

Program Complot  
(Version 2021-1)

by

Dermott E. Cullen  
(Present Contact Information)

Dermott E. Cullen  
1466 Hudson Way  
Livermore, CA 94550  
U.S.A.

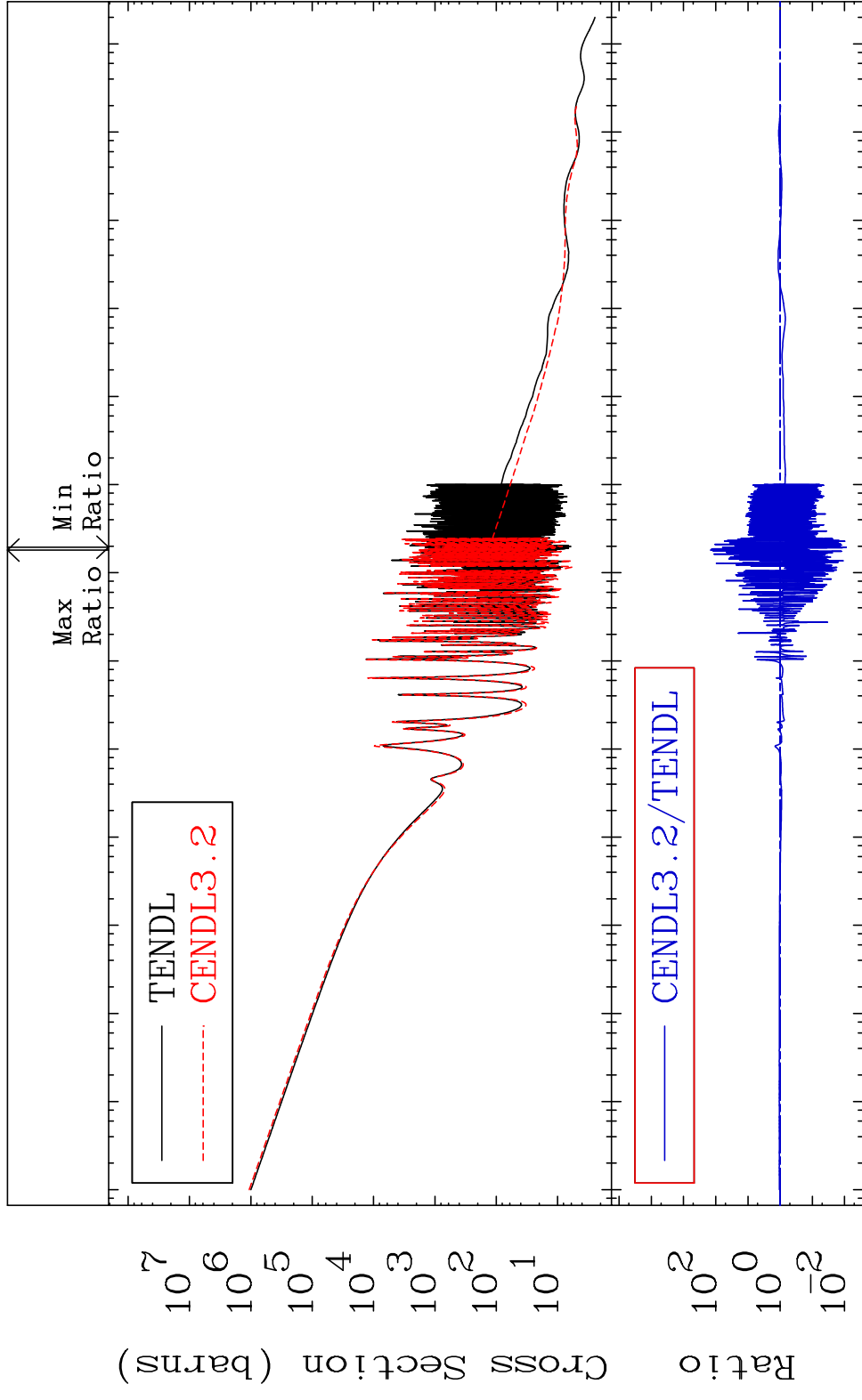
Tele: 925-443-1911

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

Press Mouse Button to Start

MAT 6246

Total Cross Section -99.12 To 9999. %  
62-Sm-151



