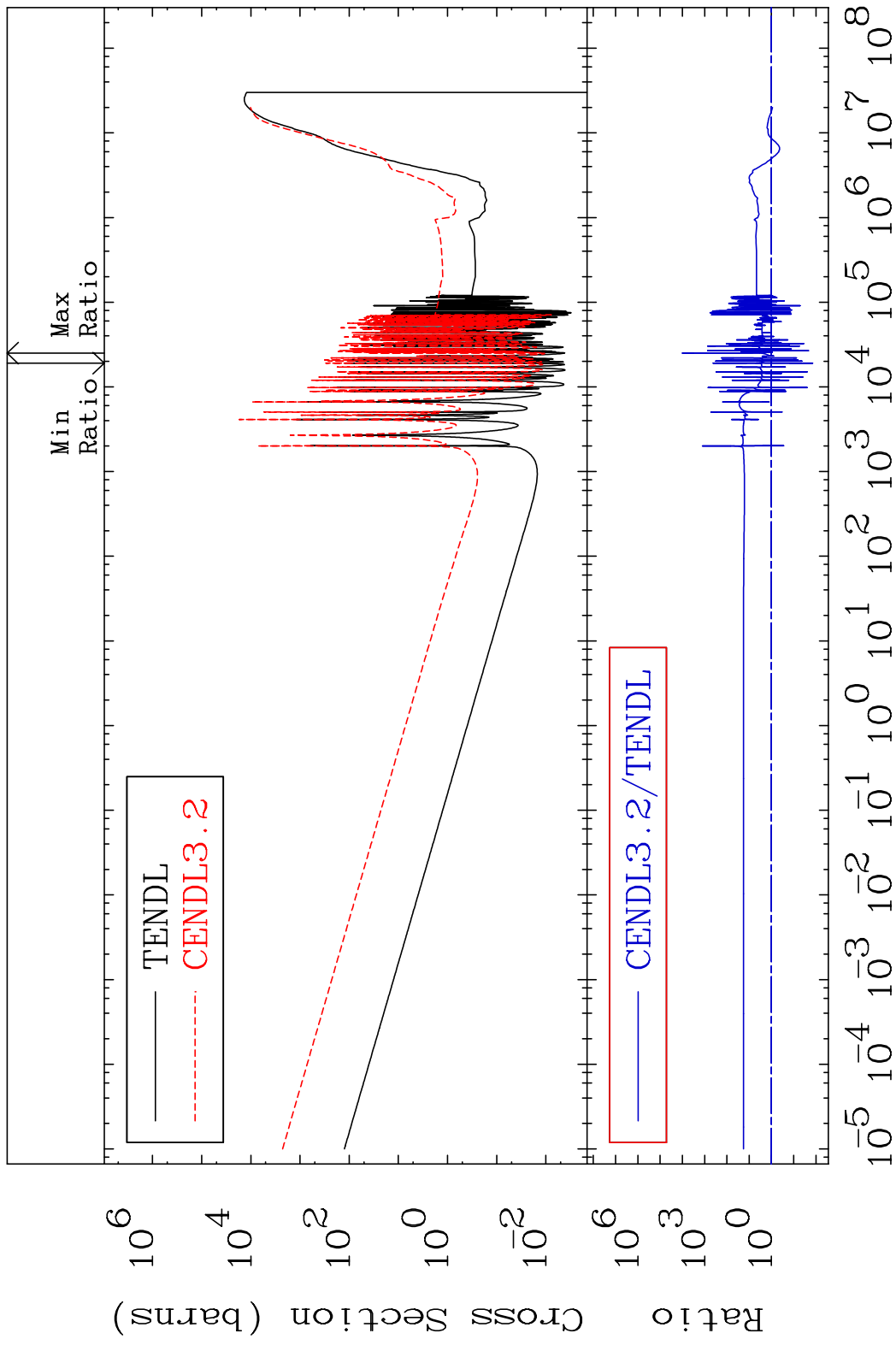
40-Zr-92

MAT 4031 Dpa inelastic (mt51-91) 40-Zr-92
 Cross Section -14.01 To 9999. %

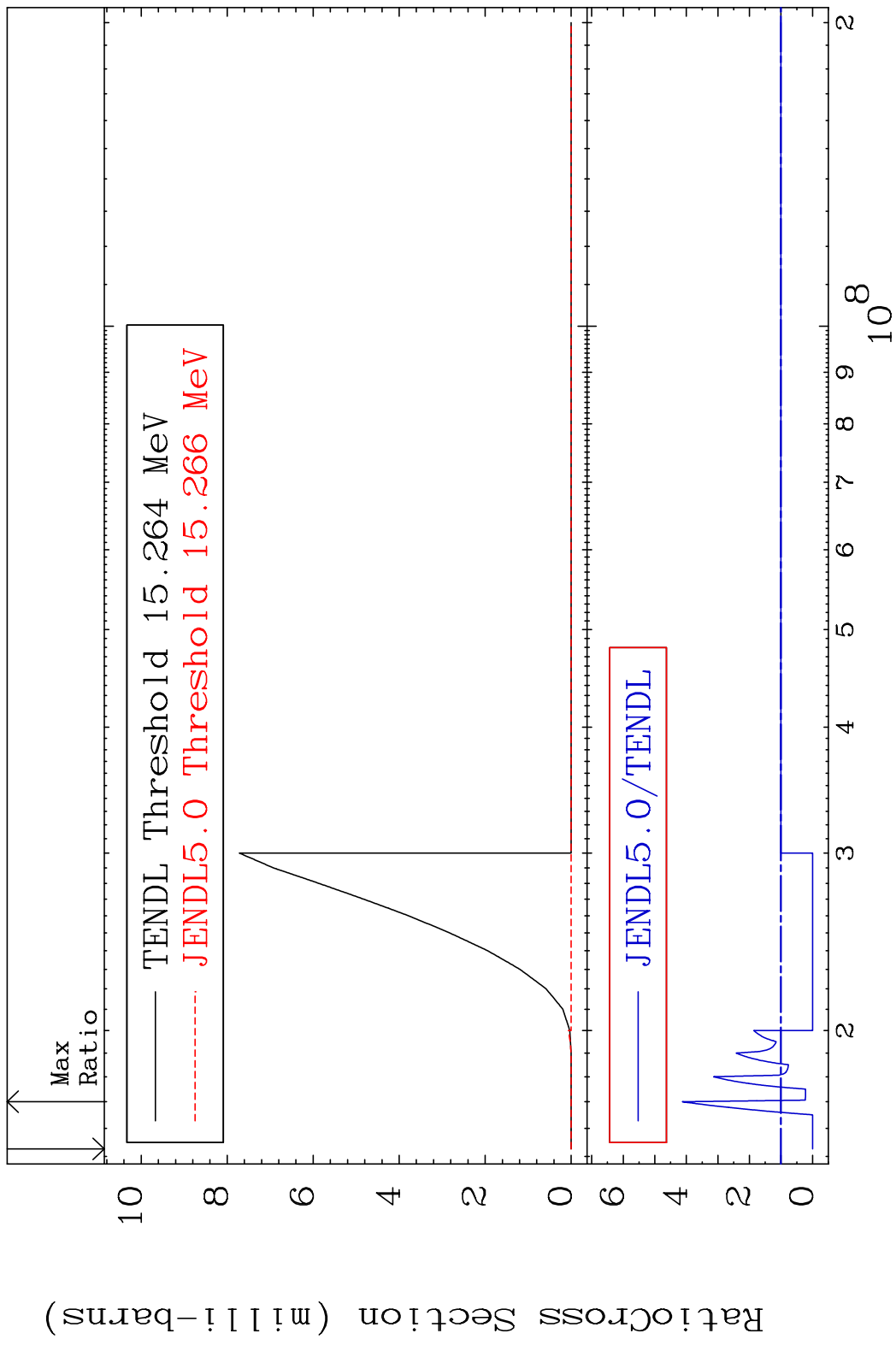


