

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

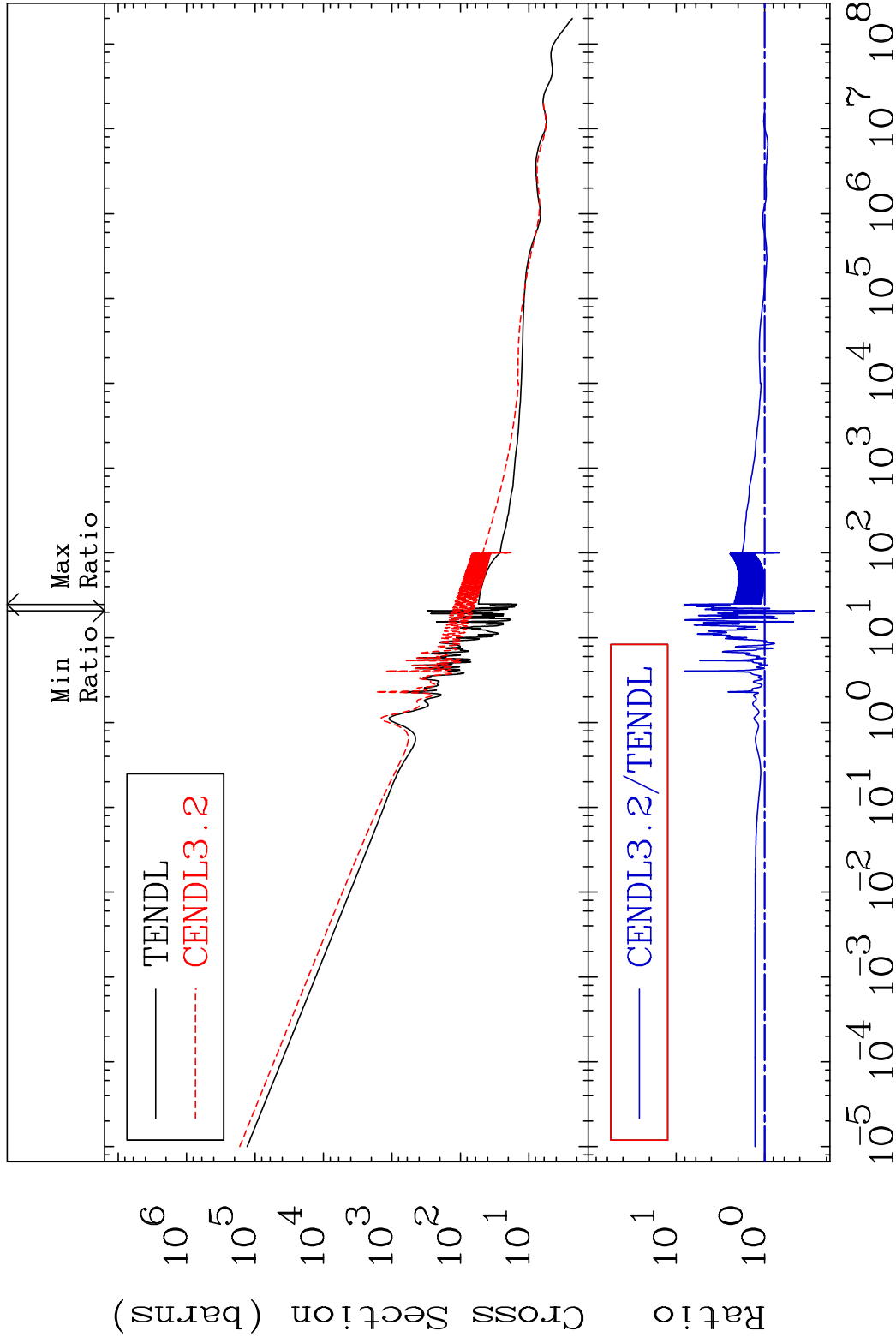
Press Mouse Button to Start

MAT 9349

Total

93-Np-238

Cross Section -72.41 To 722.7 %



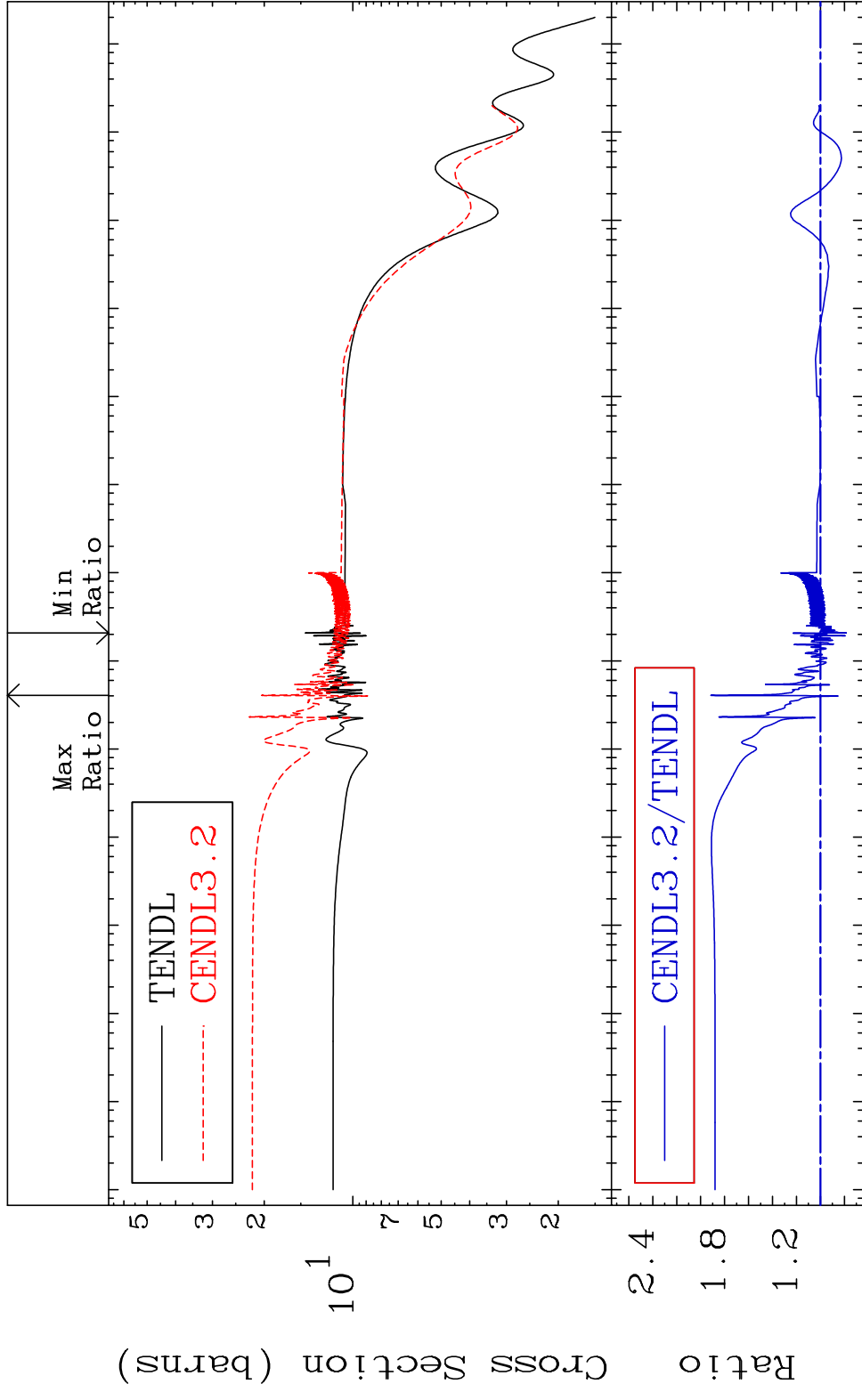
93-Np-238

MAT 9349

93-Np-238

Elastic

Cross Section -21.60 To 91.59 %



2

Incident Energy (eV)

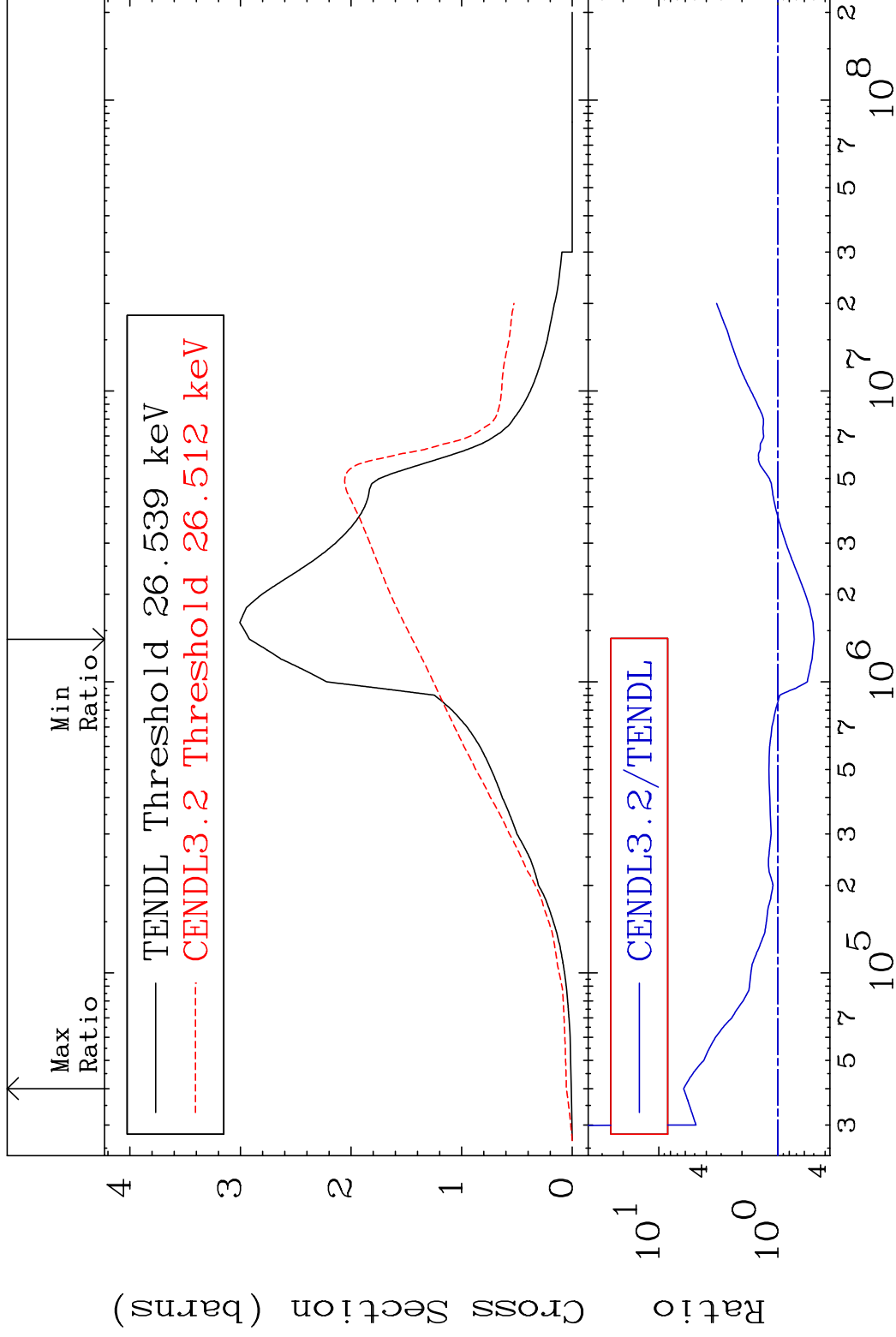
93-Np-238

MAT 9349

Inelastic

93-Np-238

Cross Section -50.45 To 519.0 %



3

Incident Energy (eV)

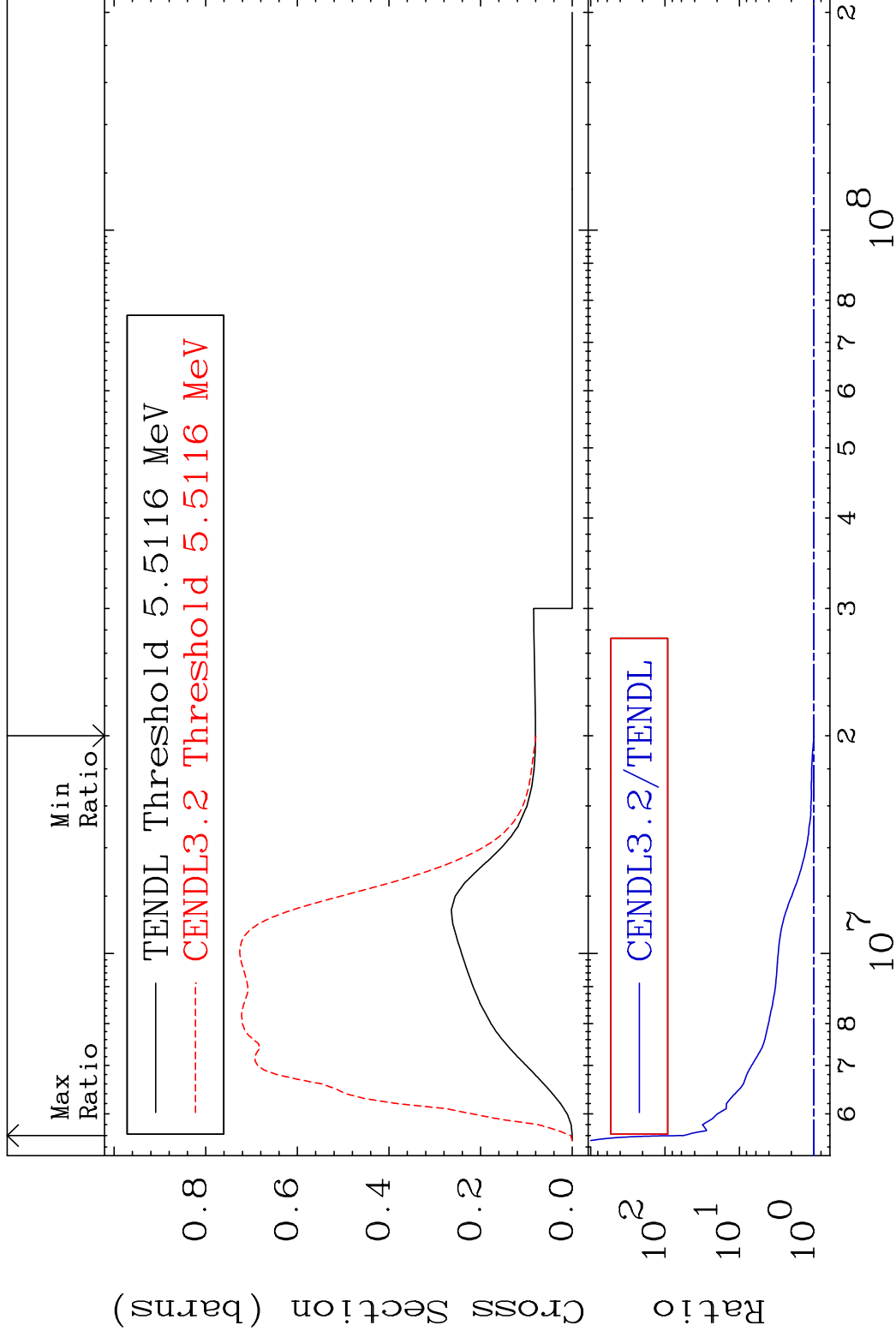
93-Np-238

MAT 9349

(n,2n)

93-Np-238

Cross Section -1.252 To 5512. %



4

Incident Energy (eV)

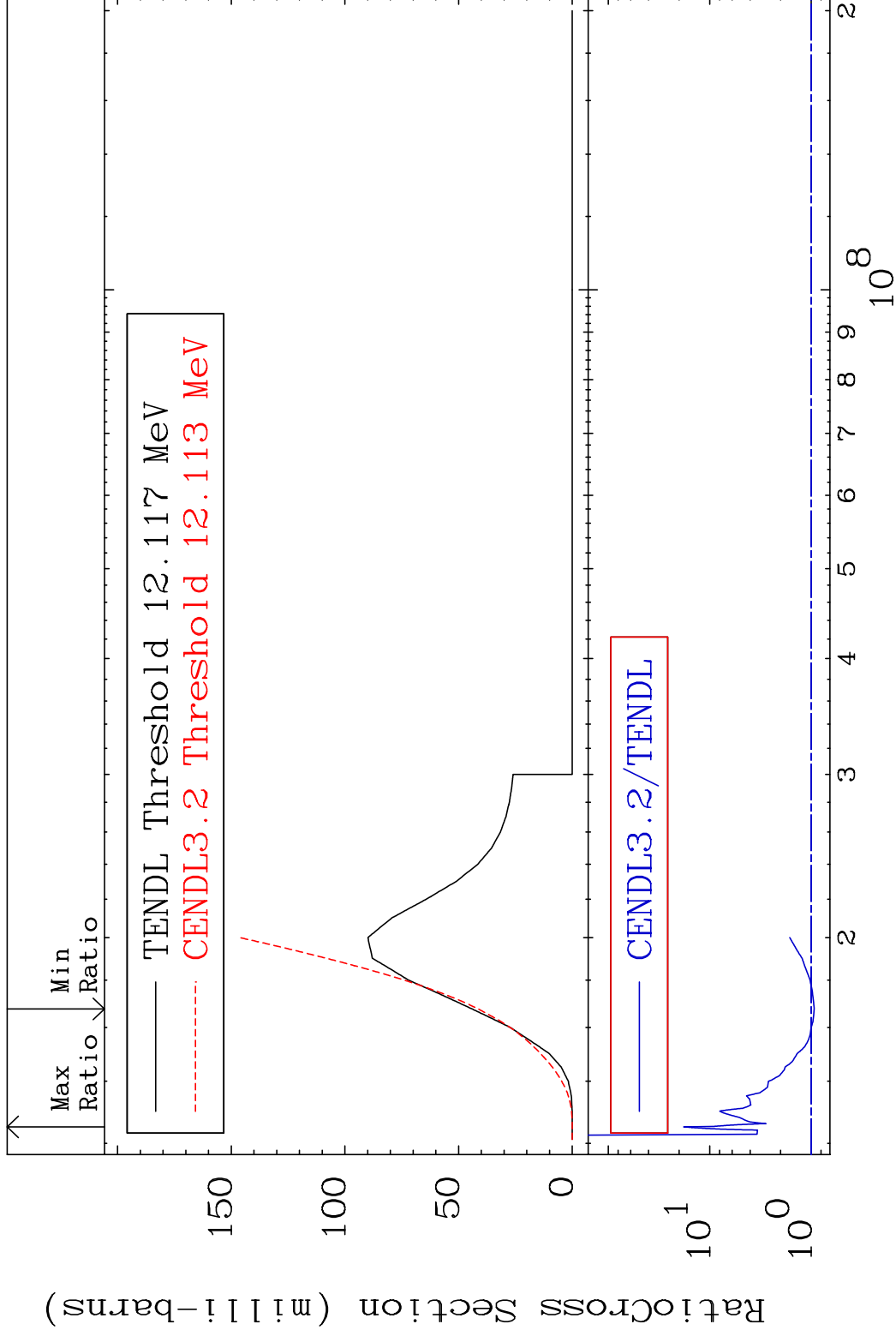
93-Np-238

MAT 9349

(n,3n)

93-Np-238

Cross Section -6.291 To 1706. %



5

Incident Energy (eV)