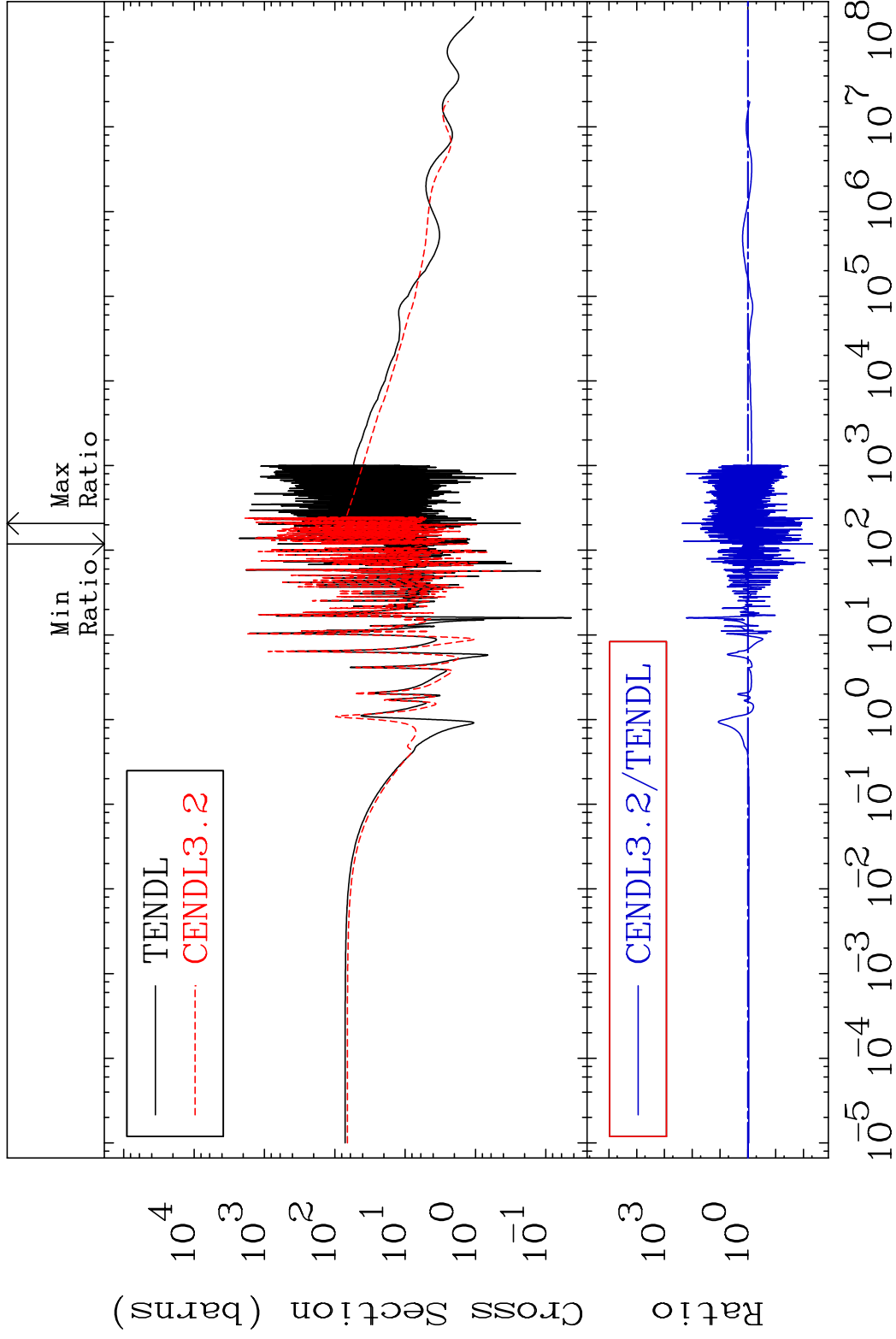
1 Incident Energy (eV) 62-Sm-151

MAT 6246

Elastic

62-Sm-151

Cross Section -99.53 To 9999. %

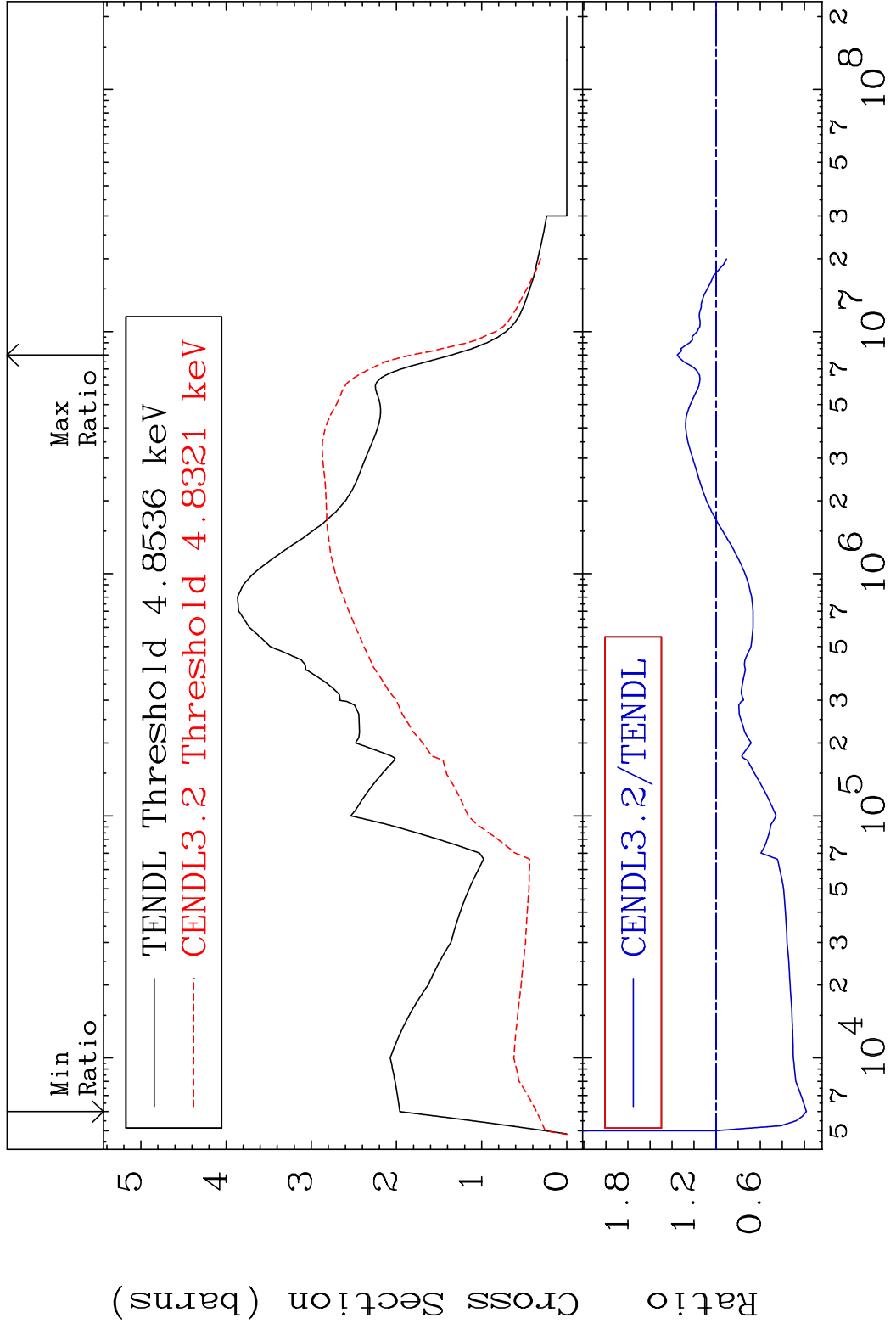


2

Incident Energy (eV)

62-Sm-151

MAT 6246 Inelastic Cross Section 62-Sm-151  
 -81.85 To 35.31 %



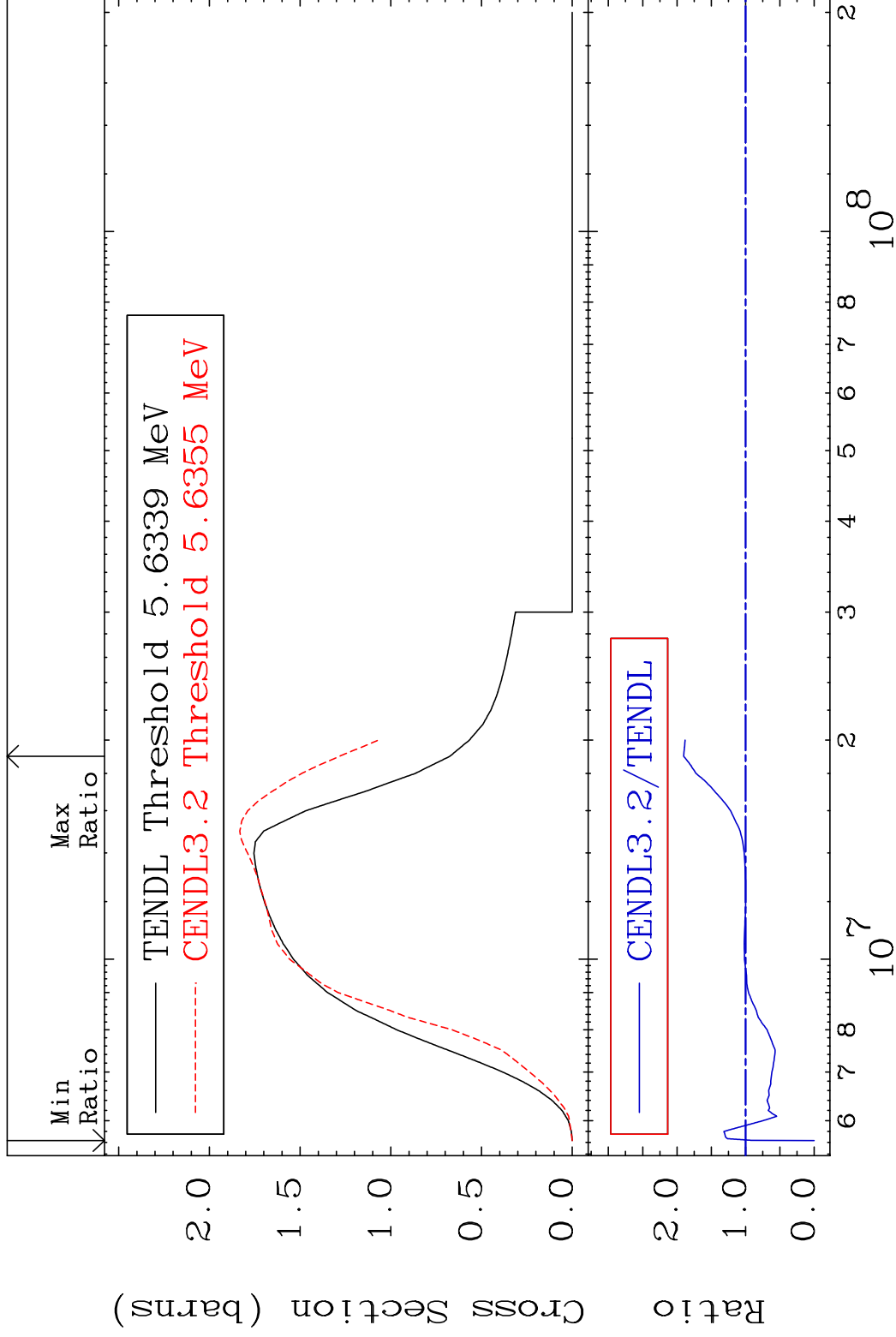
3 Incident Energy (eV) 62-Sm-151

MAT 6246

(n,2n)