48 Incident Energy (eV) 40-Zr-92

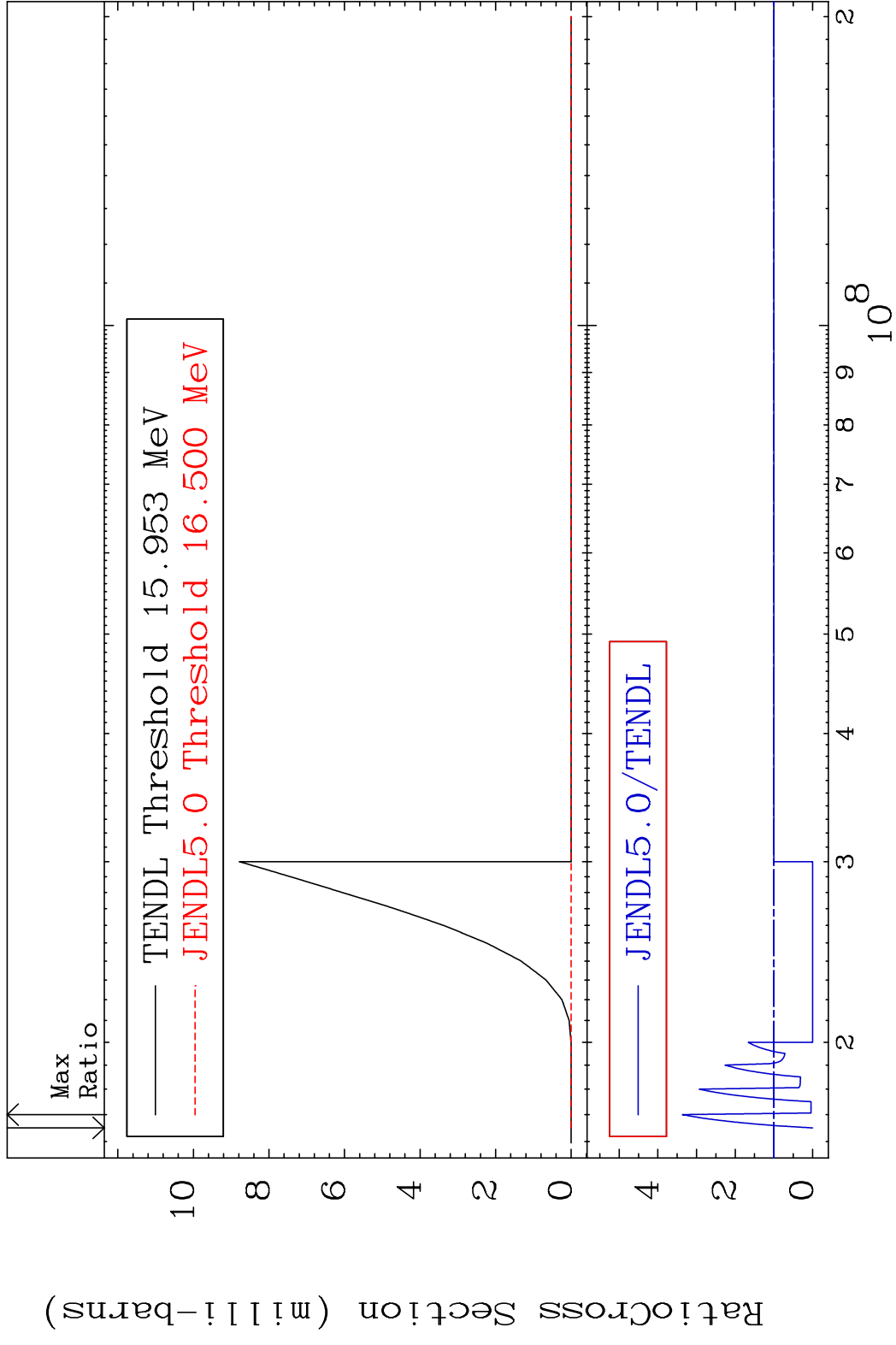
MAT 4031 Dpa disappearance (mt102 -120) 40-Zr-92
 Cross Section -98.57 To 9999. %