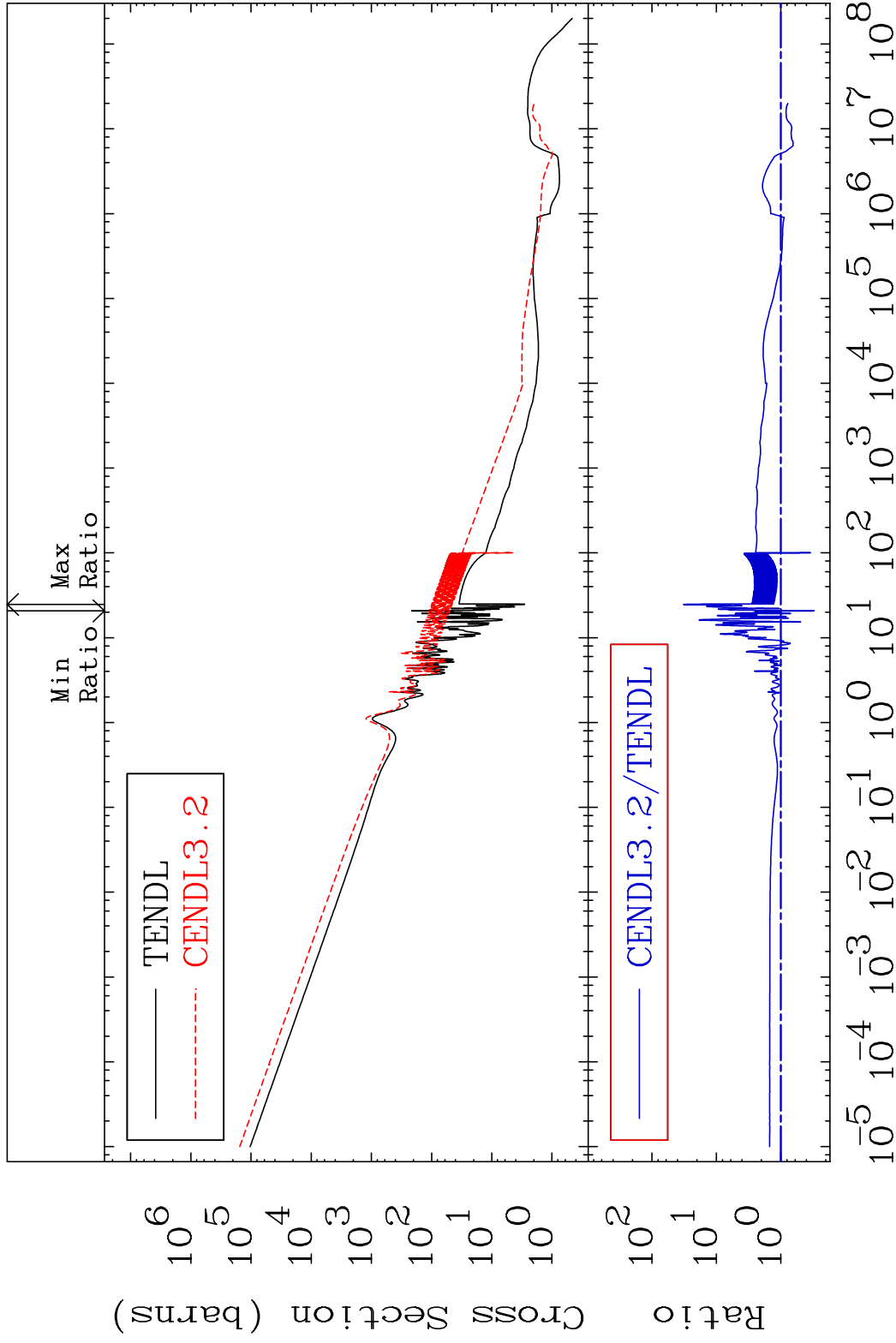
93-Np-238

MAT 9349

Fission

93-Np-238

Cross Section -69.54 To 3117. %

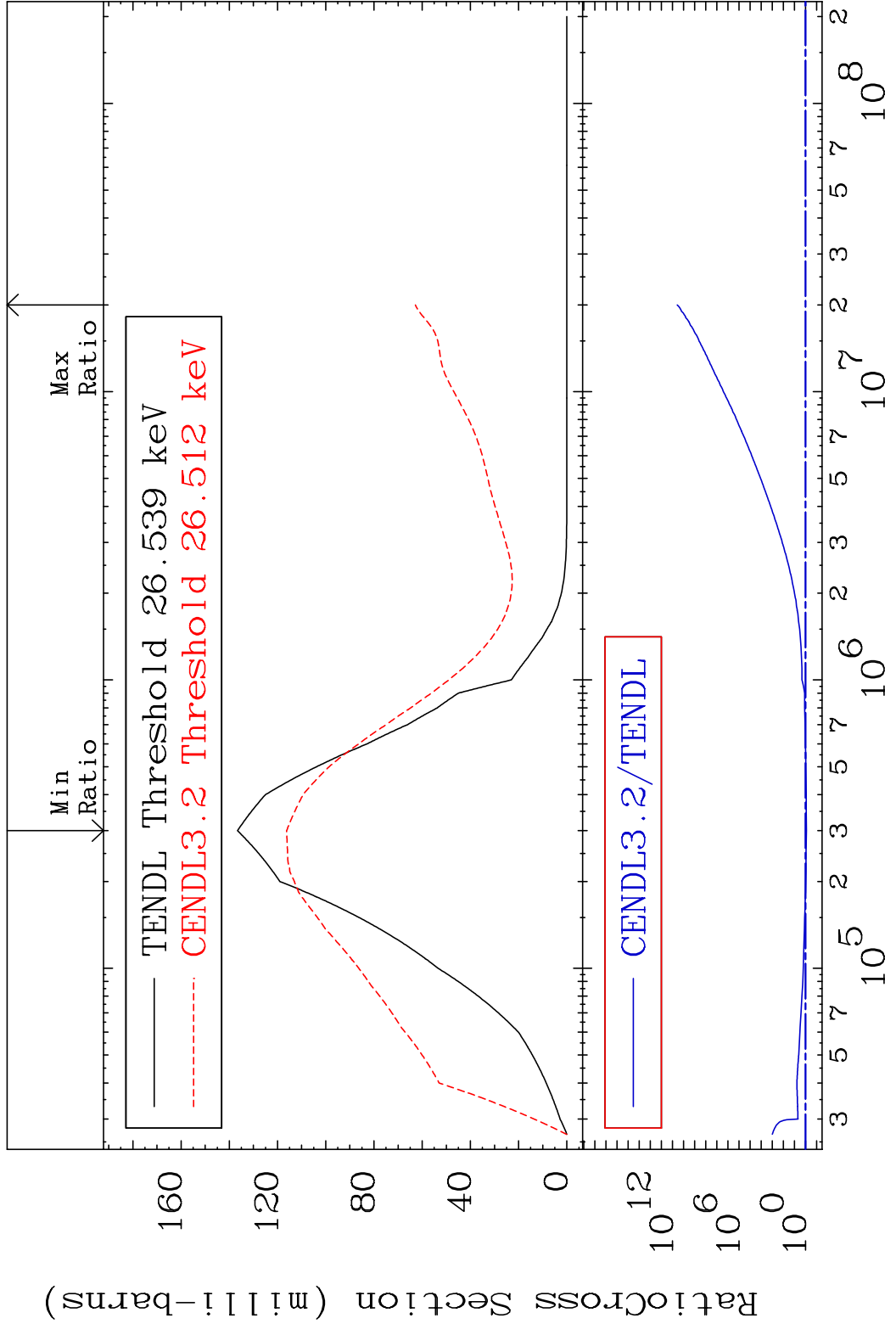


6

Incident Energy (eV)

93-Np-238

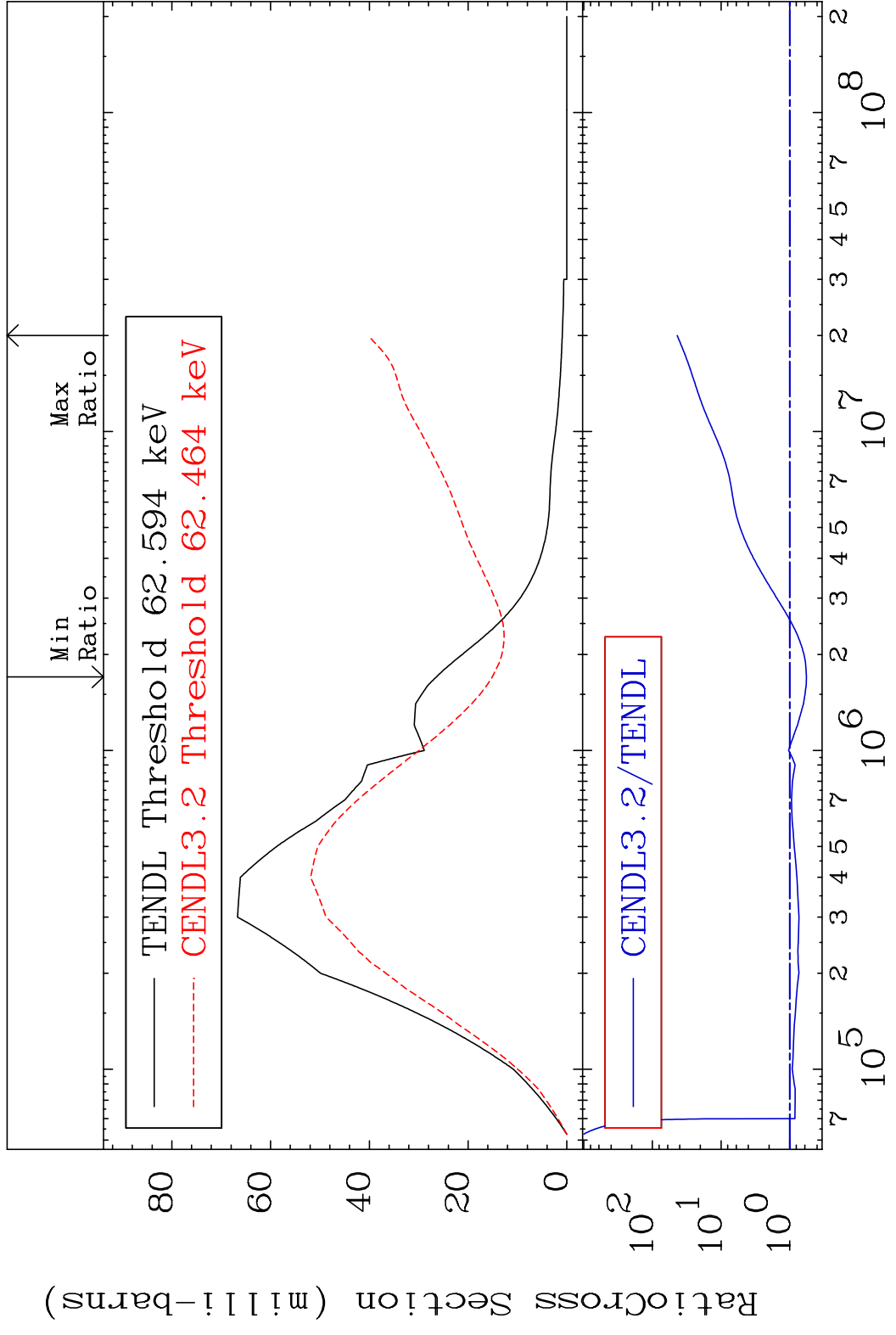
MAT 9349 MT= 51 (n, n') Level 93-Np-238  
 Cross Section -14.90 To 9999. %



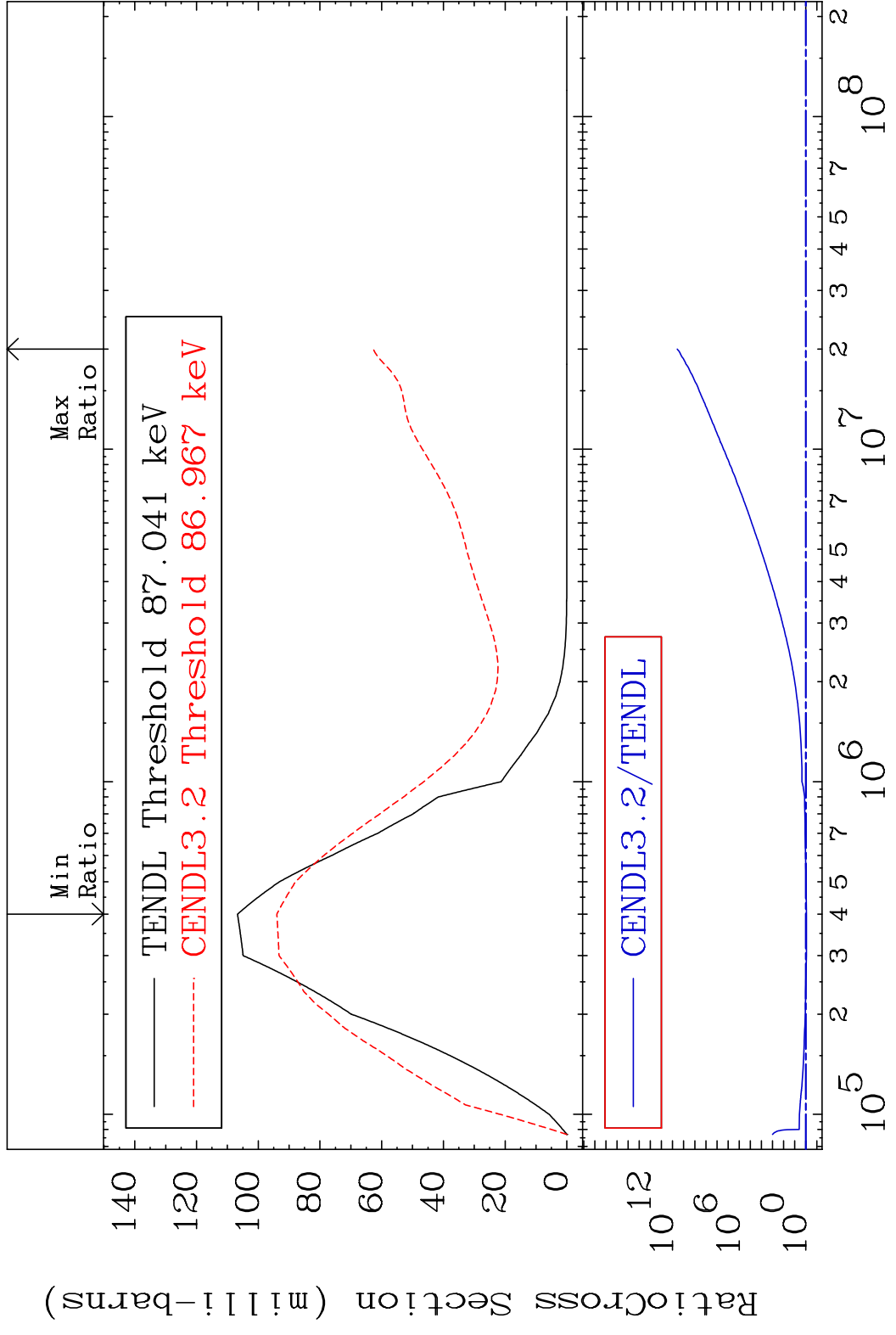
7 Incident Energy (eV) 93-Np-238



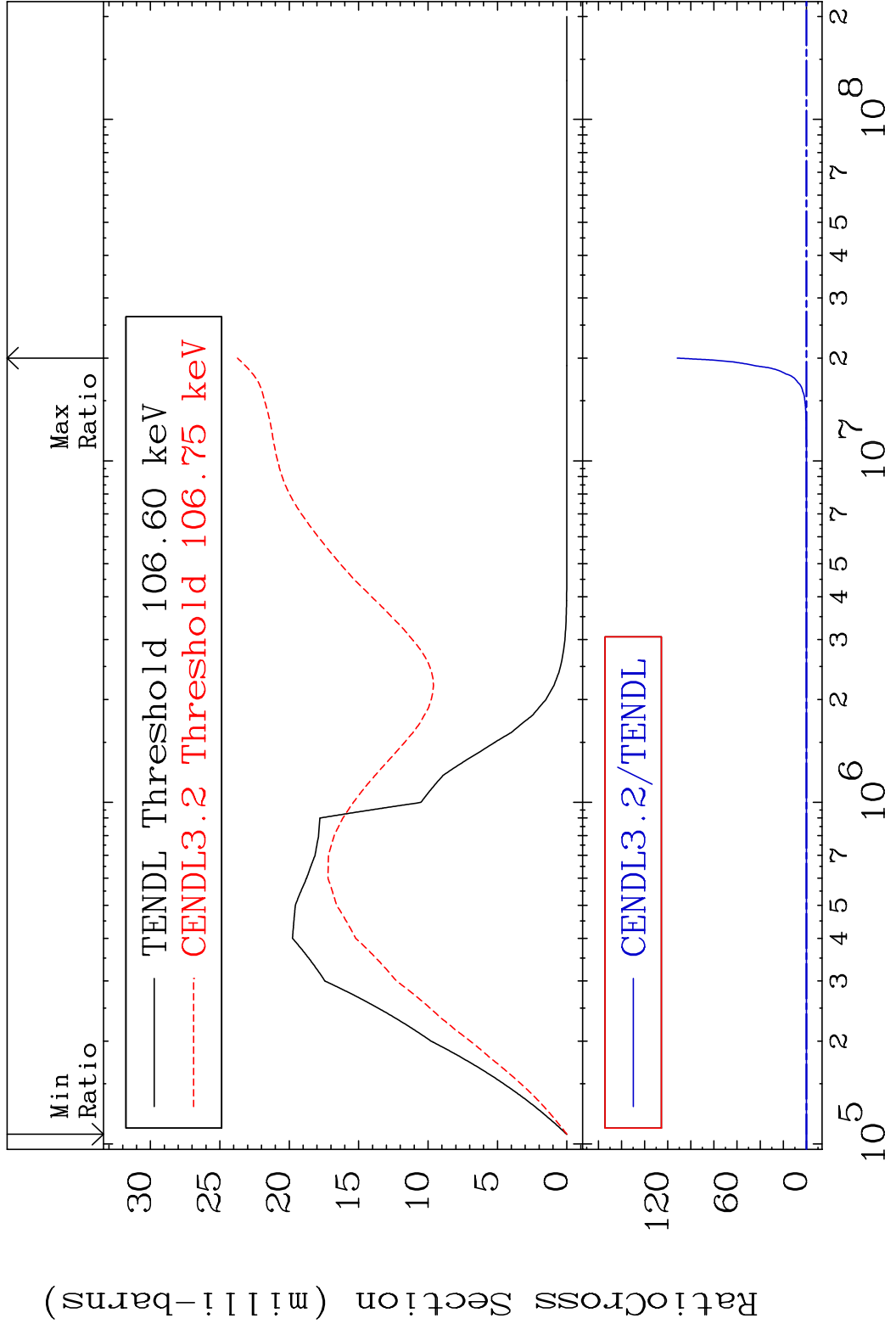
MAT 9349 MT= 52 (n, n') Level 93-Np-238  
 Cross Section -42.91 To 4256. %