62-Sm-151

Cross Section -100.0 To 90.25 %



4

Incident Energy (eV)

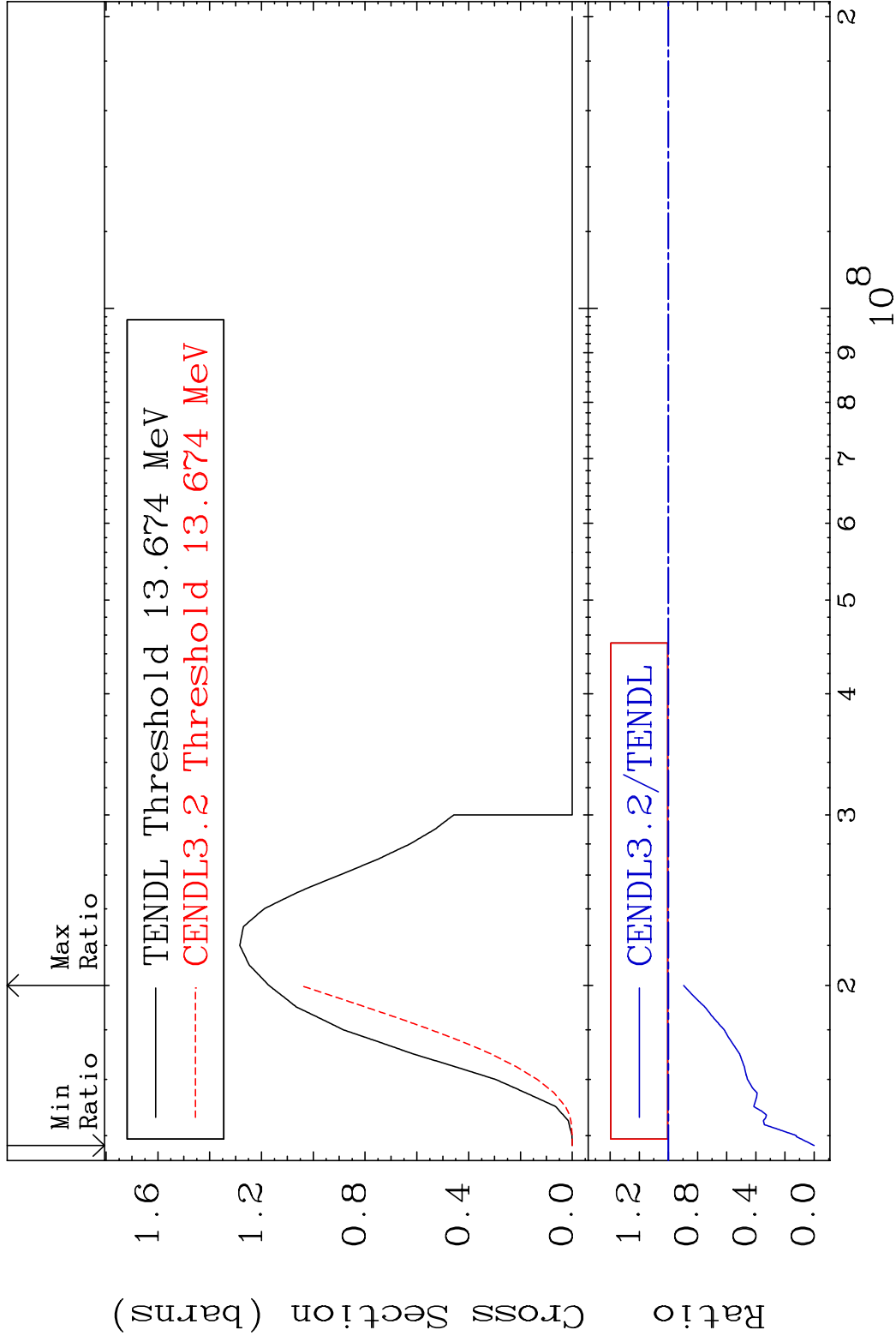
62-Sm-151

MAT 6246

(n,3n)

62-Sm-151

Cross Section -100.0 To -10.46%



5

Incident Energy (eV)