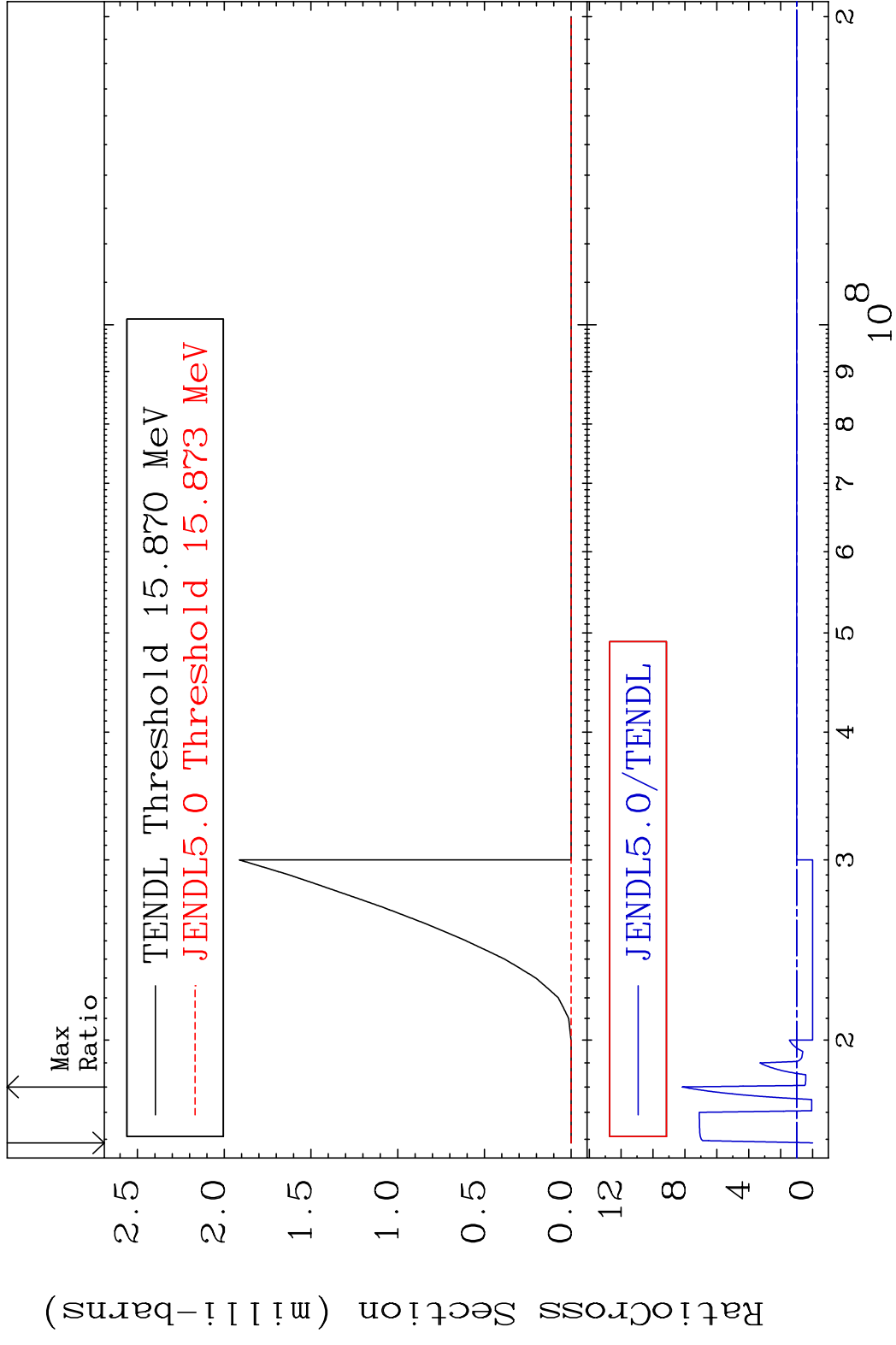
MAT 4031 (n, n') d:39-Y -90g 40-Zr-92
 Radionuclide Production Cross Section Ratio 312.6 %