MAT 9349 MT= 53 (n, n') Level 93-Np-238  
 Cross Section -11.94 To 9999. %

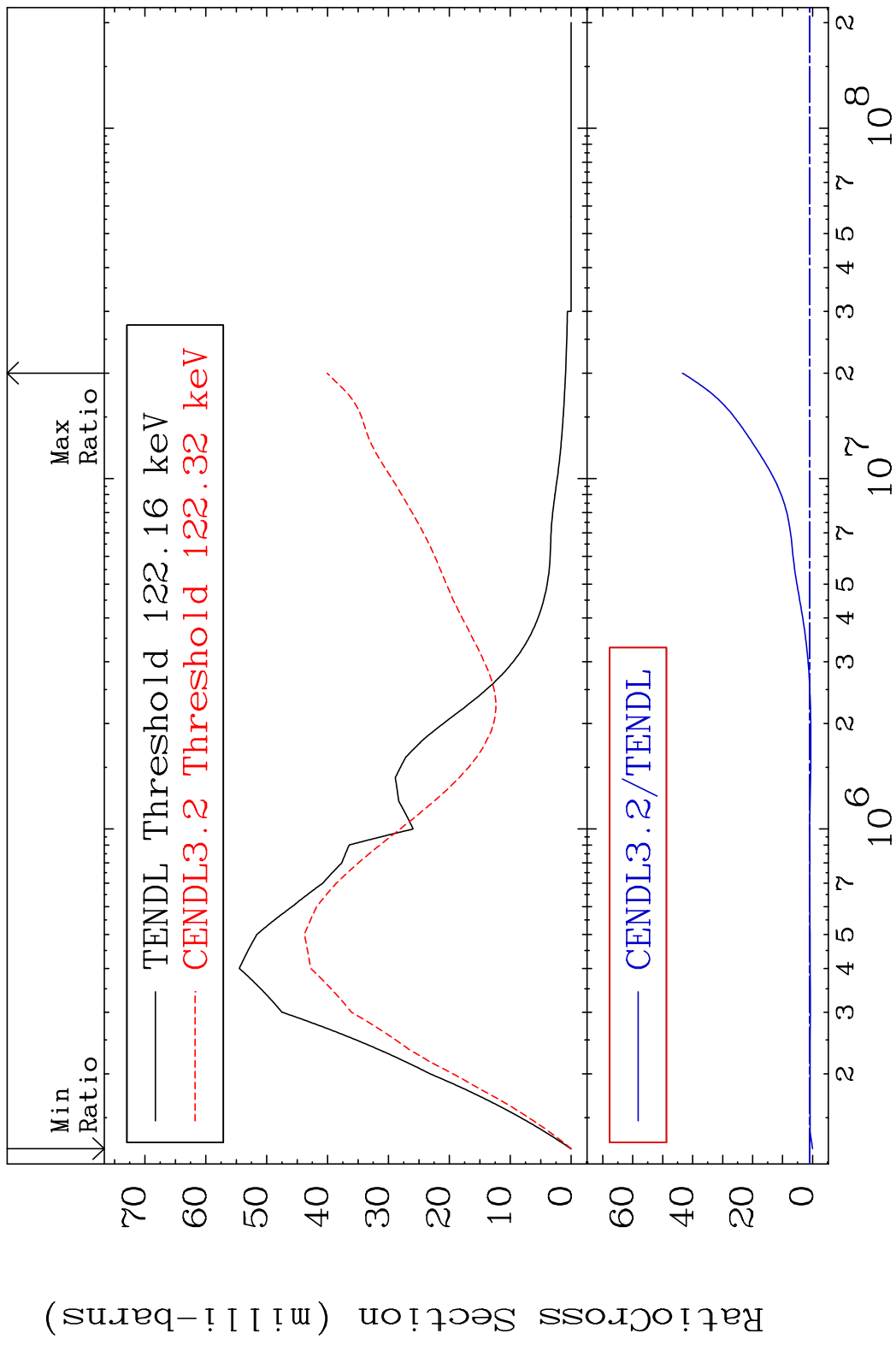


MAT 9349 MT= 54 (n, n') Level 93-Np-238  
 Cross Section -100.0 To 9999. %

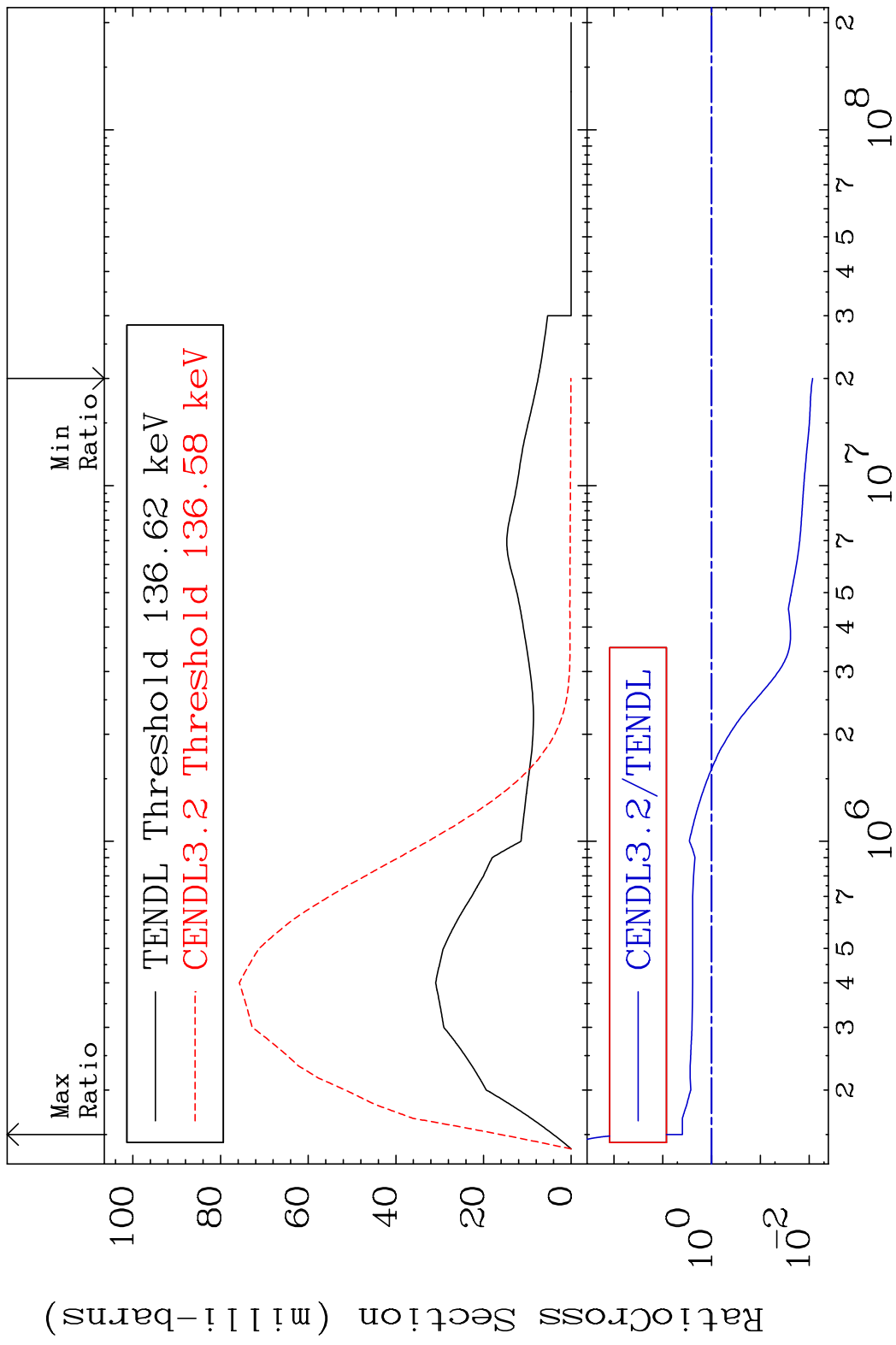


10 120 60 0 2 3 4 5 6 7 8 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup> 93-Np-238

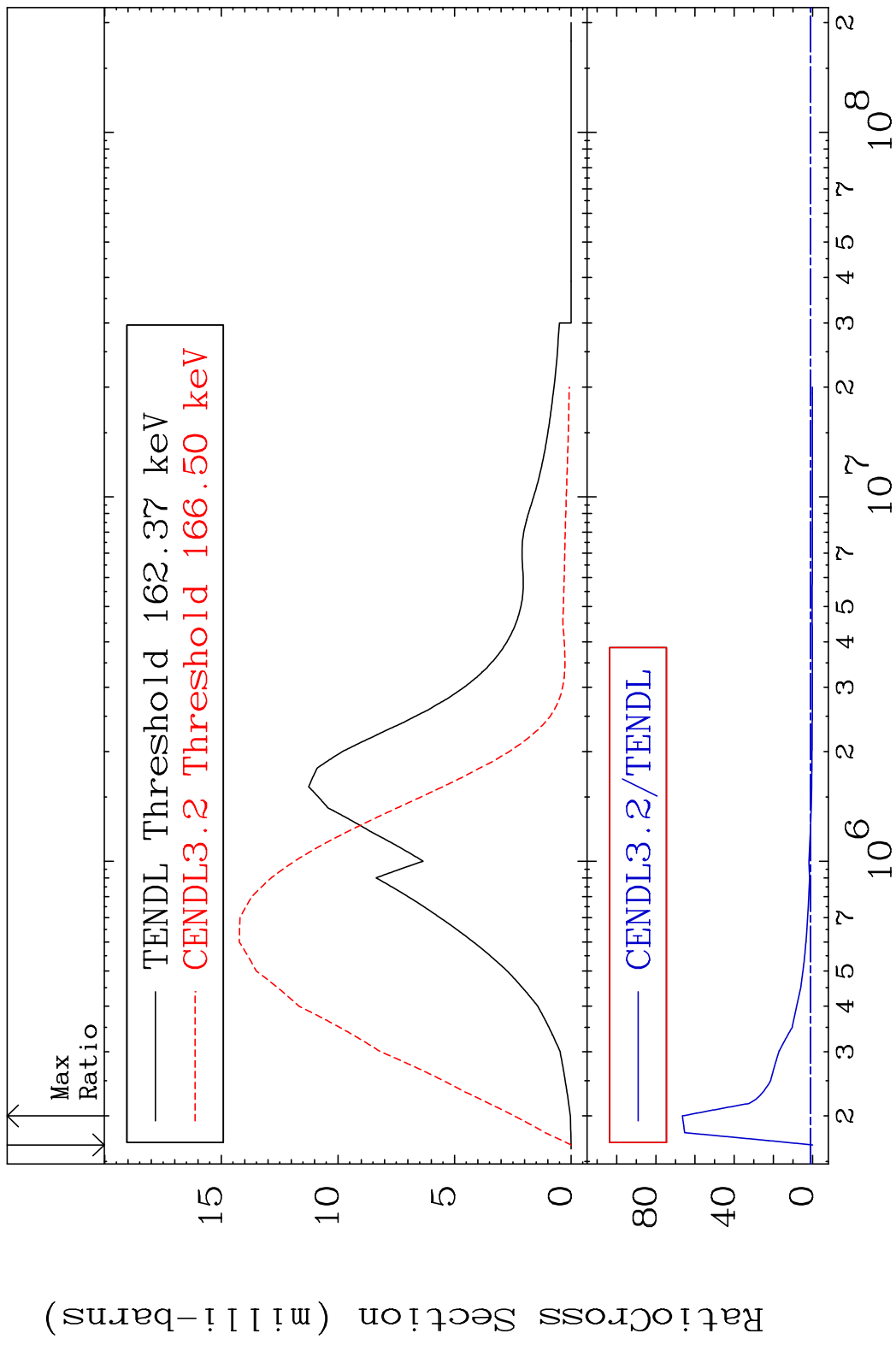
MAT 9349 MT= 55 (n, n') Level 93-Np-238  
 Cross Section -100.0 To 4244. %



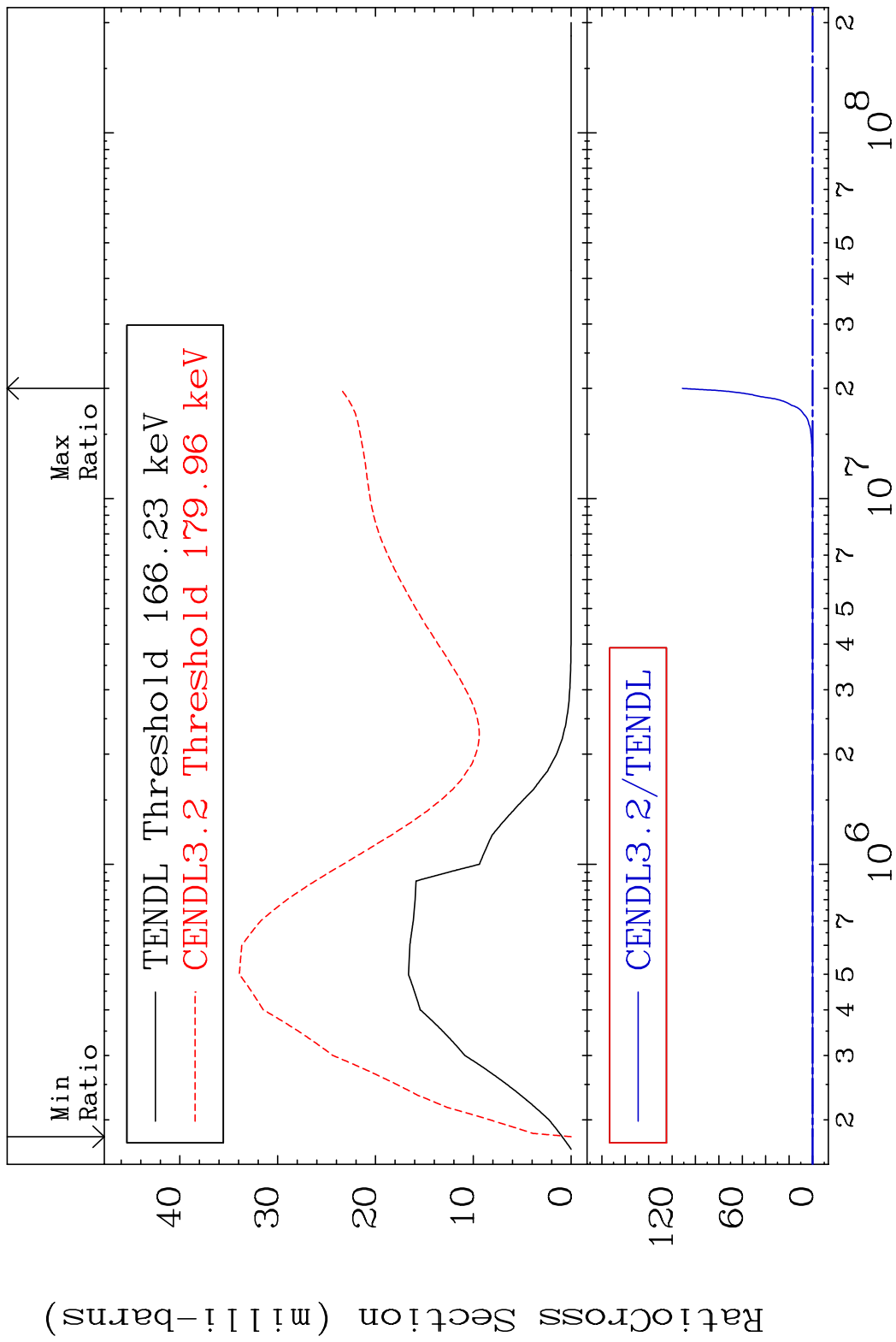
MAT 9349 MT= 56 (n, n') Level 93-Np-238  
 Cross Section -99.15 To 296.2 %



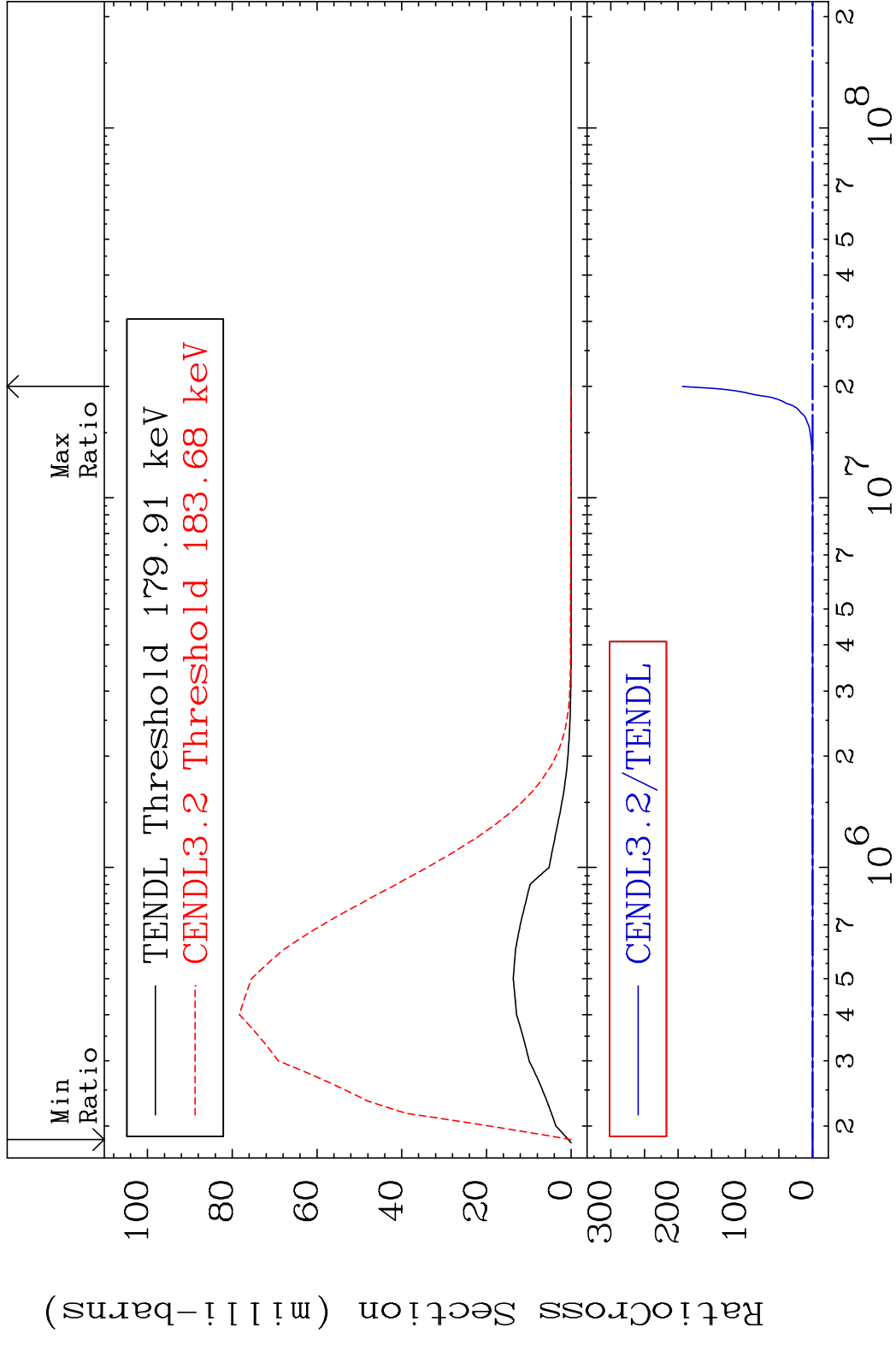
MAT 9349 MT= 57 (n, n') Level 93-Np-238  
 Cross Section -100.0 To 6547. %