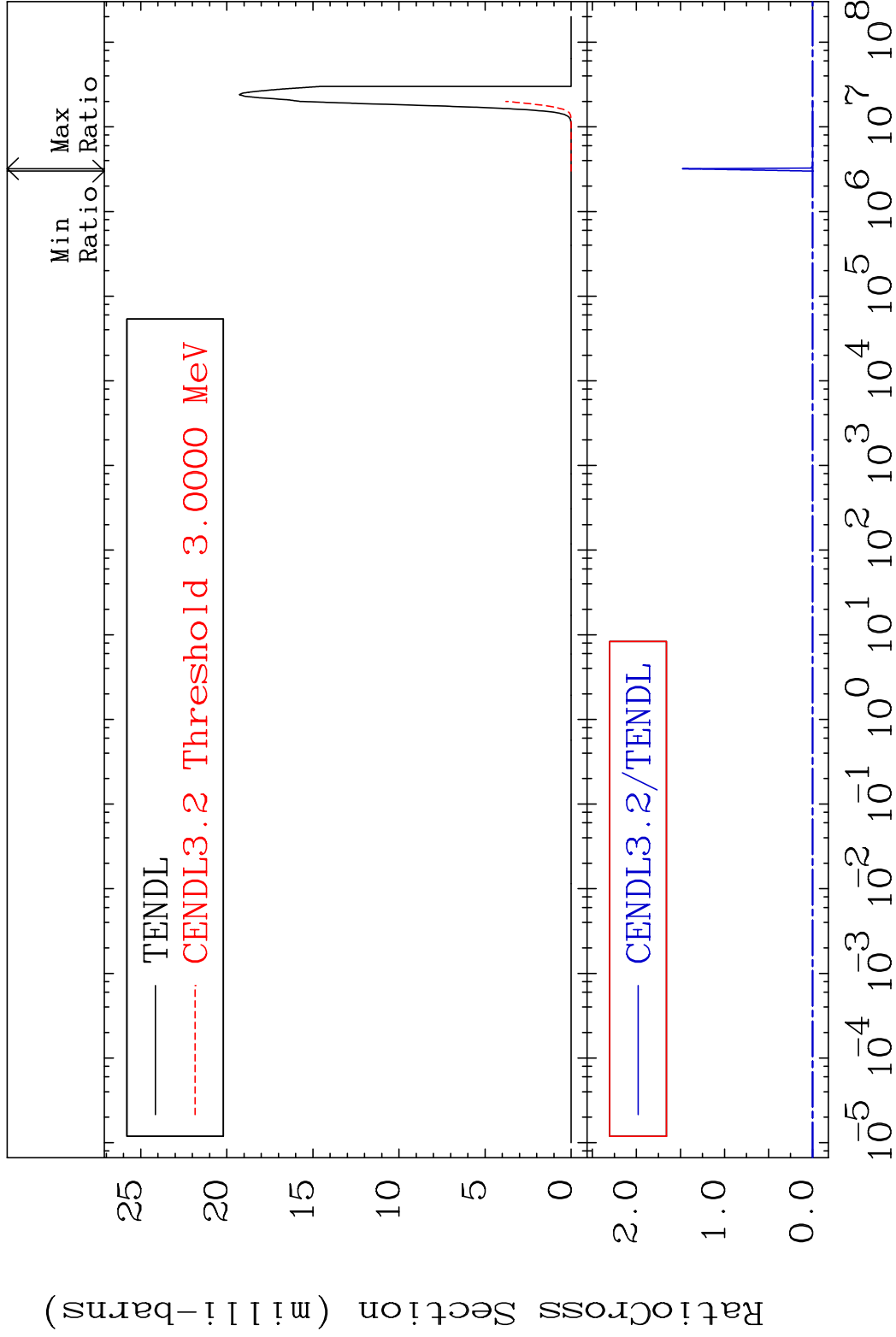
62-Sm-151

MAT 6246

(n, n')  $\alpha$

62-Sm-151

Cross Section -100.0 To 9999. %



6

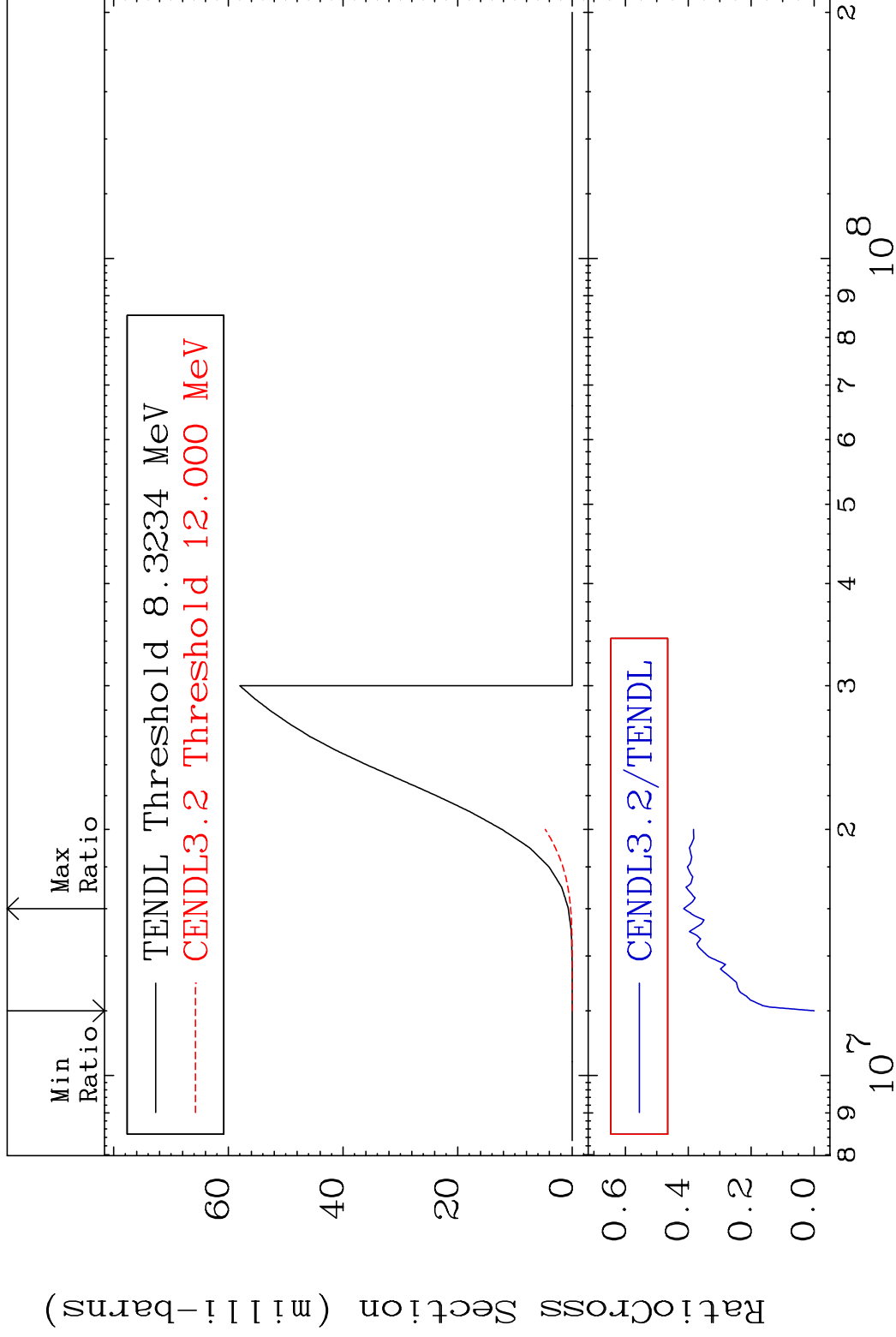
Incident Energy (eV)