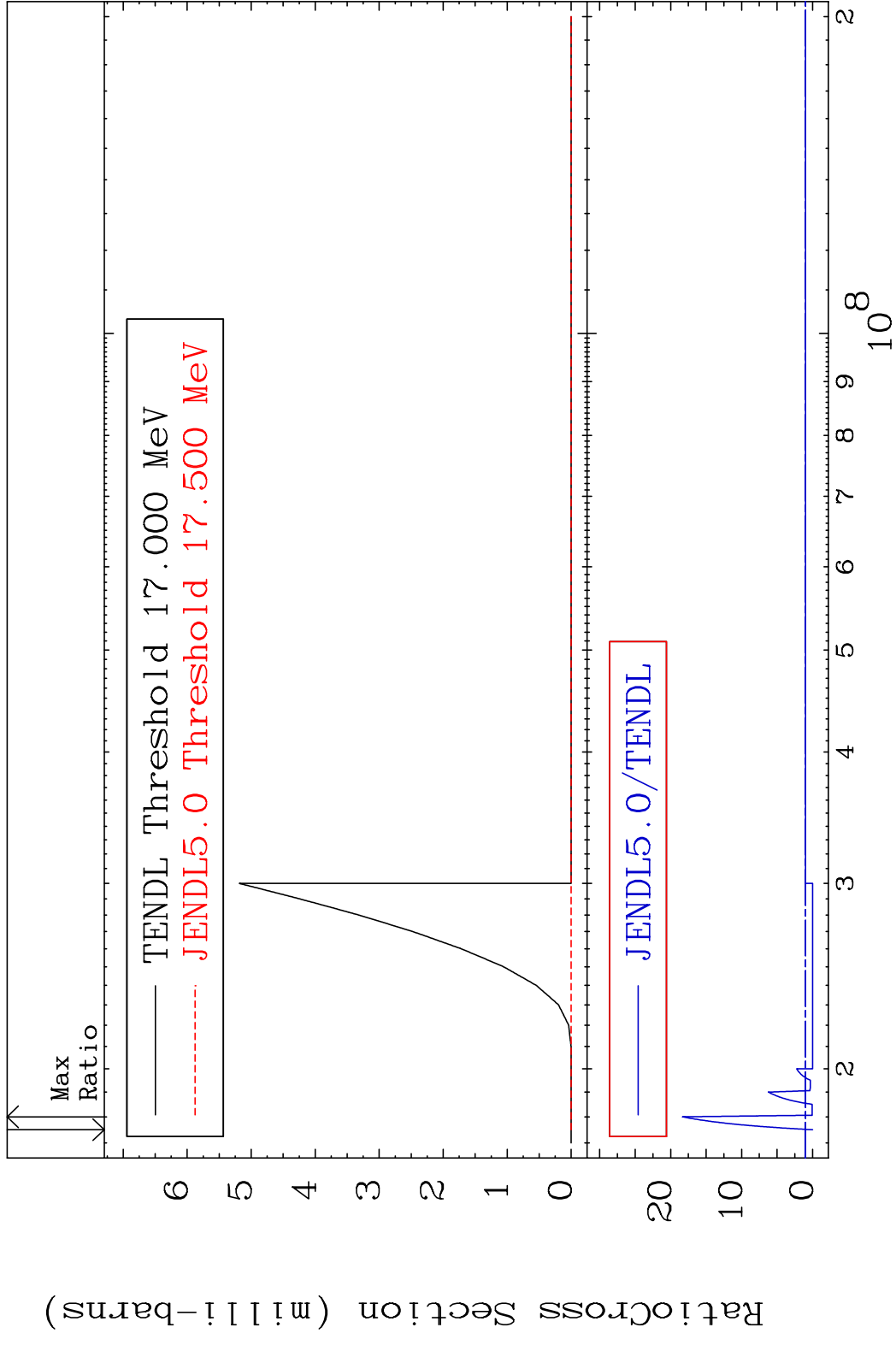
MAT 4031 (n, n') d:39-Y -90m2 40-Zr-92
 Radionuclide Production Cross Section 180.0 dth 236.7 %