MAT 9349 MT= 58 (n, n') Level 93-Np-238  
 Cross Section -100.0 To 9999. %

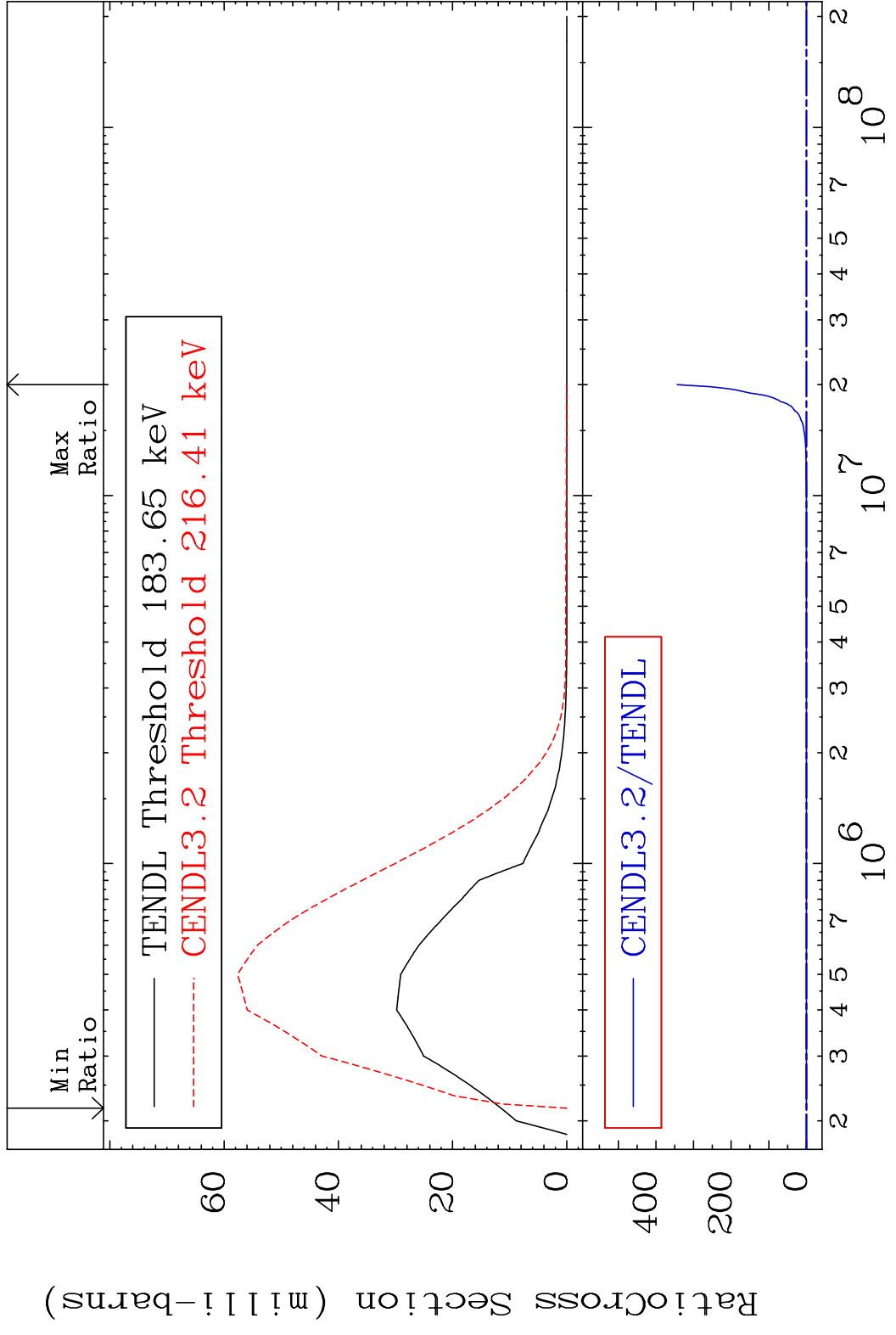


MAT 9349 MT= 59 (n, n') Level 93-Np-238  
 Cross Section -100.0 To 9999. %

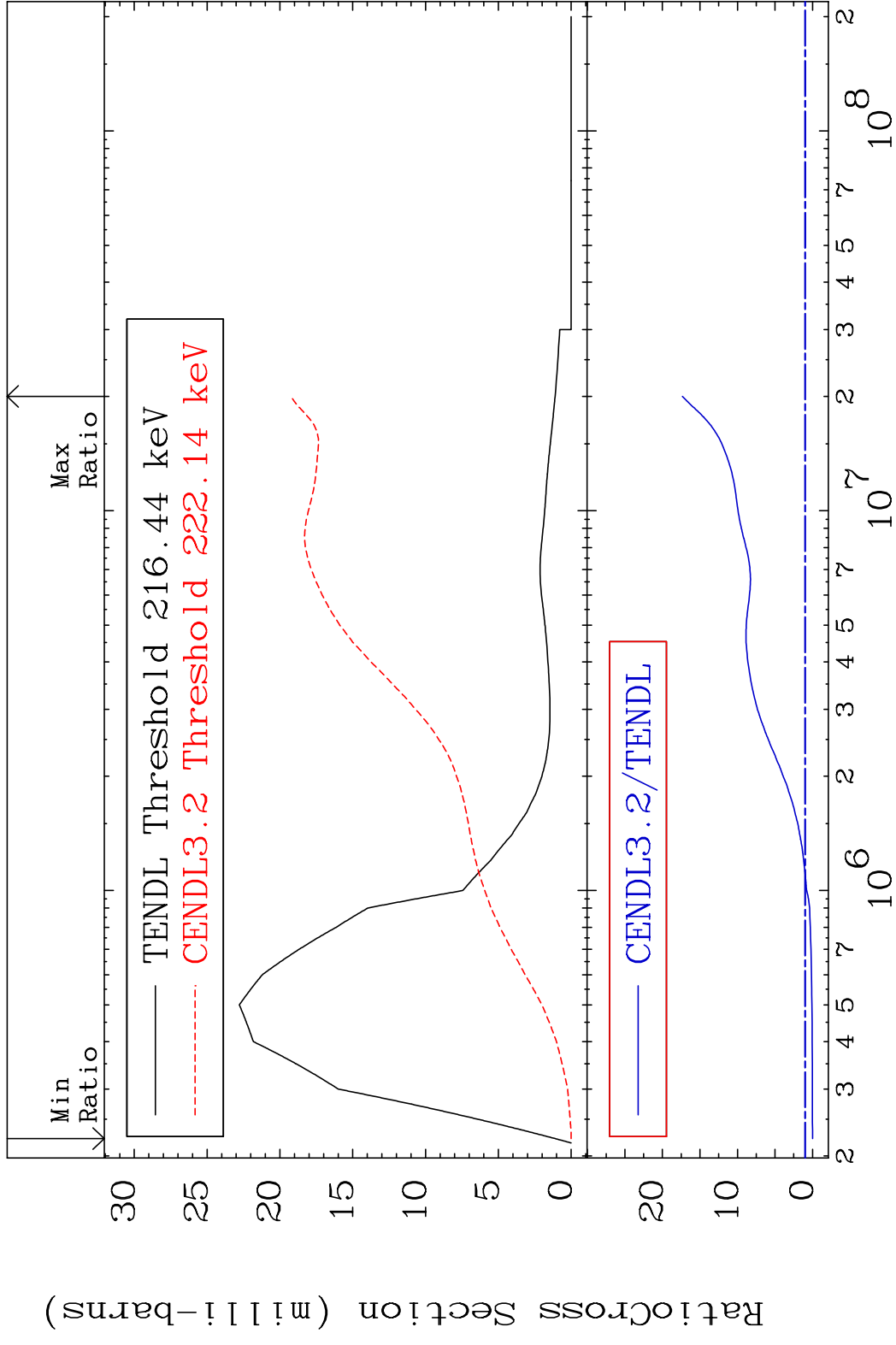




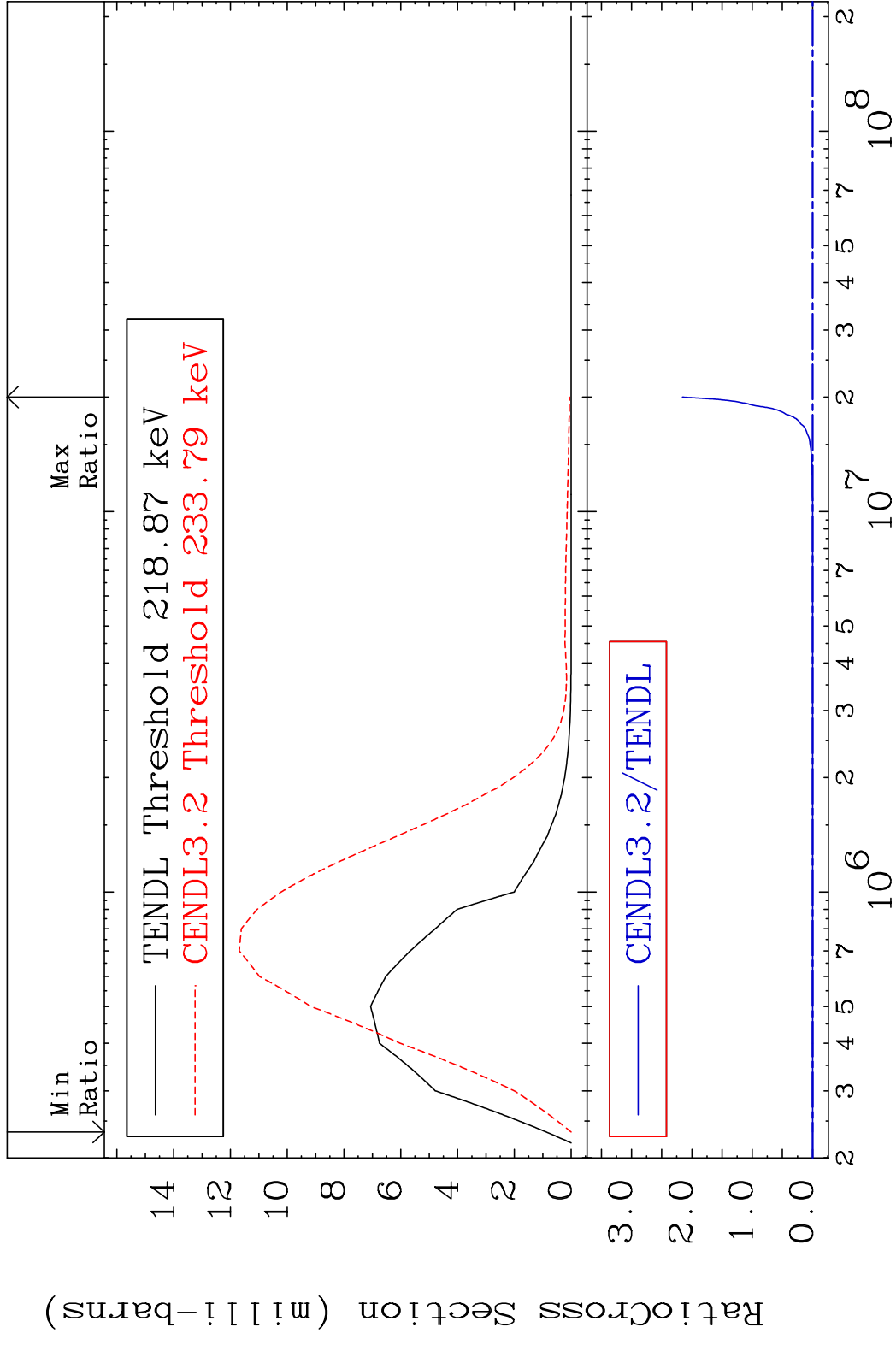
MAT 9349 MT= 60 (n, n') Level 93-Np-238  
 Cross Section -100.0 To 9999. %



MAT 9349 MT= 61 (n, n') Level 93-Np-238  
 Cross Section -100.0 To 1635. %



MAT 9349 MT= 62 (n, n') Level 93-Np-238  
 Cross Section -100.0 To 9999. %

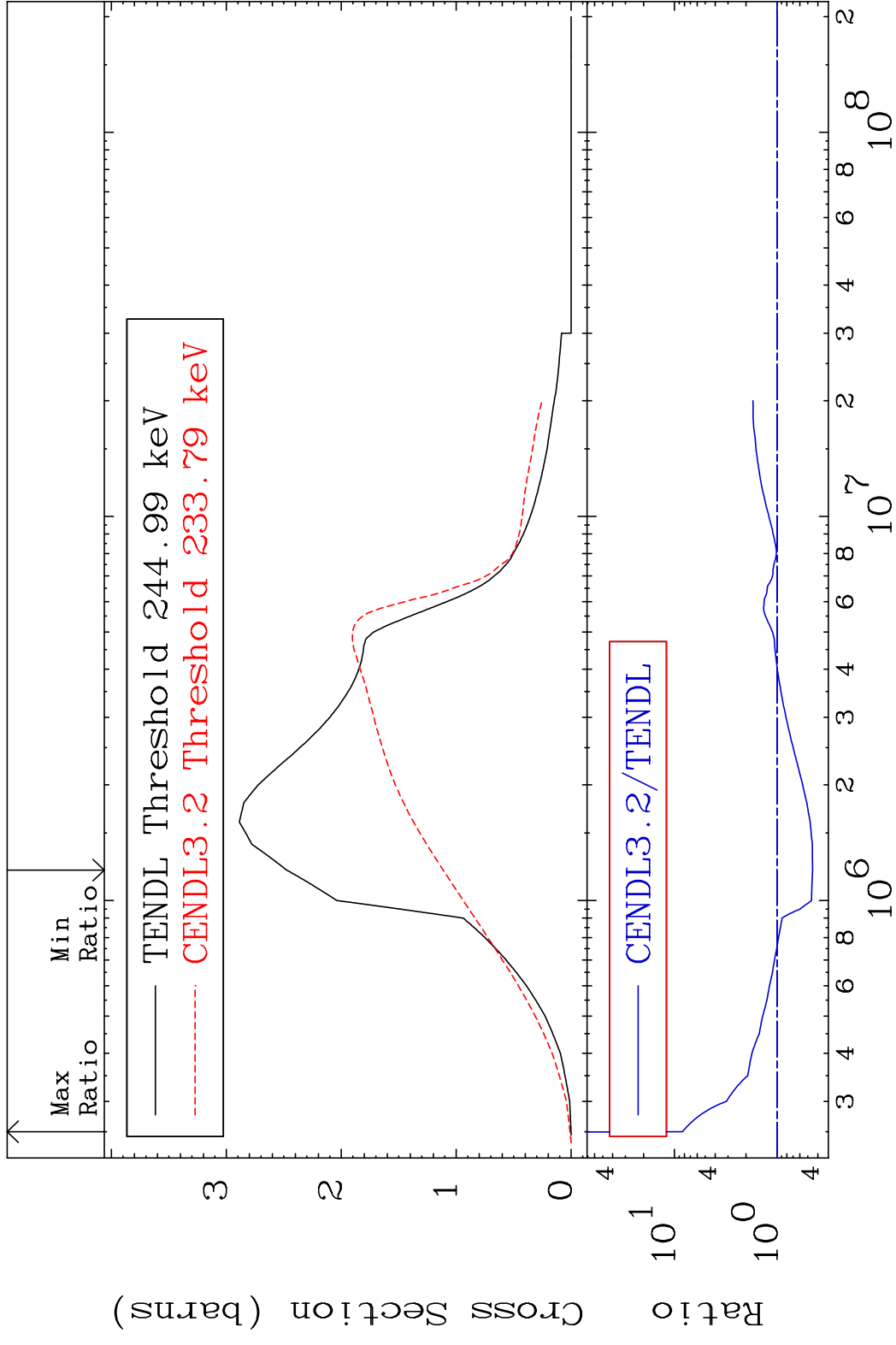


MAT 9349

(n, n') Continuum

93-Np-238

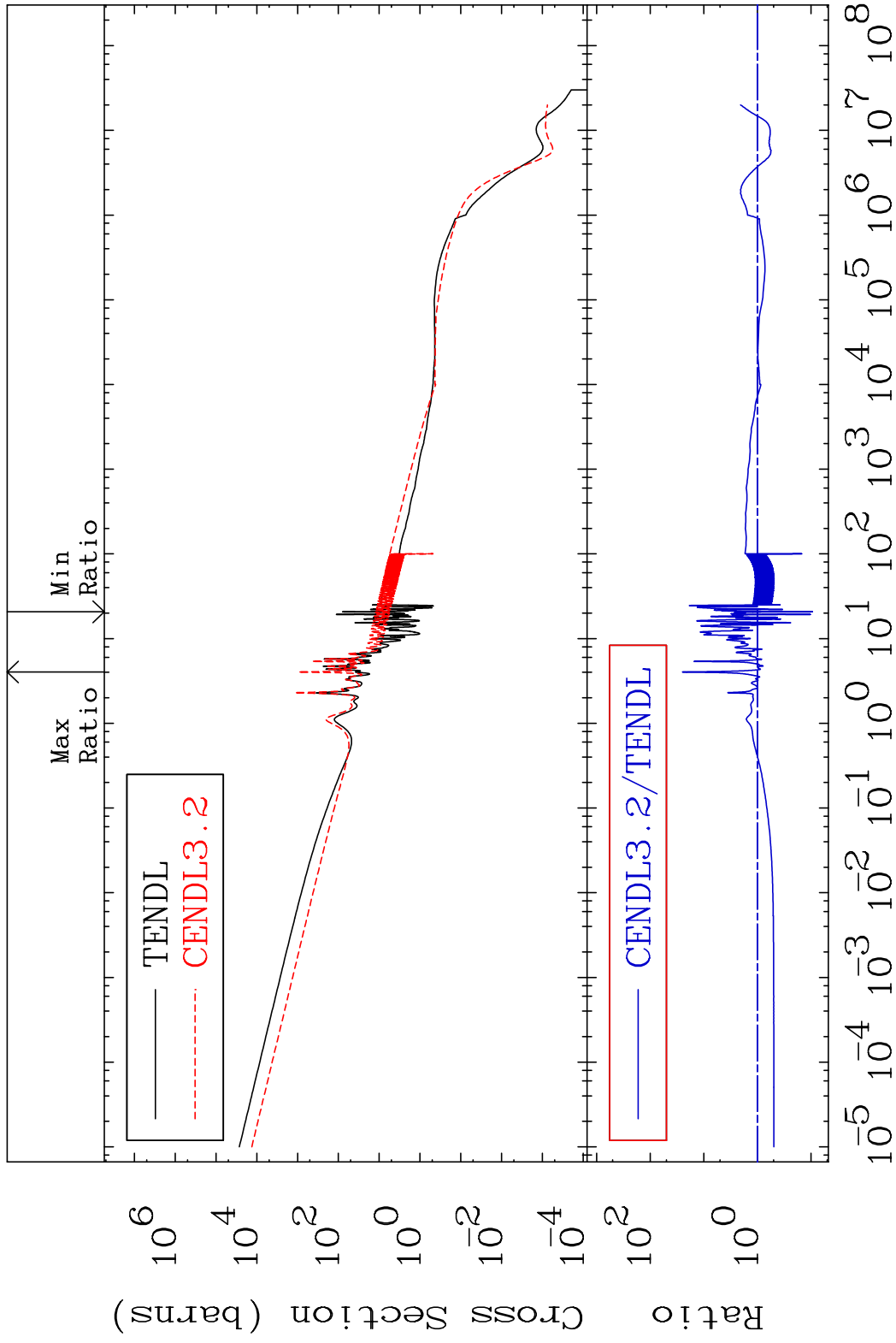
Cross Section -54.97 To 736.7 %



MAT 9349

(n,  $\gamma$ )  
Cross Section -90.65 To 2411. %

93-Np-238



20

Incident Energy (eV)