62-Sm-151

MAT 6246

(n, n') p 62-Sm-151

Cross Section -100.0 To -58.53%

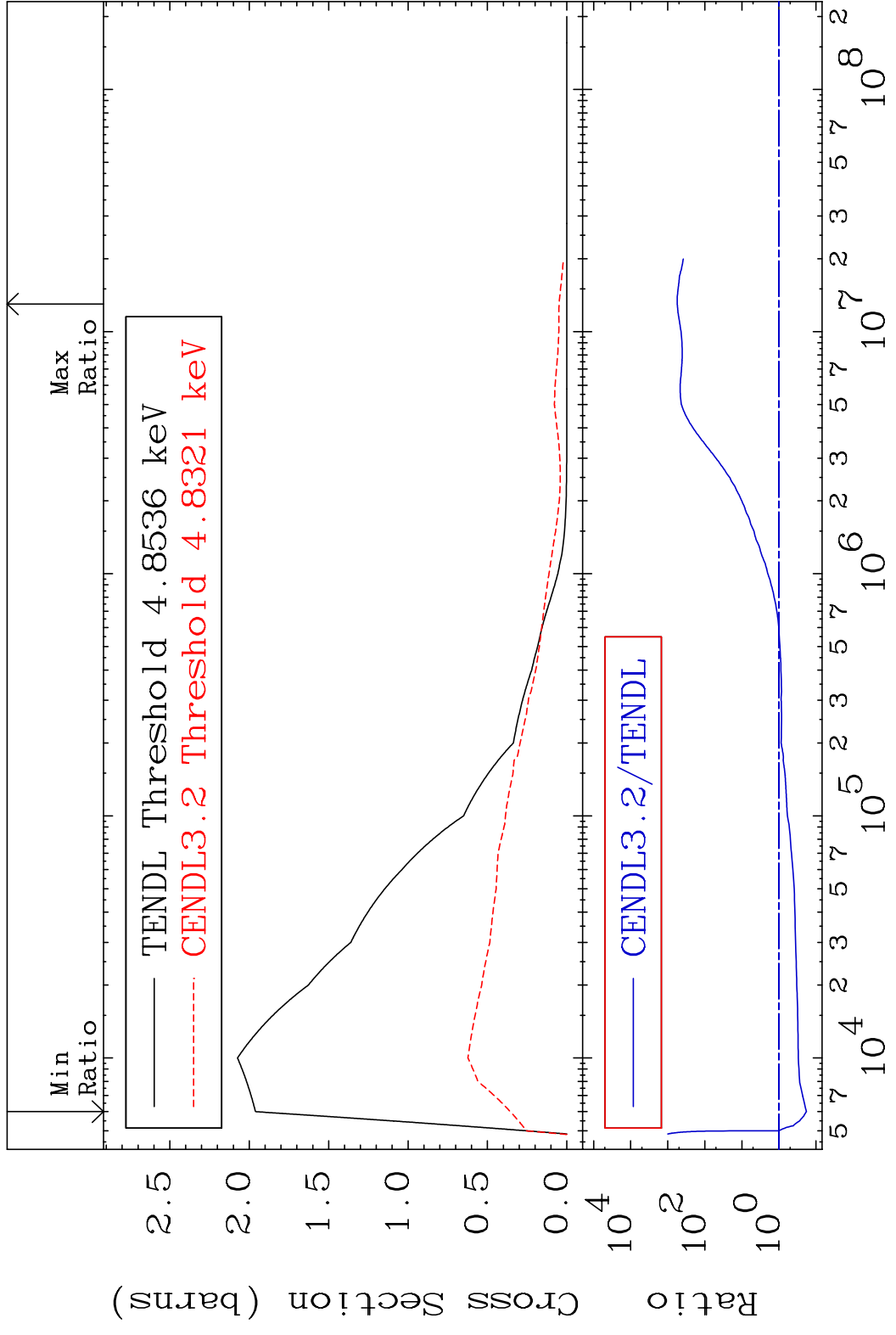


7

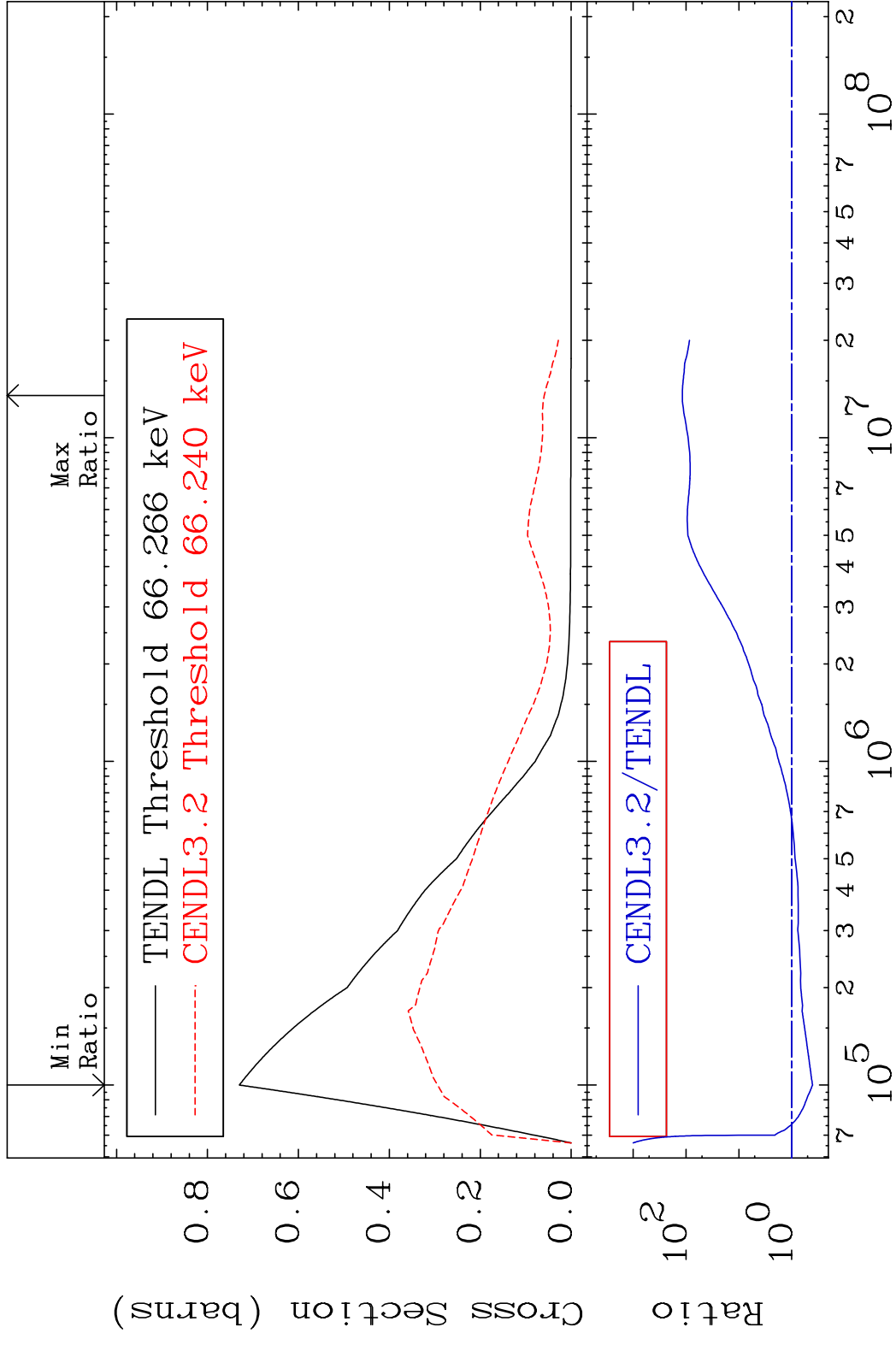
Incident Energy (eV)

62-Sm-151

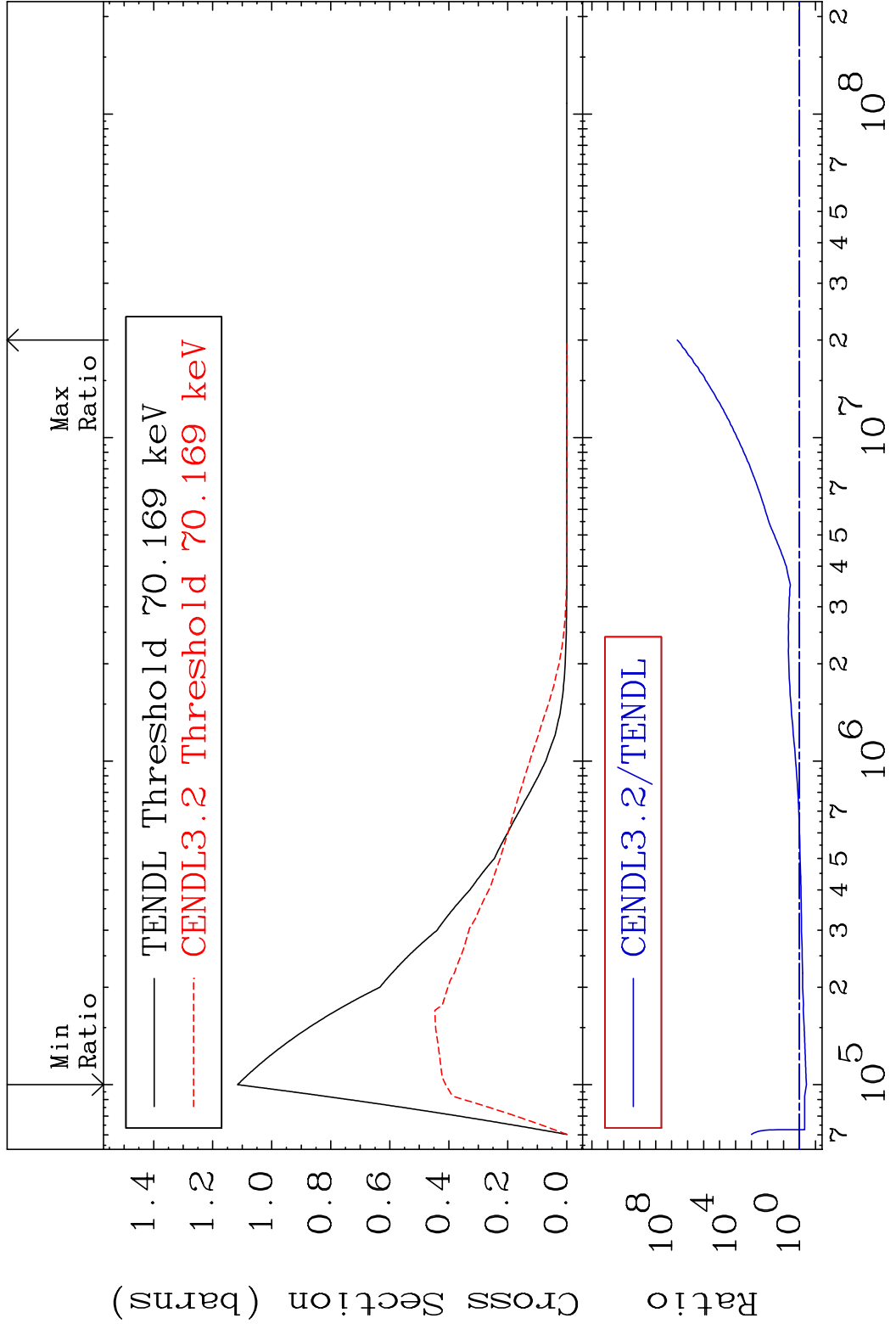
MAT 6246 MT= 51 (n, n') Level 62-Sm-151  
 Cross Section -81.85 To 9999. %