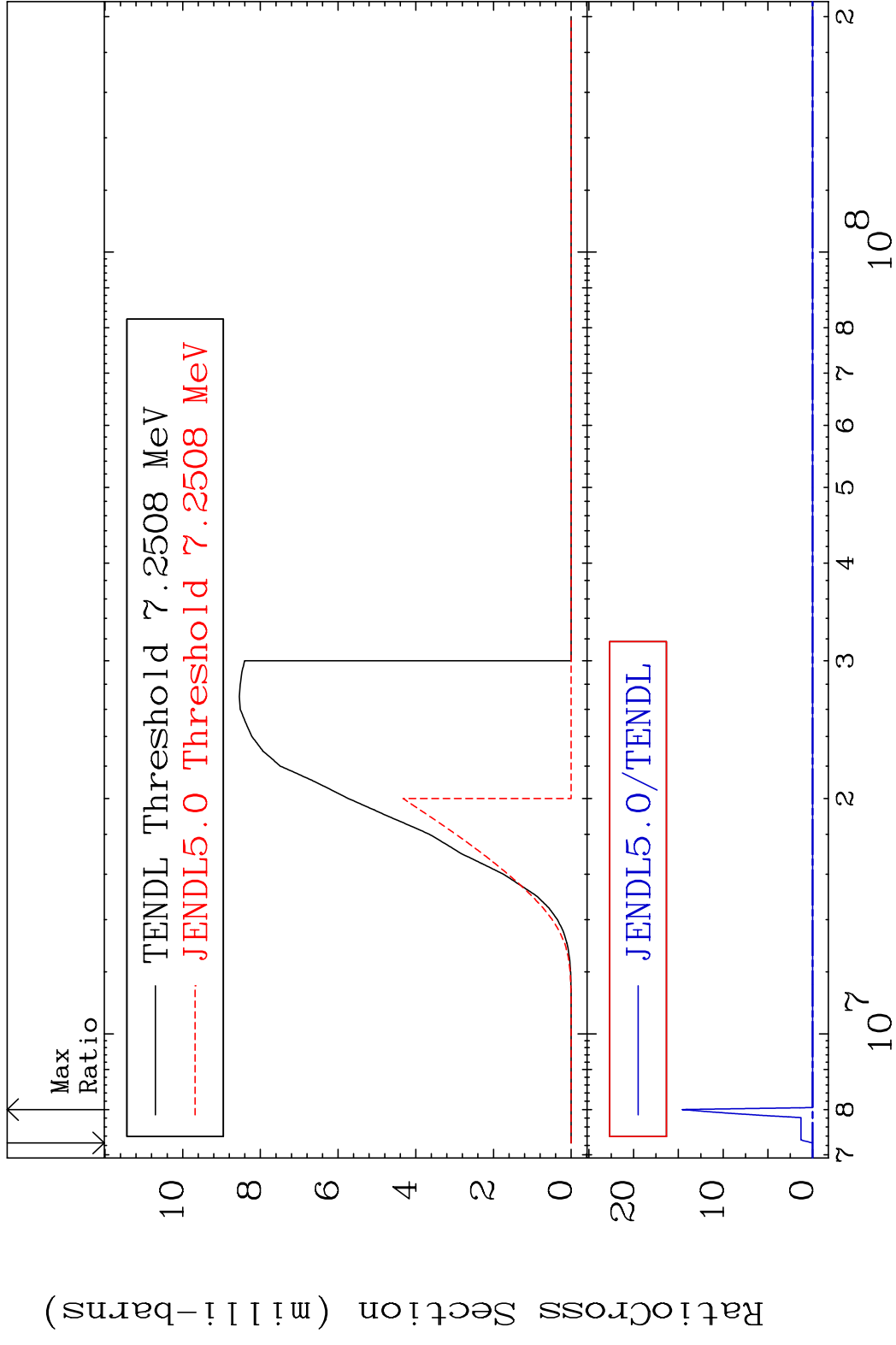
MAT 4031 (n, n') t:39-Y -89g 40-Zr-92
 Radionuclide Production Cross Section 180.0 dth 716.3 %