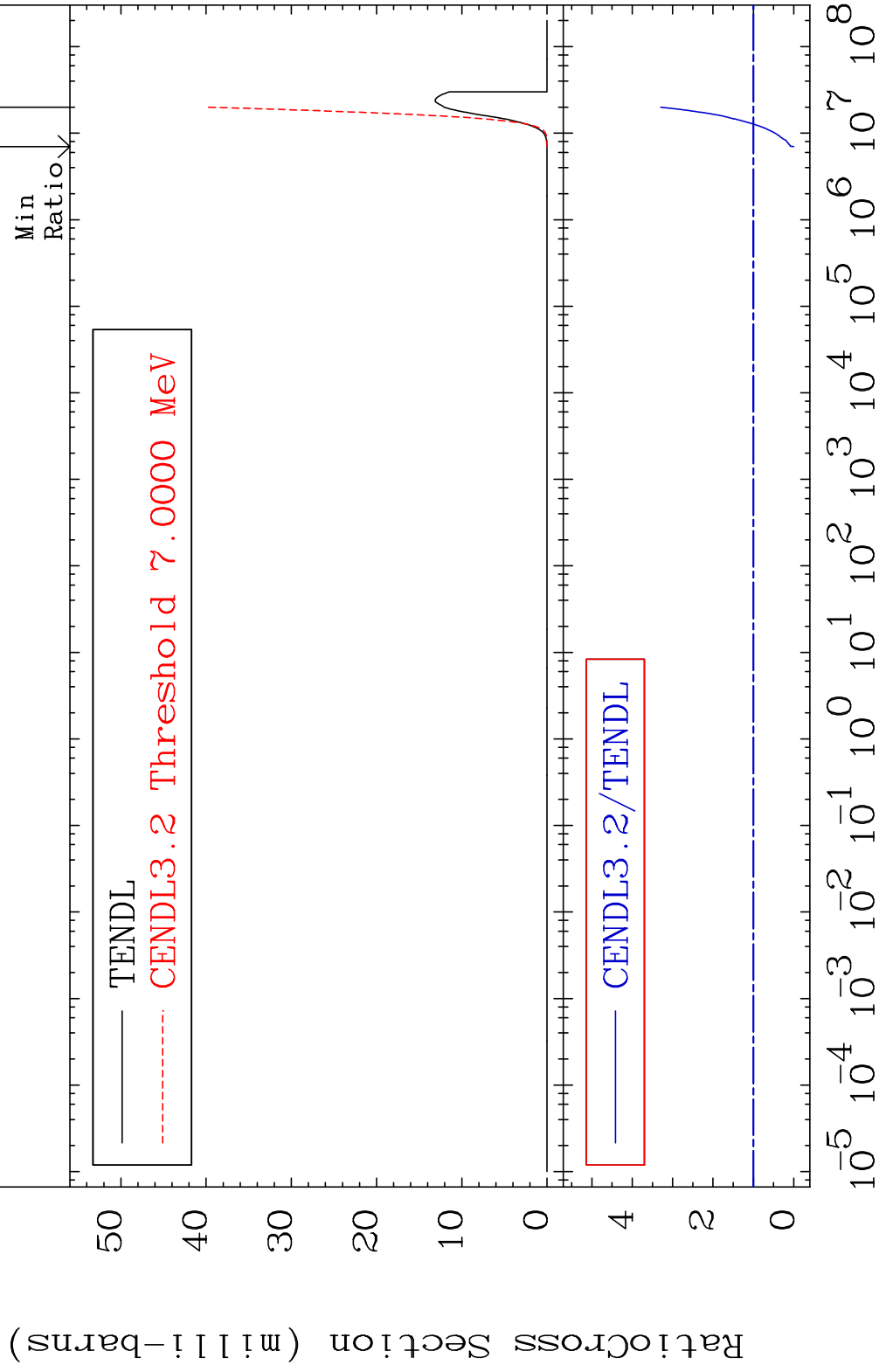
93-Np-238

MAT 9349

(n, p)

93-Np-238

Cross Section -100.0 To 229.6 %



21

Incident Energy (eV)

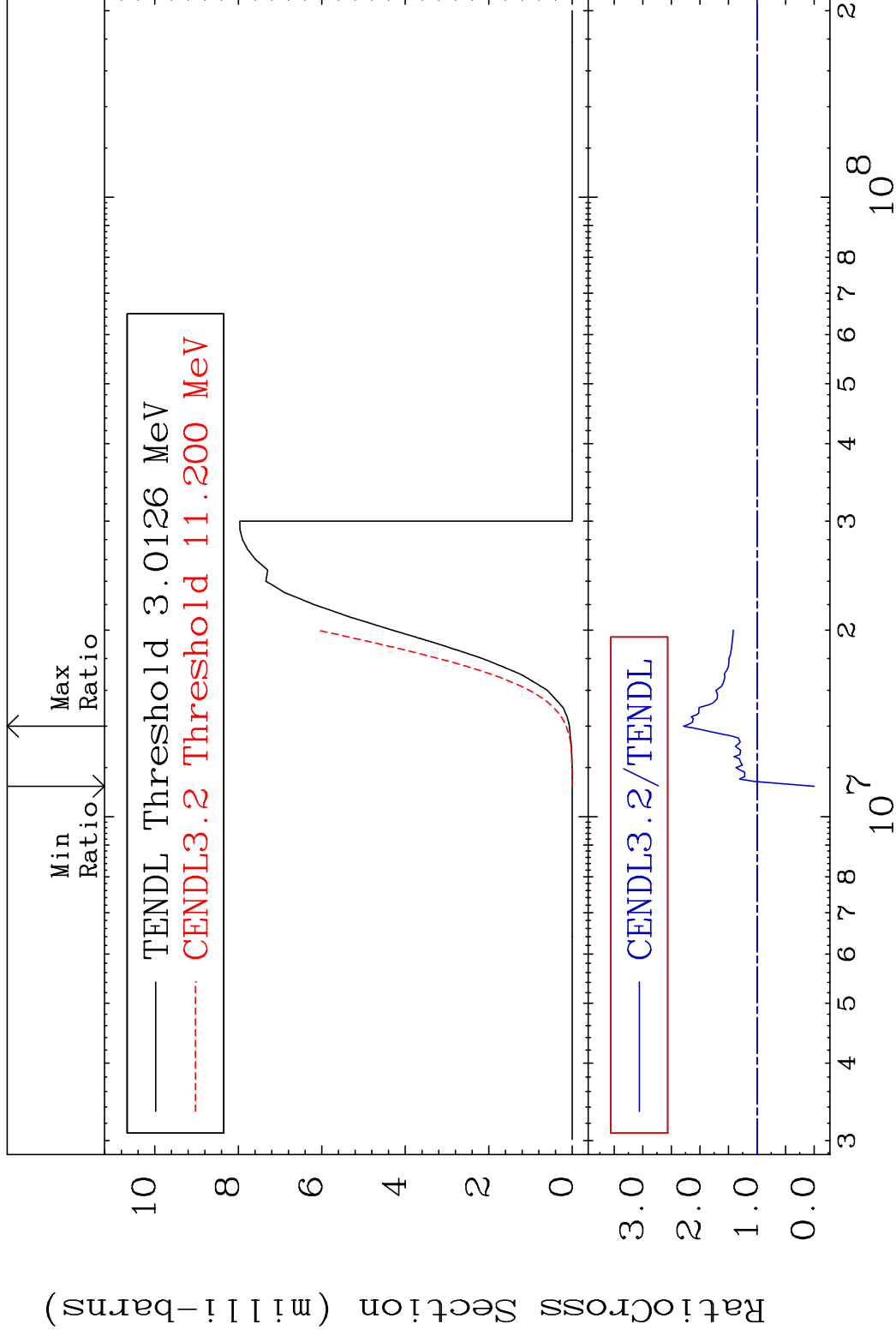
93-Np-238

MAT 9349

(n, d)

93-Np-238

Cross Section -100.0 To 128.3 %



22

Incident Energy (eV)

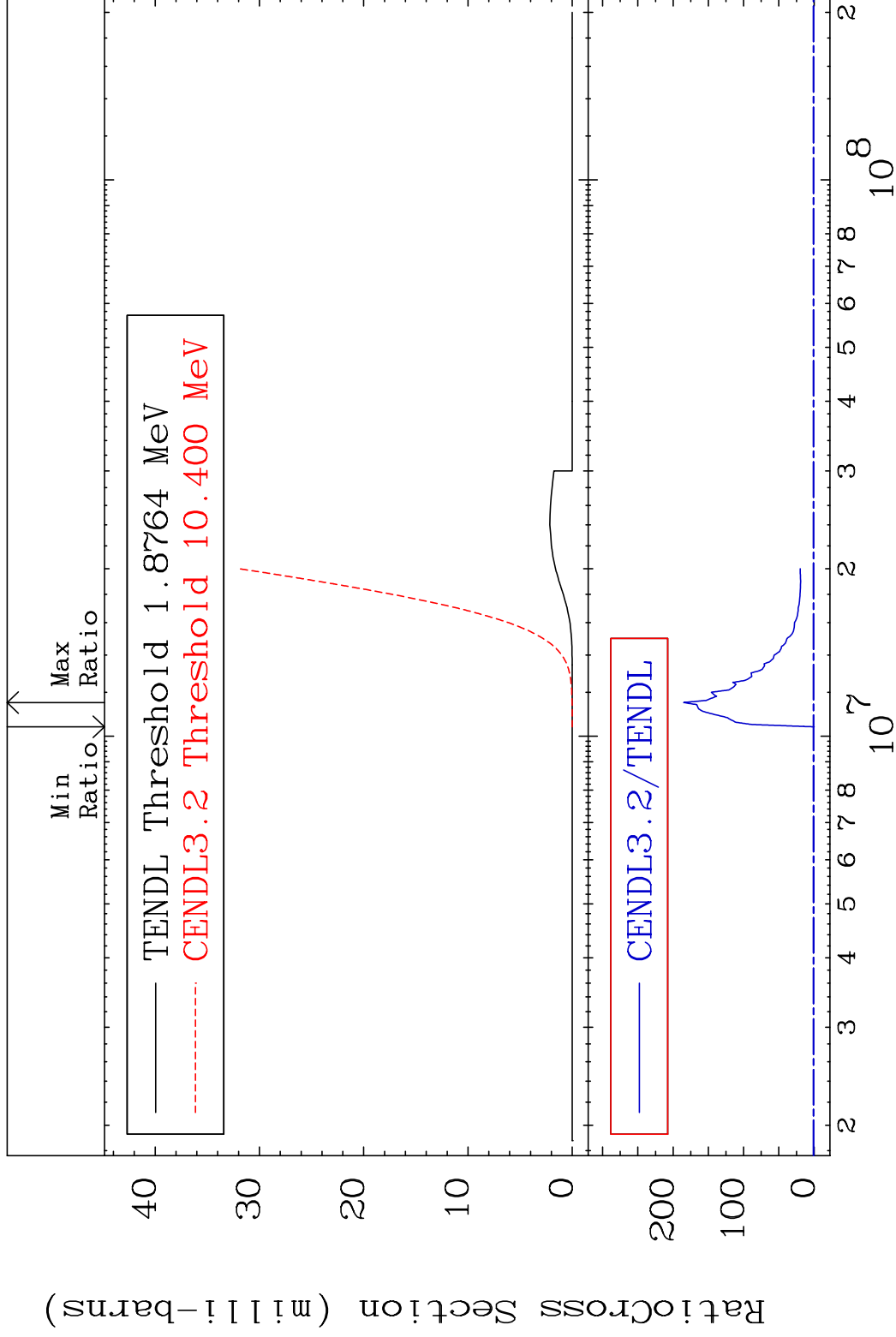
93-Np-238

MAT 9349

(n, t)

93-Np-238

Cross Section -100.0 To 9999. %



23

Incident Energy (eV)

93-Np-238

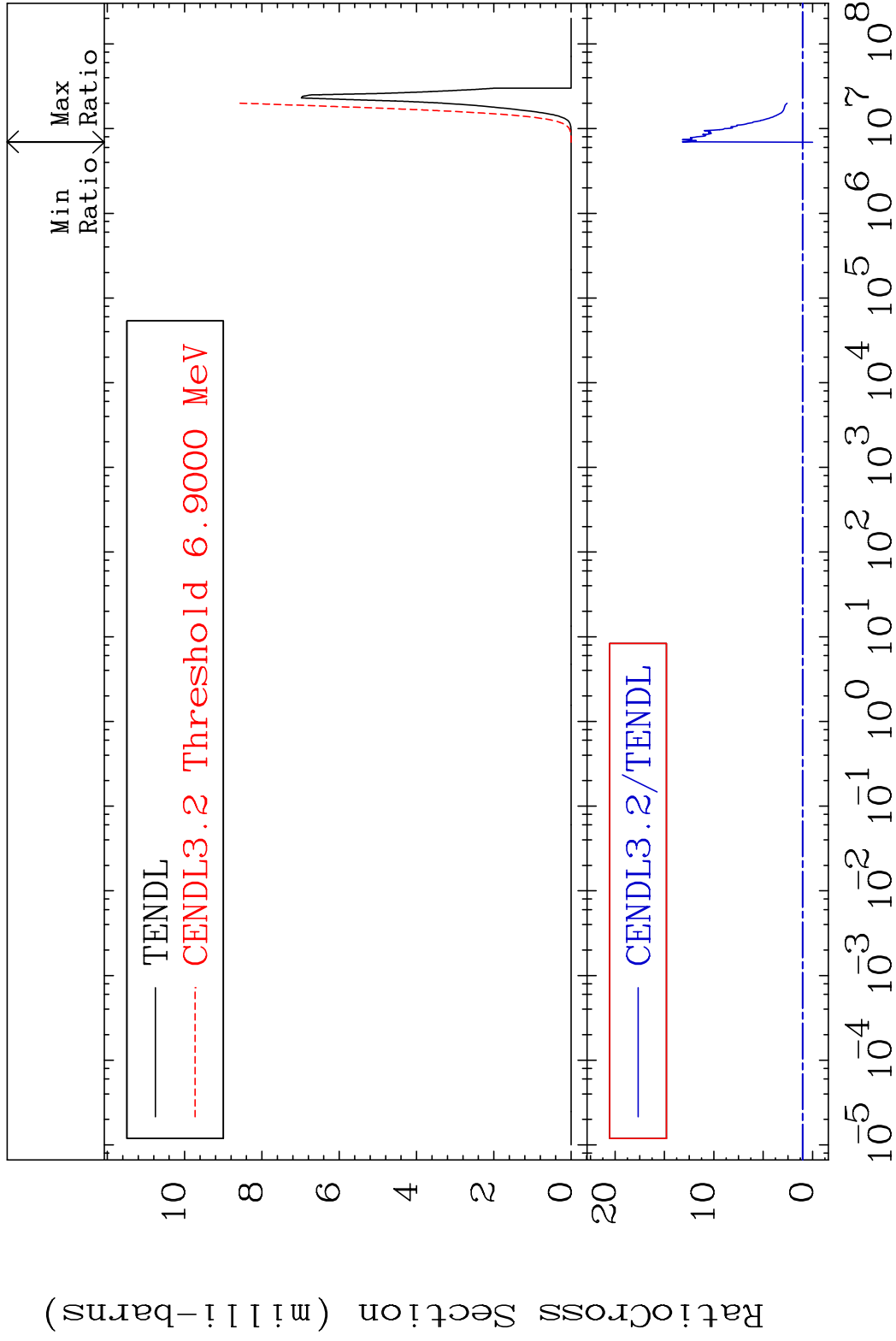


MAT 9349

(n,  $\alpha$ )

93-Np-238

Cross Section -100.0 To 1219. %



24

Incident Energy (eV)