MAT 6246 MT= 52 (n, n') Level 62-Sm-151  
 Cross Section -59.73 To 9999. %

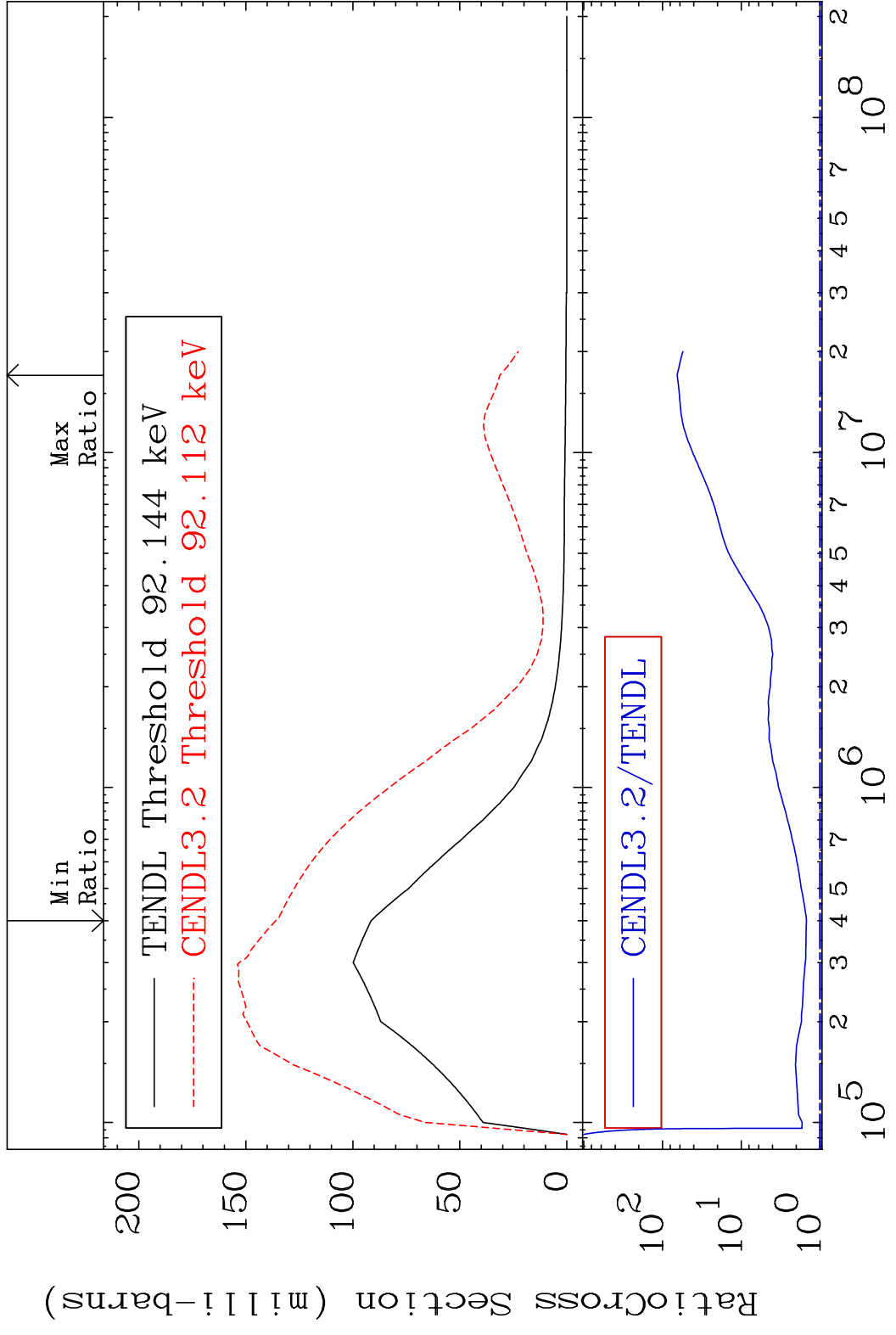


MAT 6246 MT= 53 (n,n') Level 62-Sm-151  
 Cross Section -63.21 To 9999. %



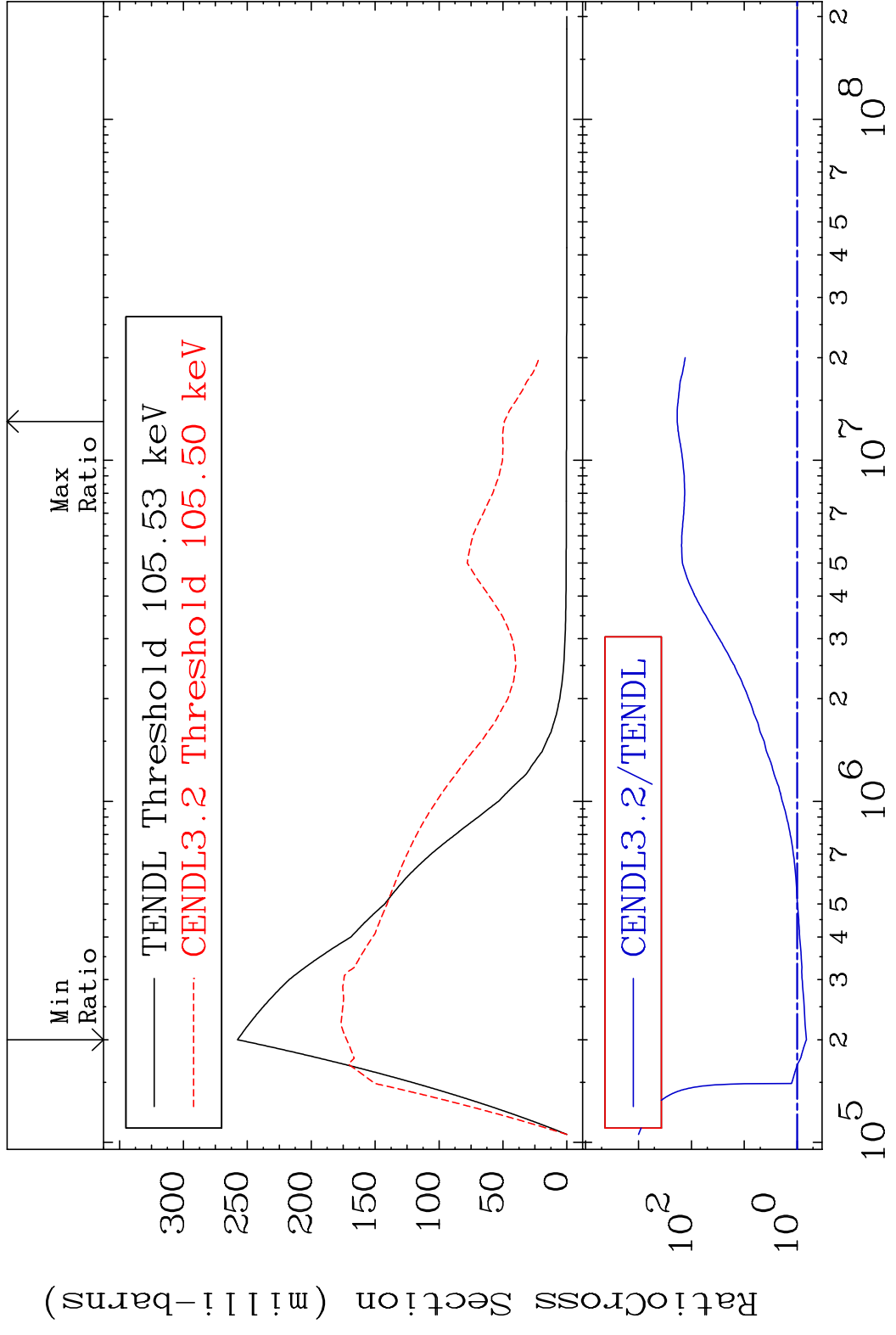
10 Incident Energy (eV) 62-Sm-151