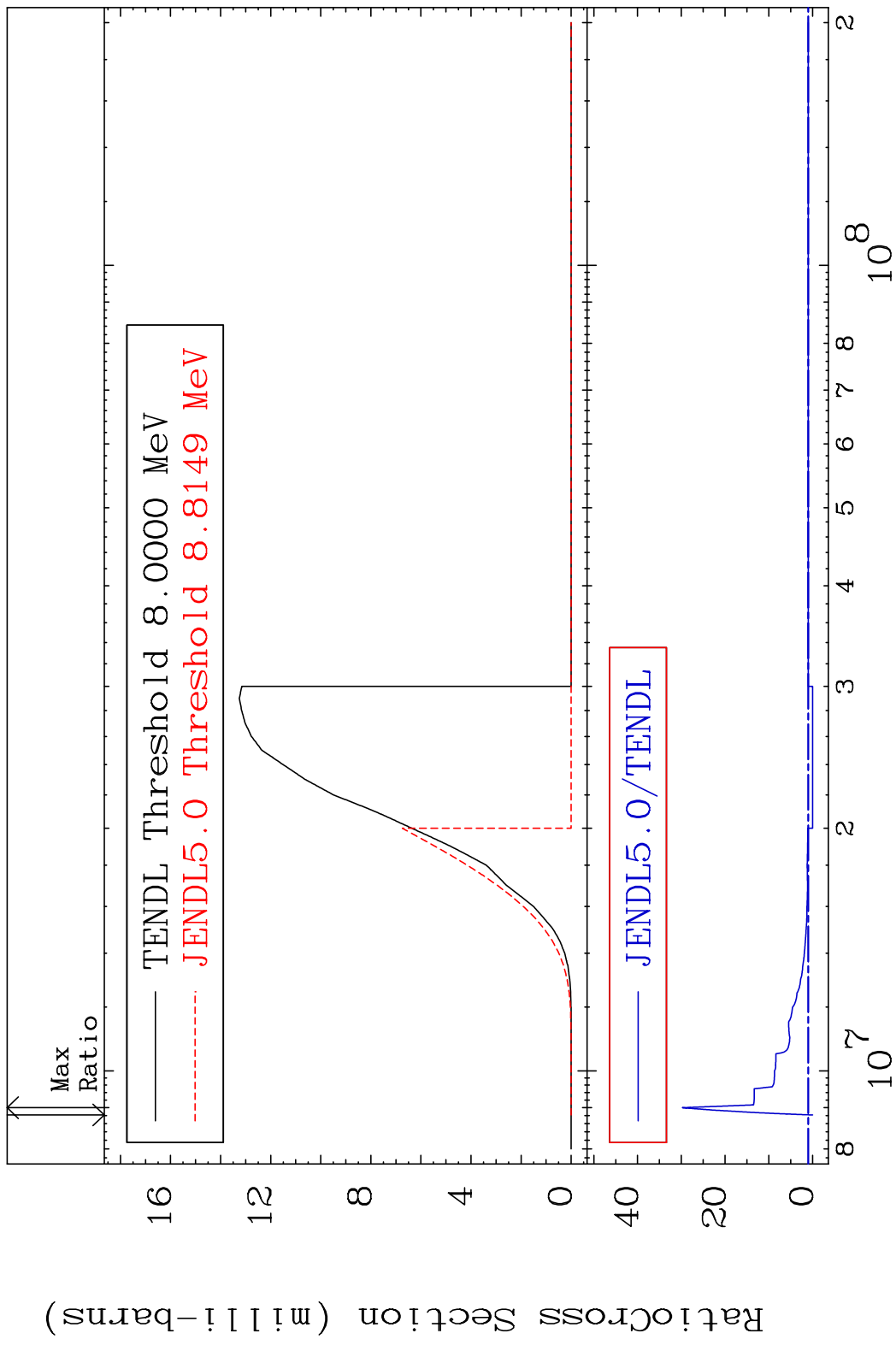
MAT 4031 (n, n') t:39-Y -89m1 40-Zr-92
 Radionuclide Production Cross Section 1800 dth 1735. %