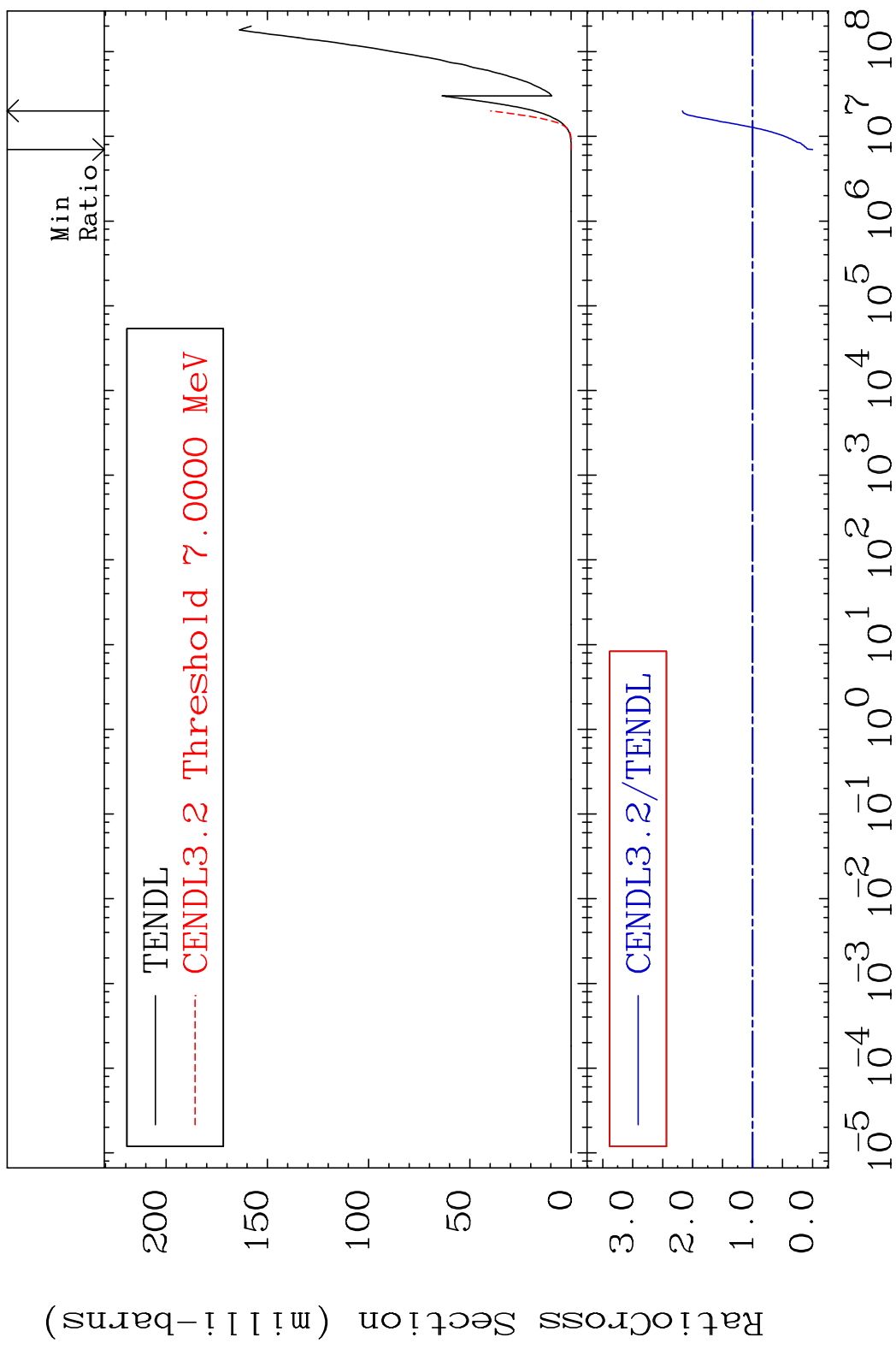
93-Np-238

MAT 9349

Hydrogen Production

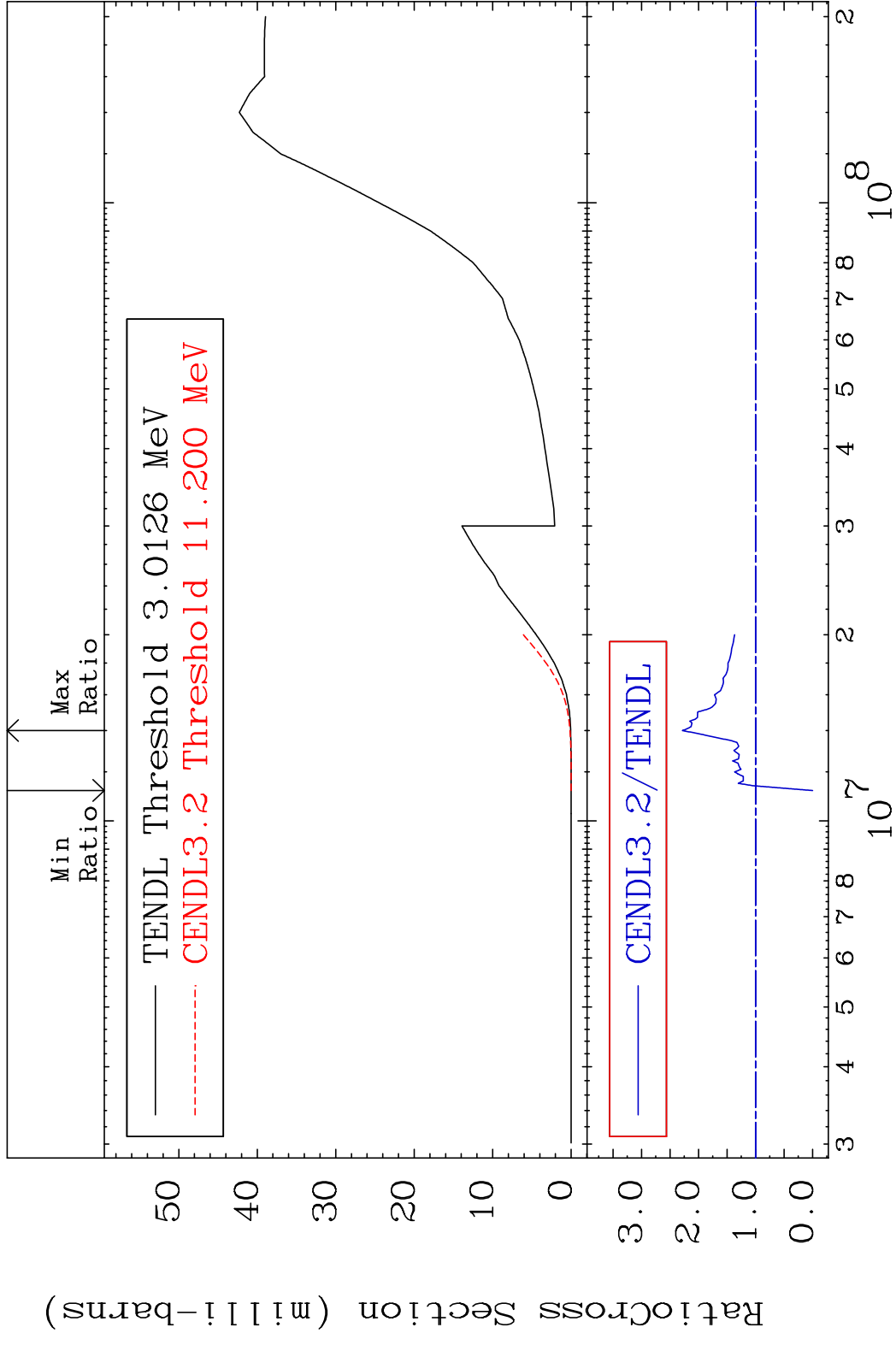
93-Np-238

Cross Section -100.0 To 117.2 %



MAT 9349

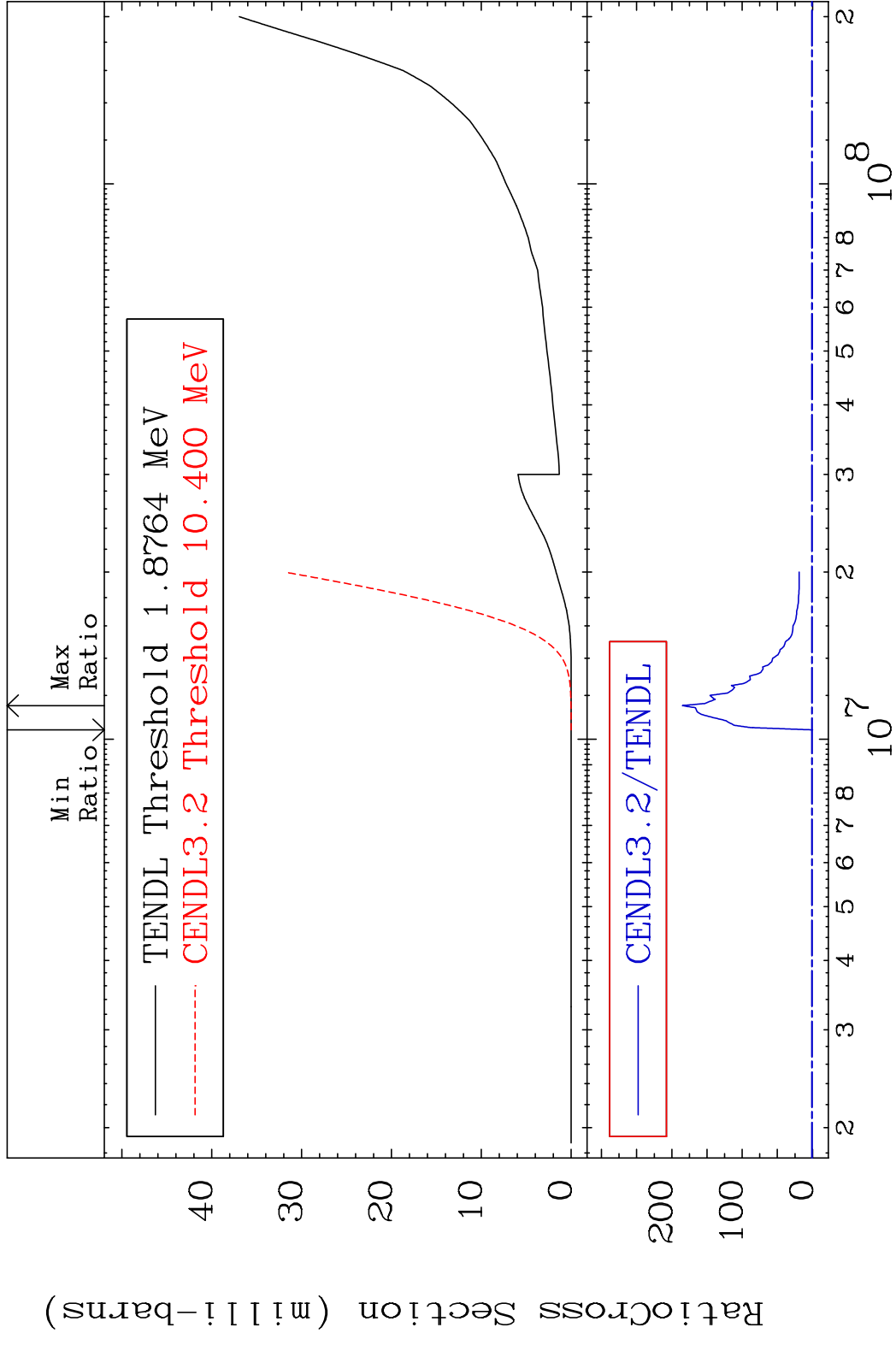
Deuterium Production 93-Np-238  
Cross Section -100.0 To 128.3 %



MAT 9349

Tritium Production 93-Np-238

Cross Section -100.0 To 9999. %

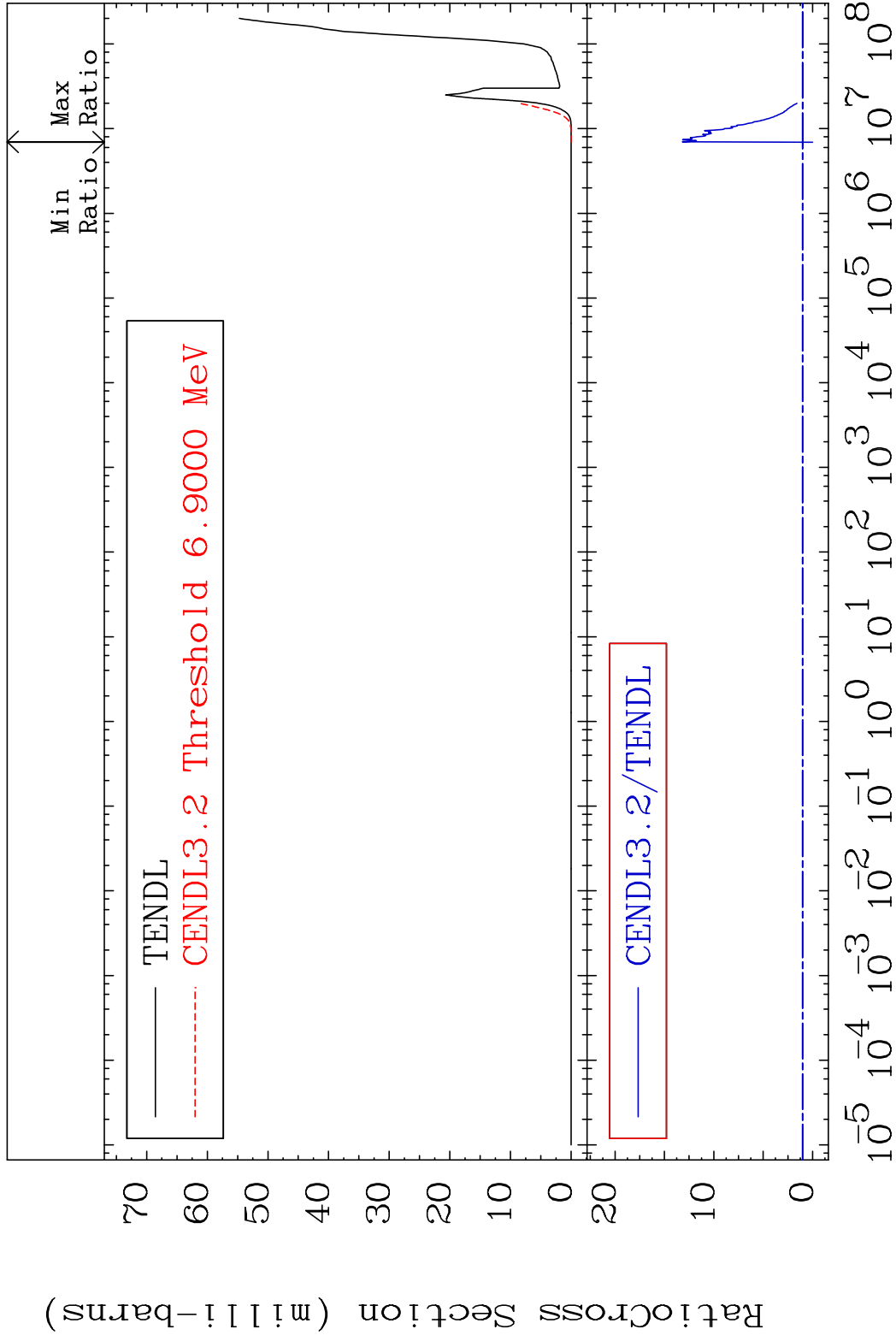


MAT 9349

He-4 Production

93-Np-238

Cross Section -100.0 To 1218. %



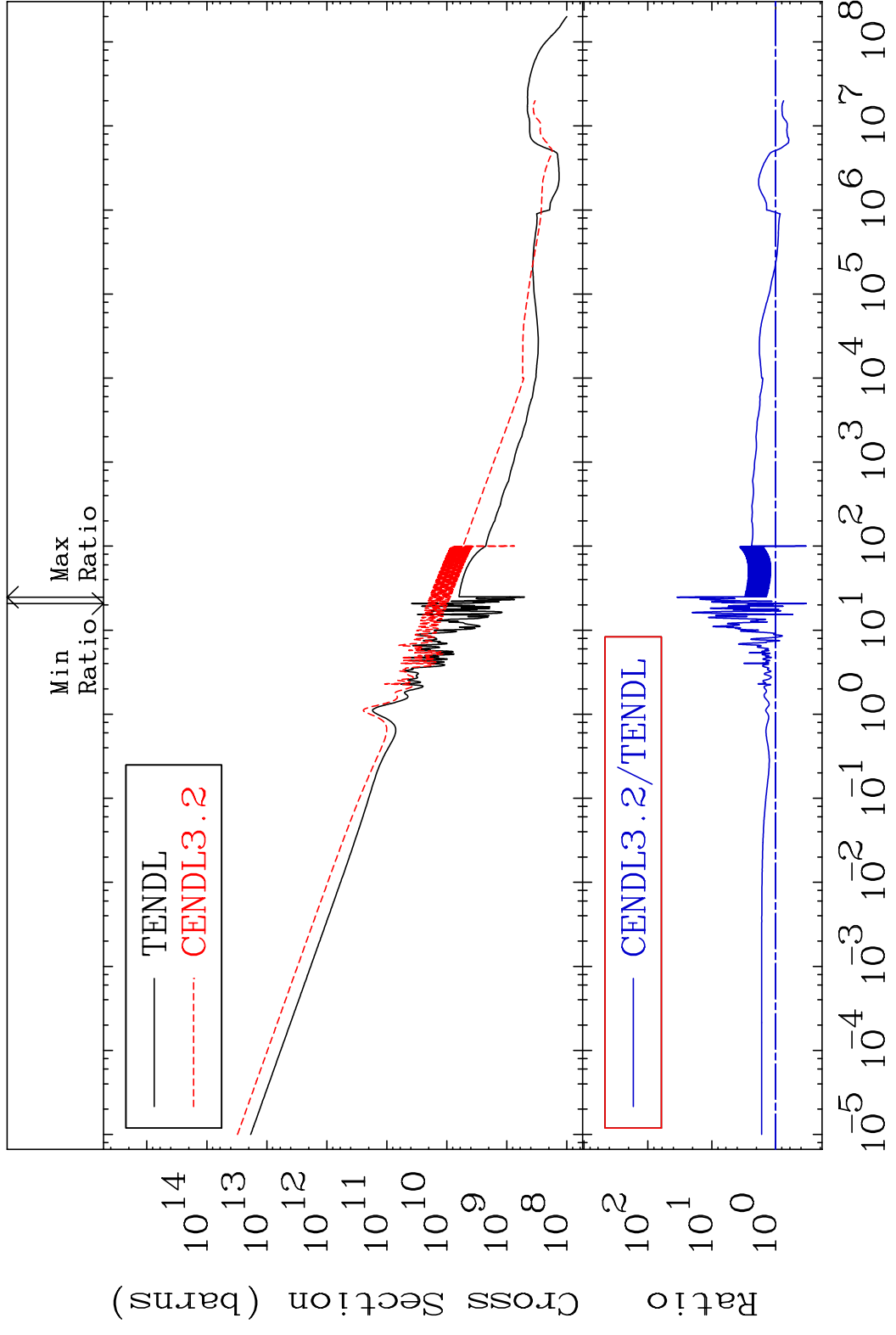
28

Incident Energy (eV)

93-Np-238

MAT 9349

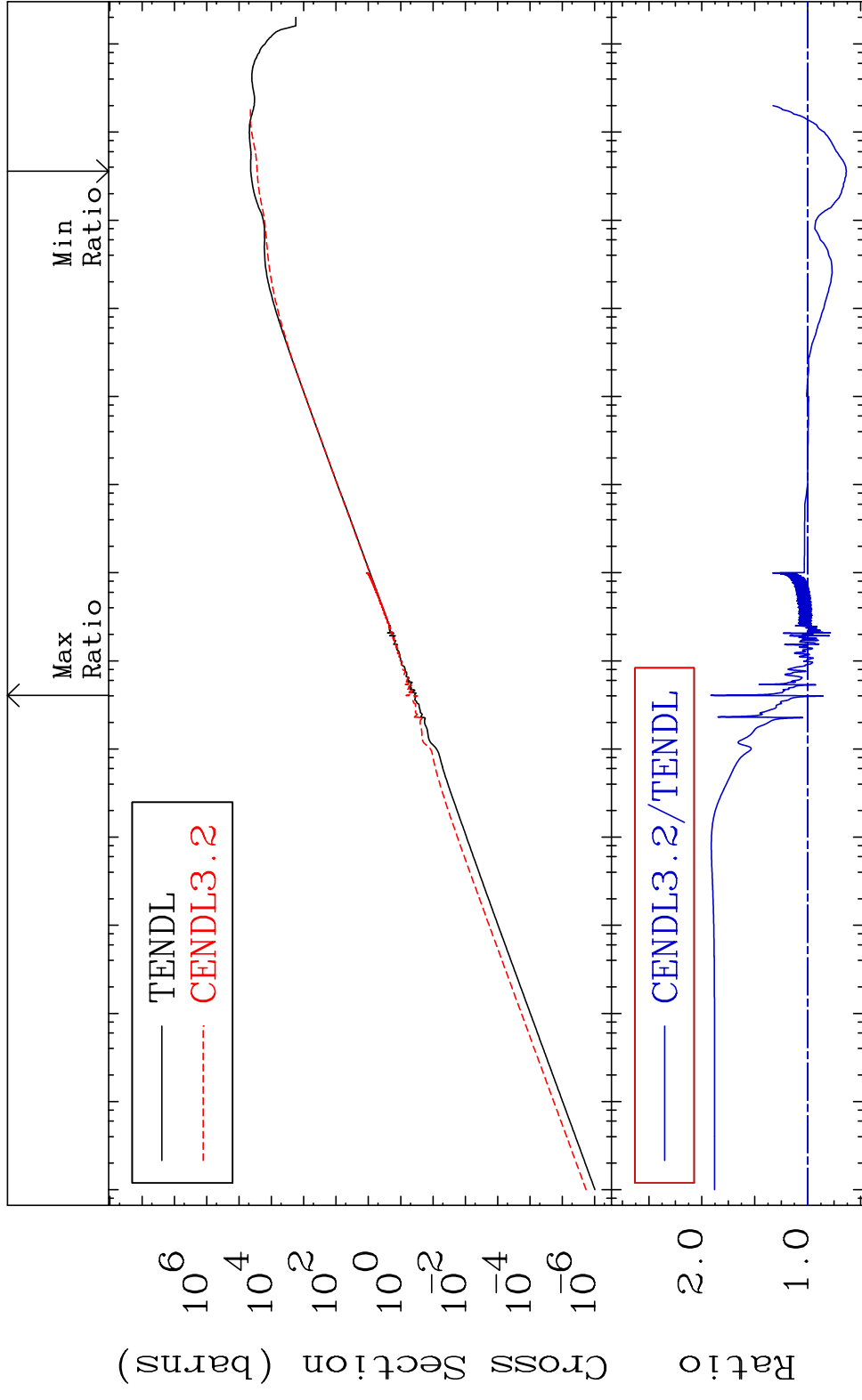
Kerma total (eV-barns) 93-Np-238  
Cross Section -66.93 To 3373. %