MAT 6246 MT= 54 (n, n') Level 62-Sm-151  
 Cross Section 48.67 To 6412. %



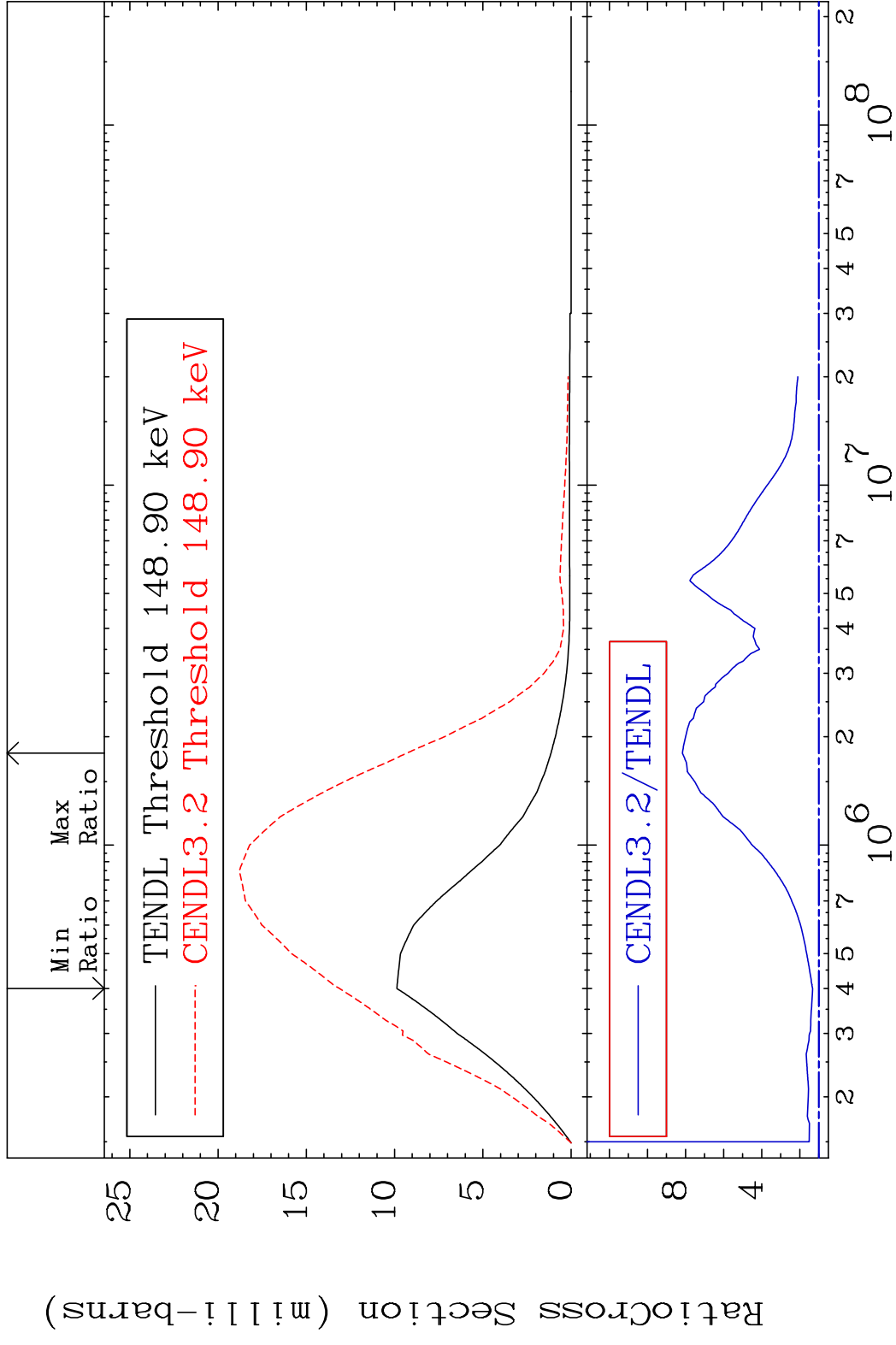
11 Incident Energy (eV) 62-Sm-151

MAT 6246 MT= 55 (n, n') Level 62-Sm-151  
 Cross Section -33.16 To 9999. %

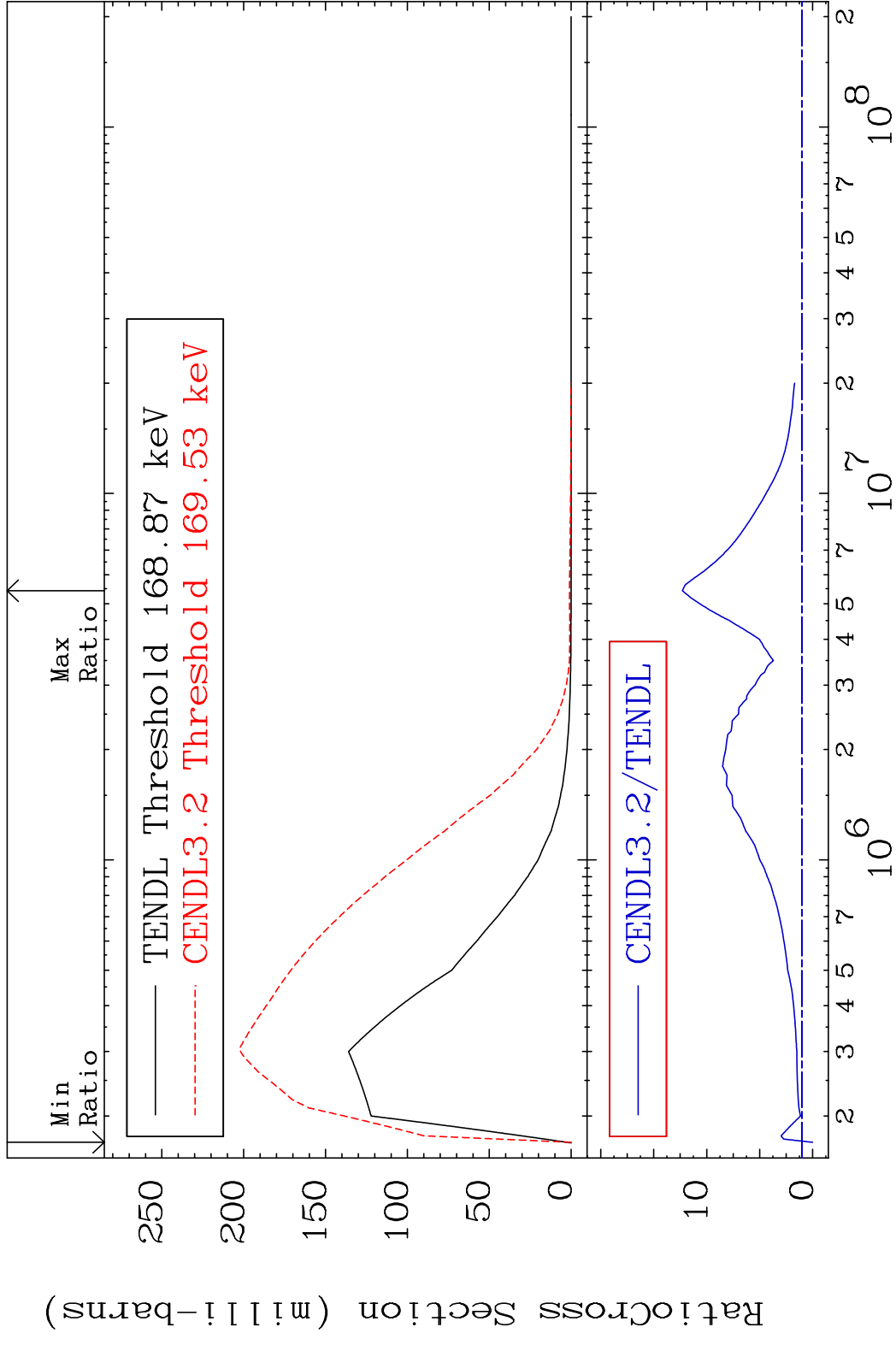