MAT 4031 (n,d):39-Y -91g 40-Zr-92
 Radionuclide Production Cross Section 100.00 % 9999. %

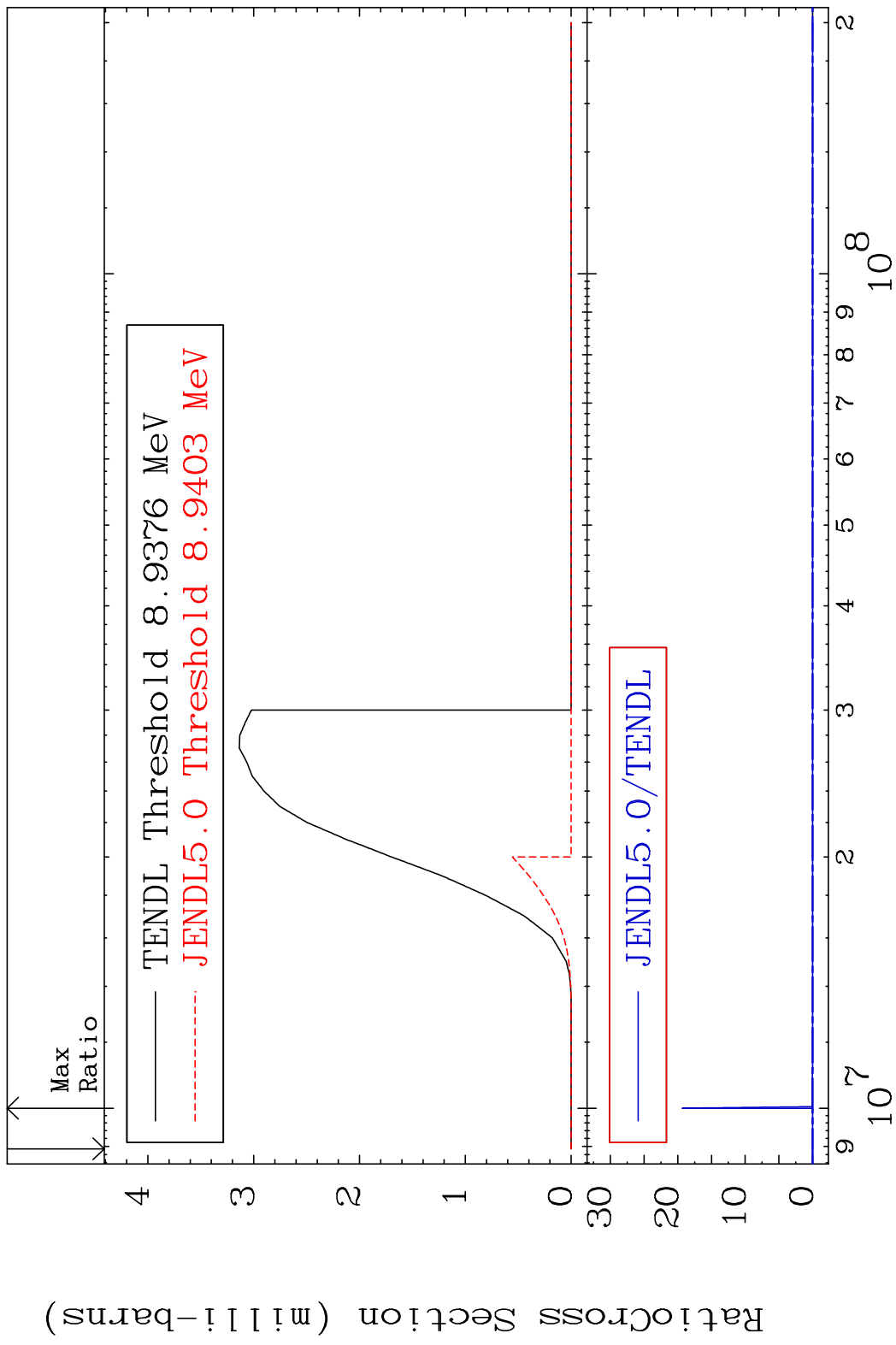


MAT 4031 (n,d):39-Y -91m1 40-Zr-92
 Radionuclide Production Cross Section 180.01 dth 2876. %