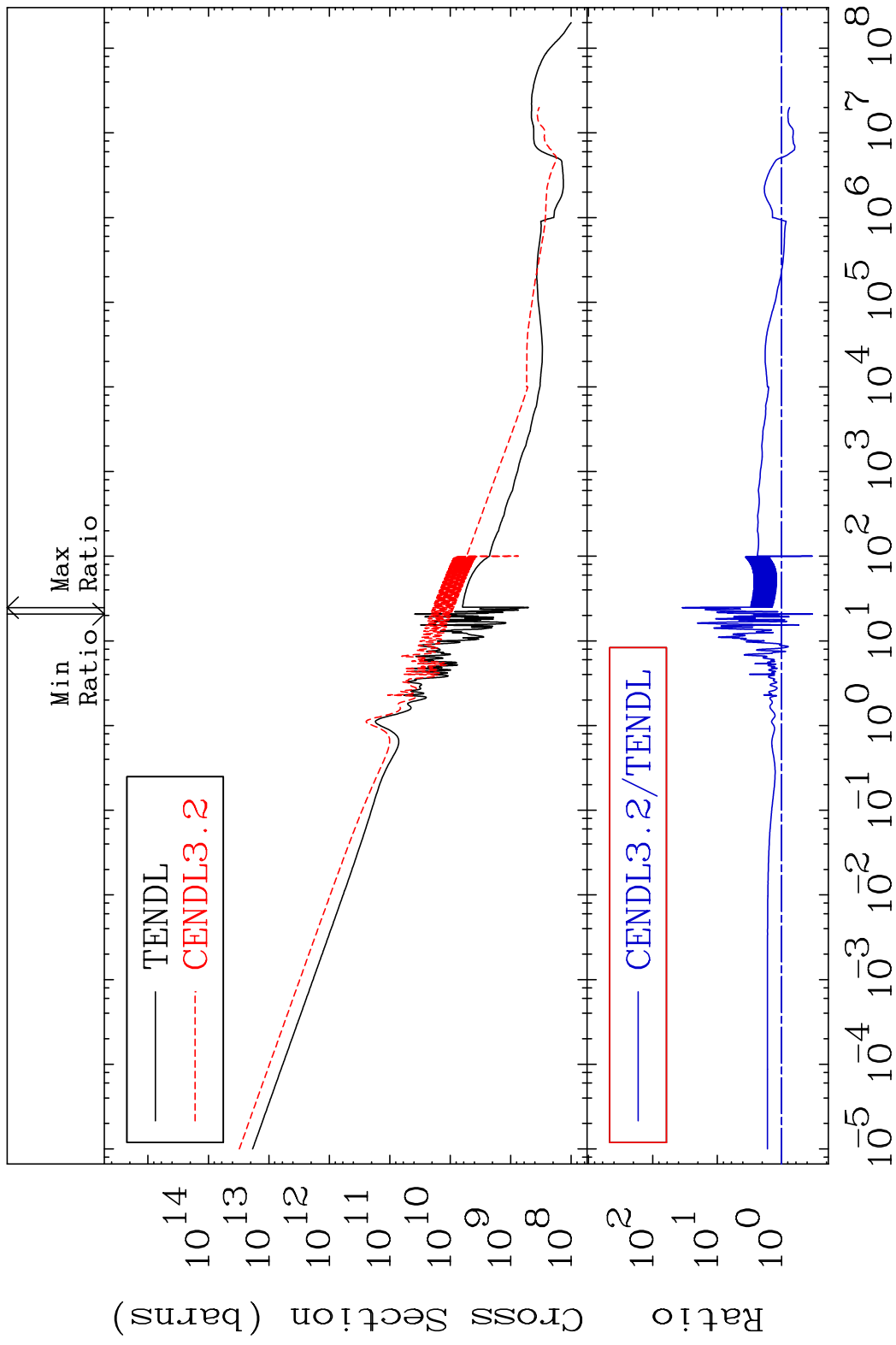
MAT 9349

Kerma elastic Cross Section -36.56 To 91.59 %

93-Np-238

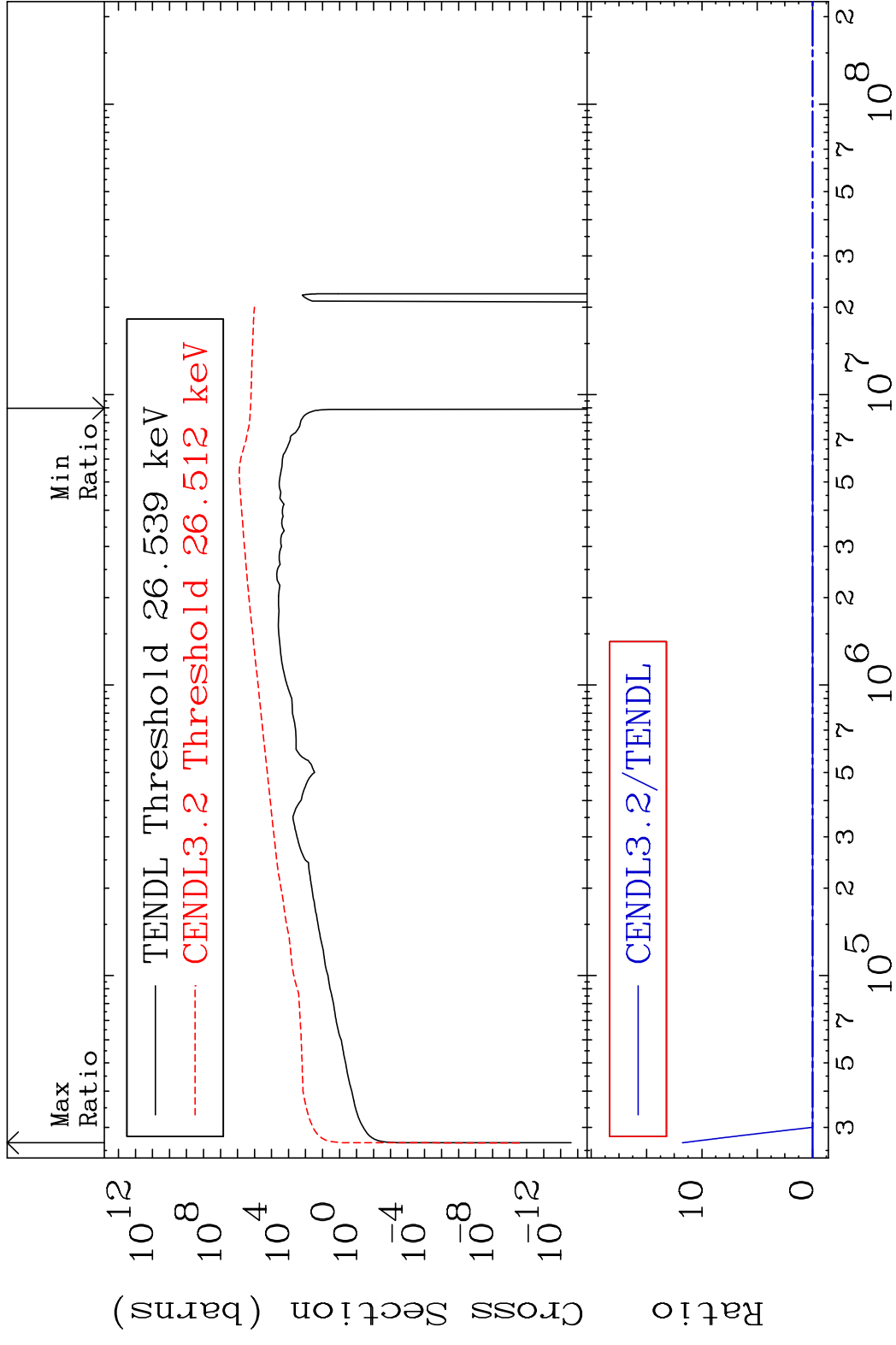


MAT 9349 Kerma non-elastic (all but mt2) 93-Np-238  
 Cross Section -66.93 To 3373. %

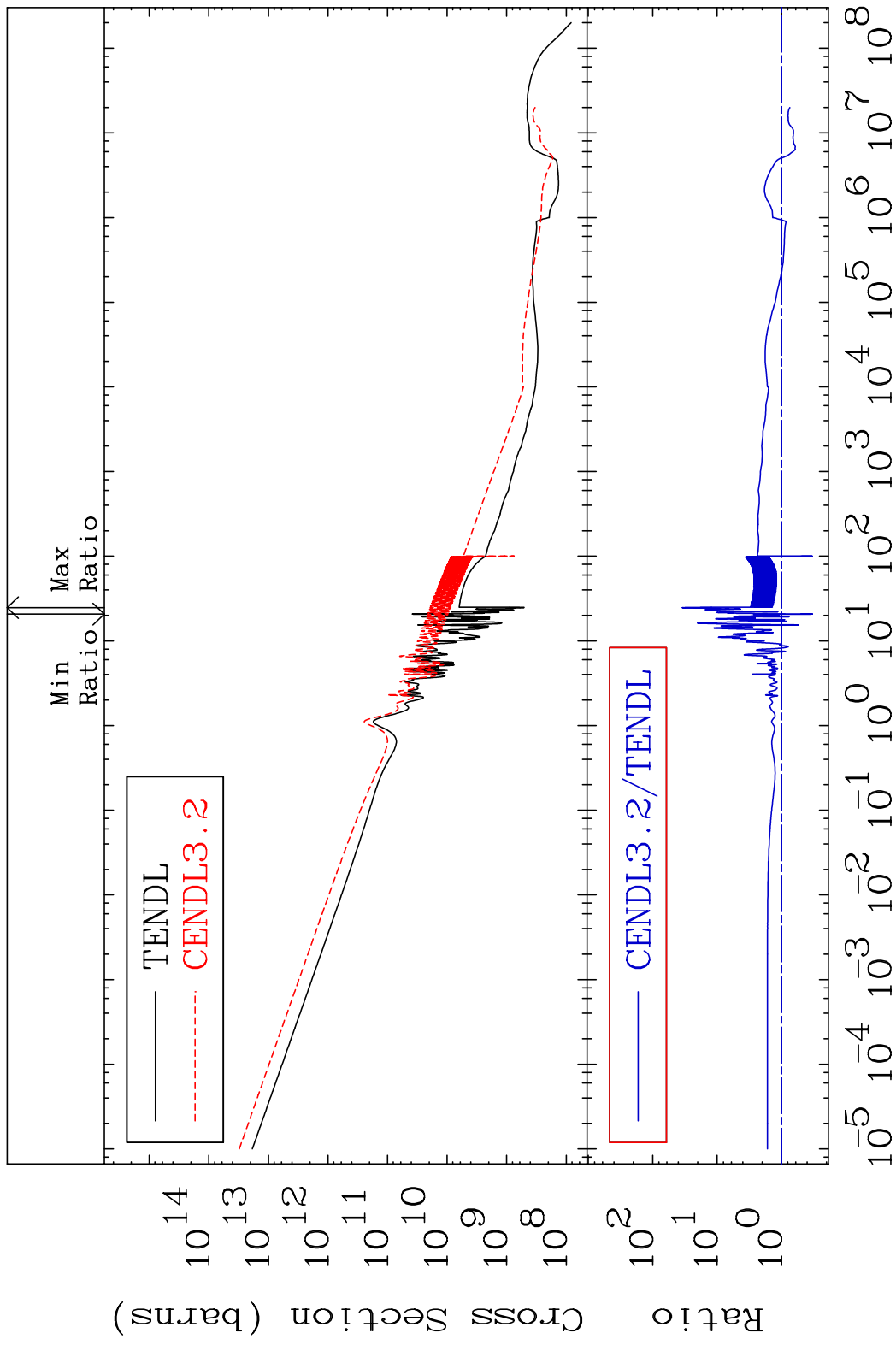




MAT 9349 Kerma inelastic (mt51-91) 93-Np-238  
 Cross Section -9999. To 9999. %

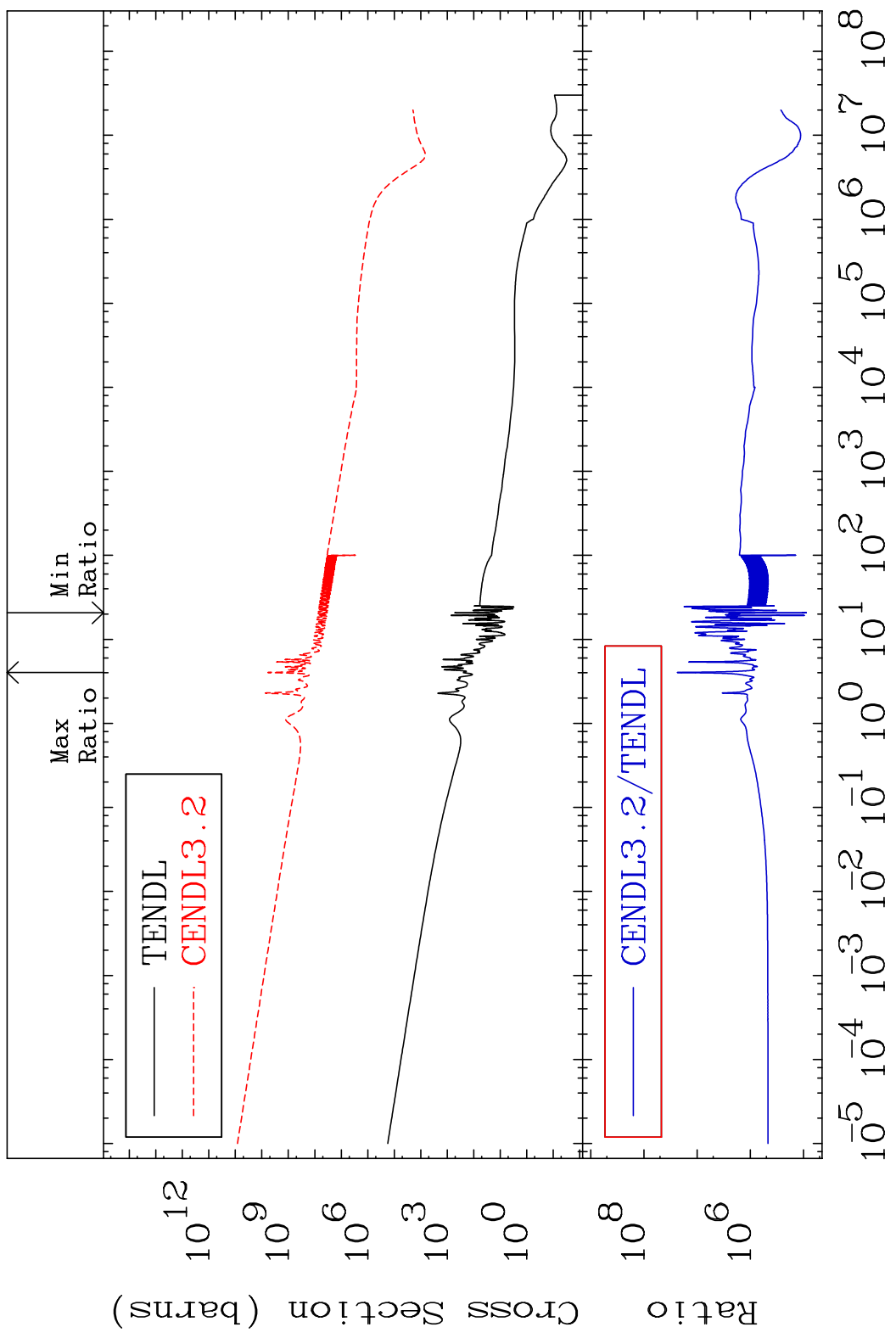


MAT 9349 Kerma fission (mt18 or mt19-20-21-38) 93-Np-238  
 Cross Section -67.05 To 3361. %