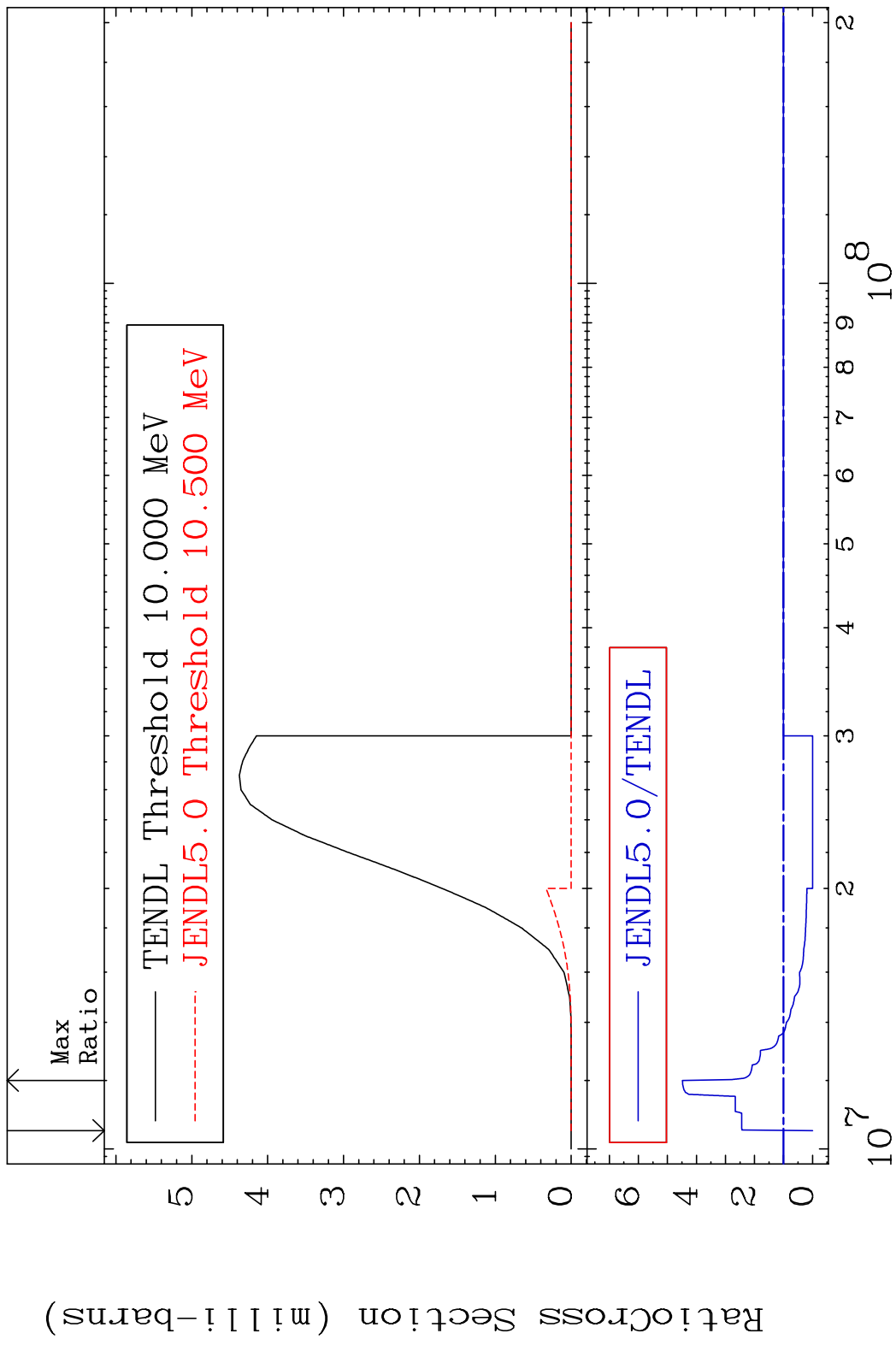
55 Incident Energy (eV) 40-Zr-92

MAT 4031 (n, t):39-Y -90g 40-Zr-92
 Radionuclide Production Cross Section Ratio 9999. %



56 Incident Energy (eV) 40-Zr-92

MAT 4031 (n, t):39-Y -90m2 40-Zr-92
 Radionuclide Production Cross Section 180.0 mb 348.5 %



57 40-Zr-92