MAT 9349

Kerma capture (mt102) 93-Np-238  
Cross Section 9999. To 9999. %

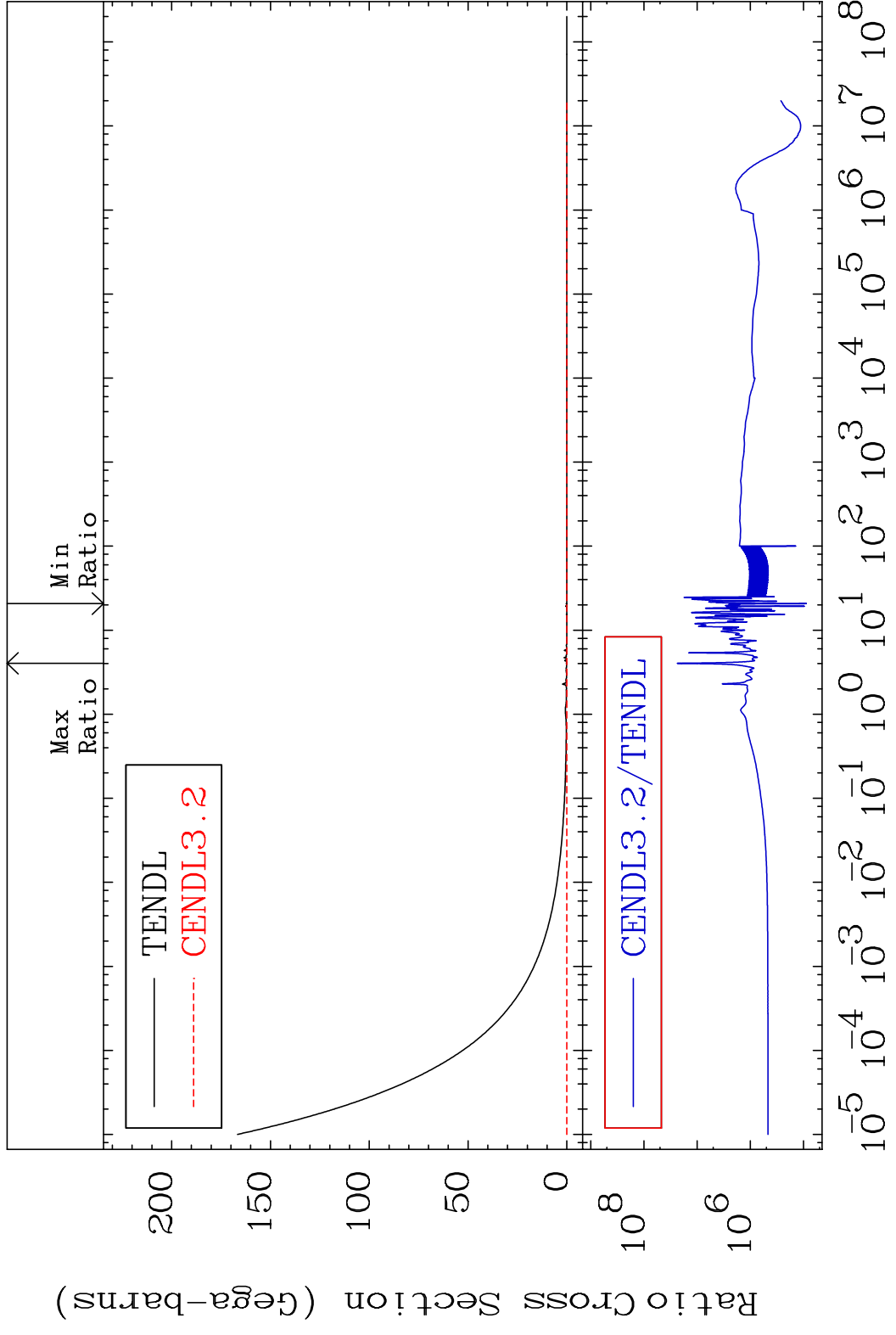


34

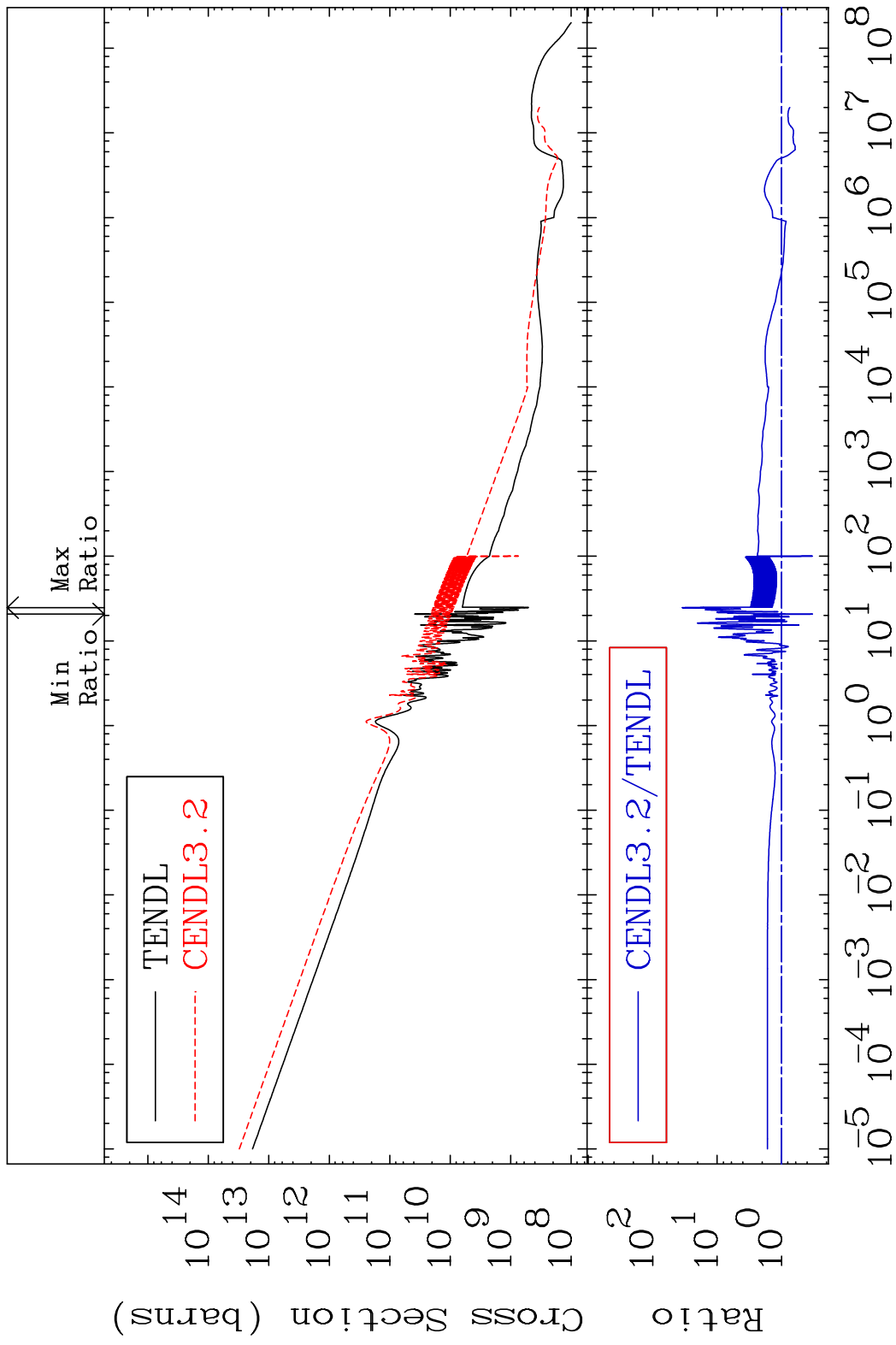
Incident Energy (eV) 93-Np-238

MAT 9349

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



MAT 9349 Total kinematic kerma (high limit) 93-Np-238  
 Cross Section -67.05 To 3361. %

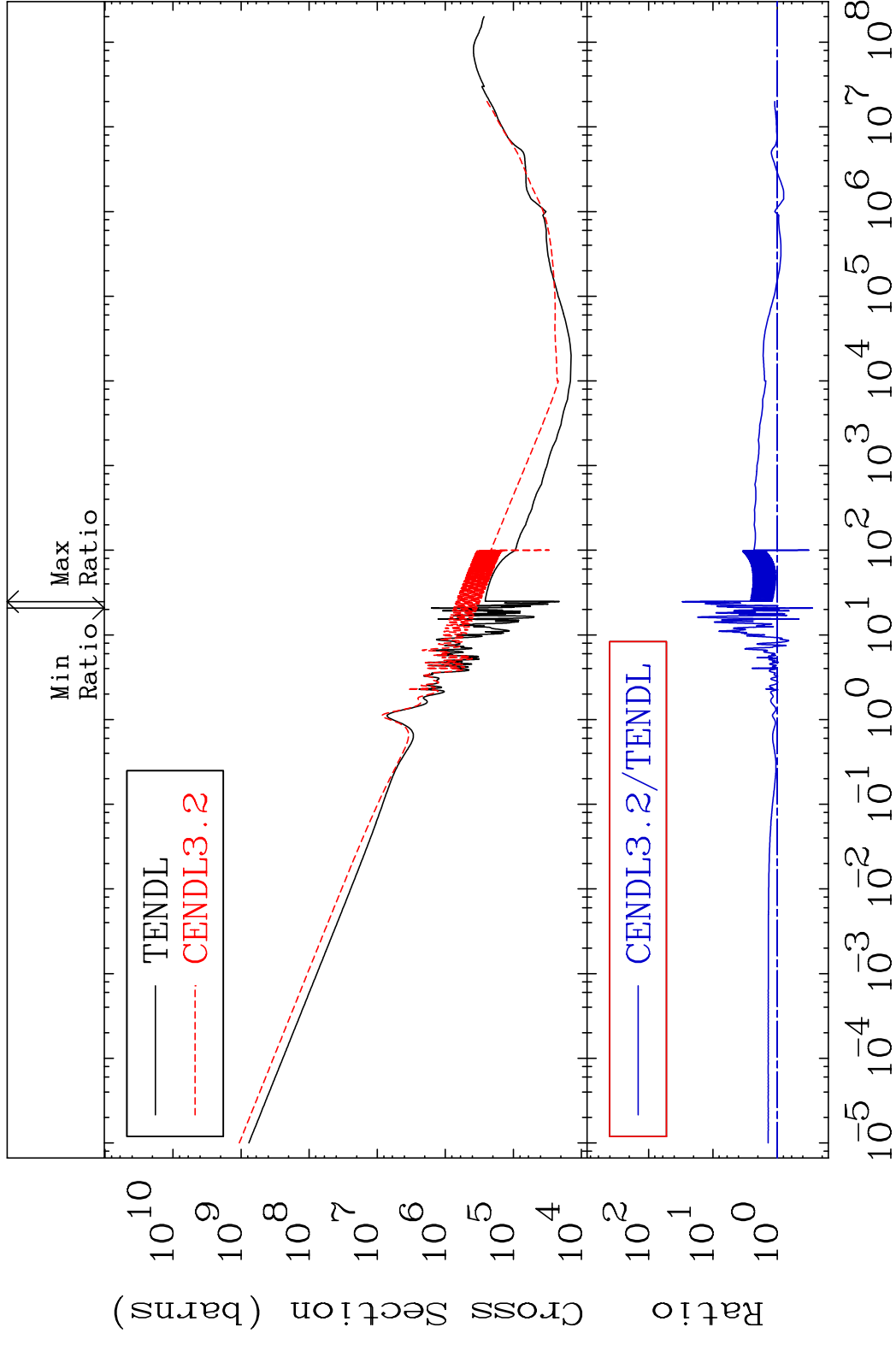


MAT 9349

Dpa total (eV-barns)

93-Np-238

Cross Section -71.74 To 2885. %

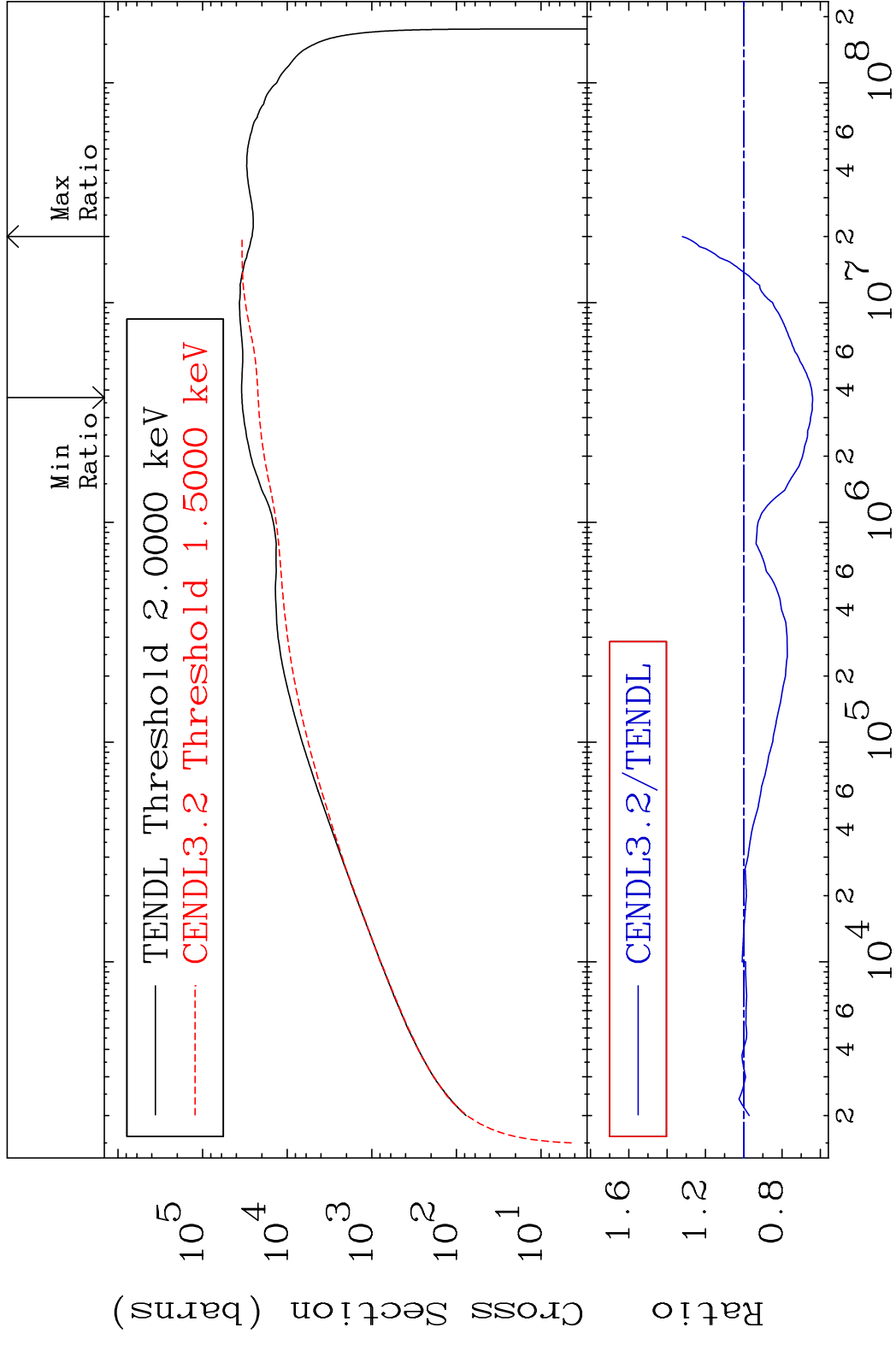


MAT 9349

Dpa elastic (mt2)

93-Np-238

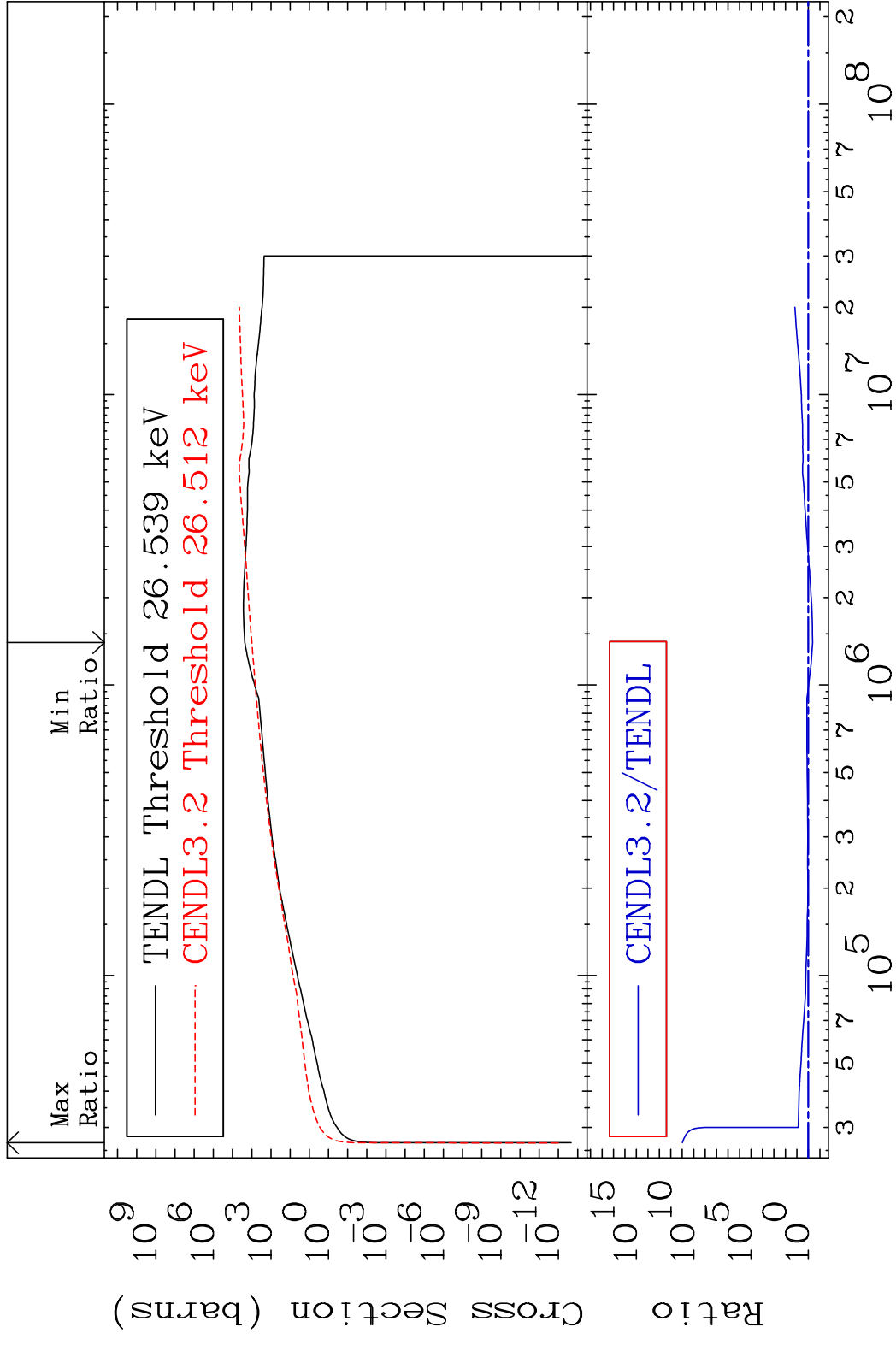
Cross Section -35.90 To 32.03 %



MAT 9349

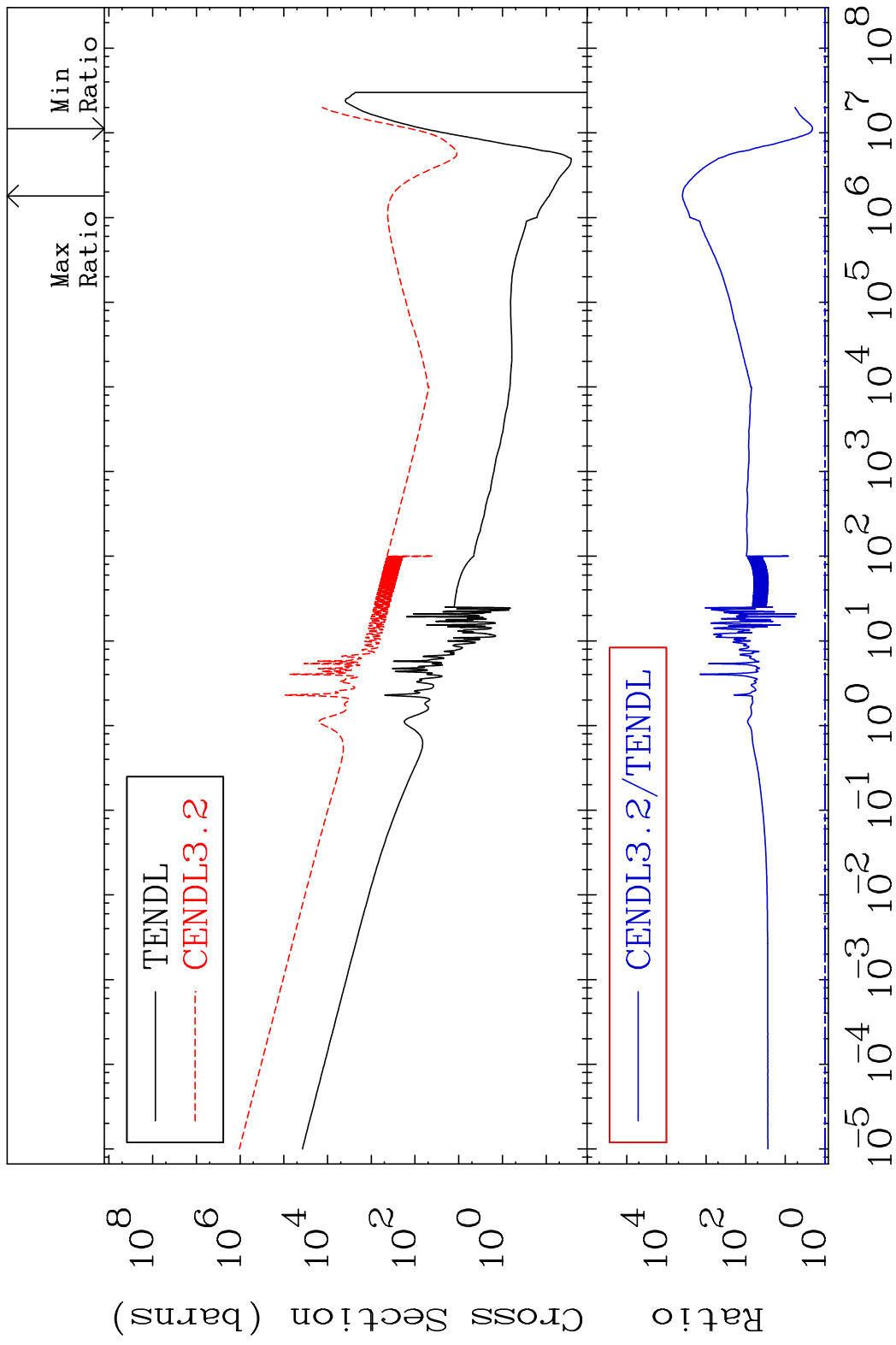
Dpa inelastic (mt51-91) 93-Np-238

Cross Section -57.18 To 9999. %





MAT 9349 Dpa disappearance (mt102 -120) 93-Np-238  
 Cross Section 105.5 To 9999. %



40 Incident Energy (eV) 93-Np-238