12 Incident Energy (eV) 62-Sm-151

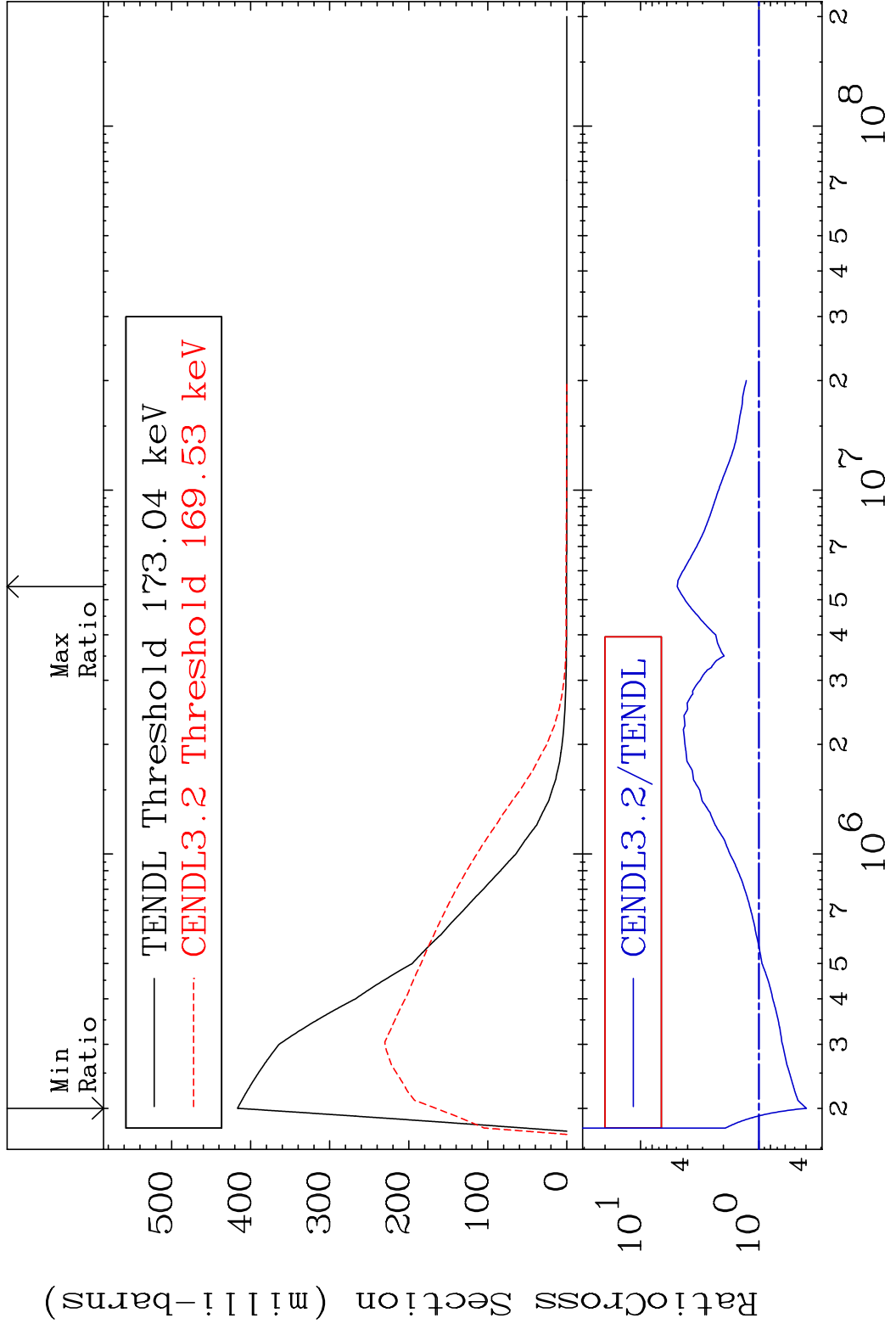
MAT 6246 MT= 56 (n, n') Level 62-Sm-151  
 Cross Section 32.98 To 716.7 %



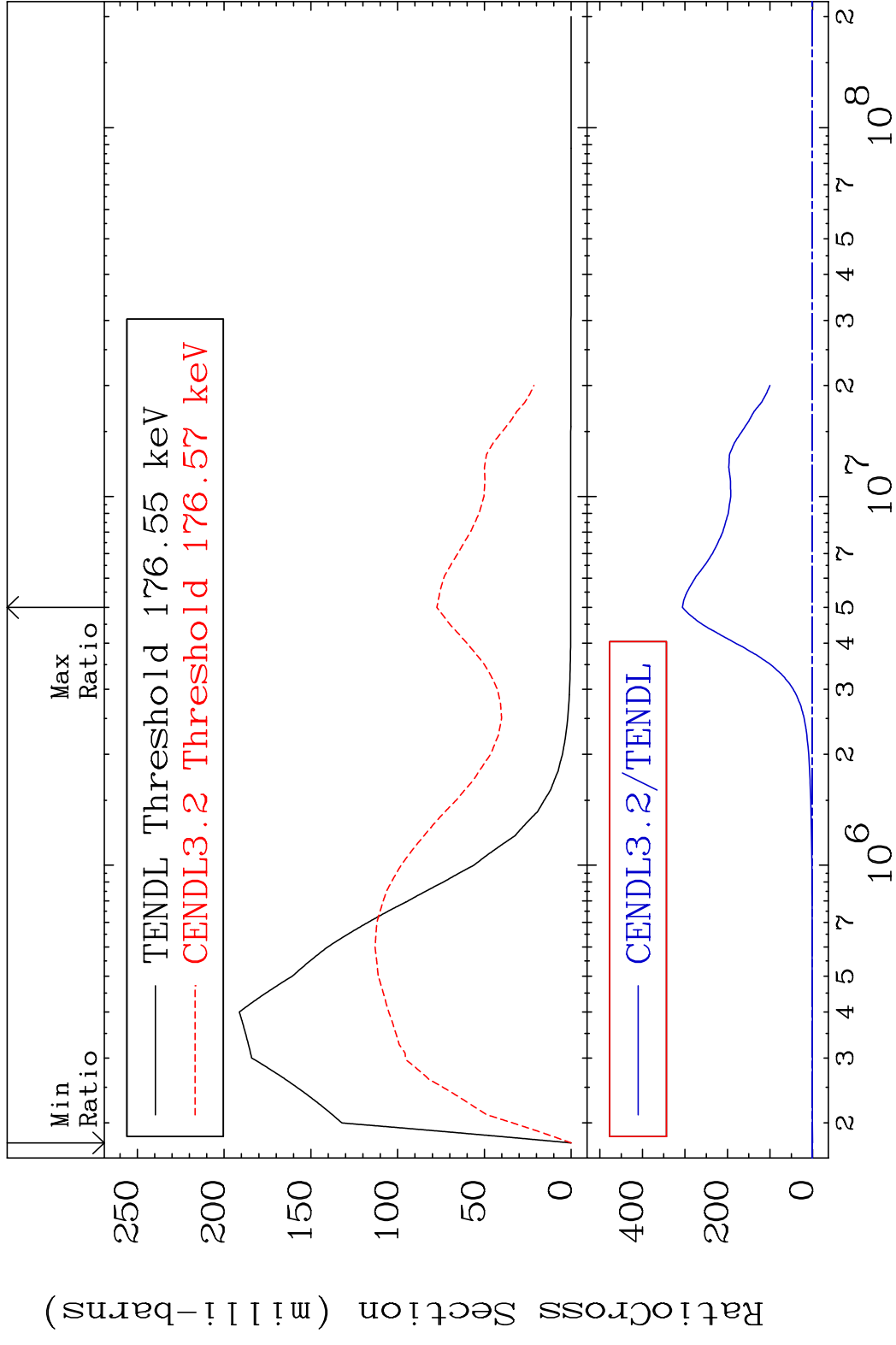
MAT 6246 MT= 57 (n, n') Level 62-Sm-151  
 Cross Section -100.0 To 1130. %



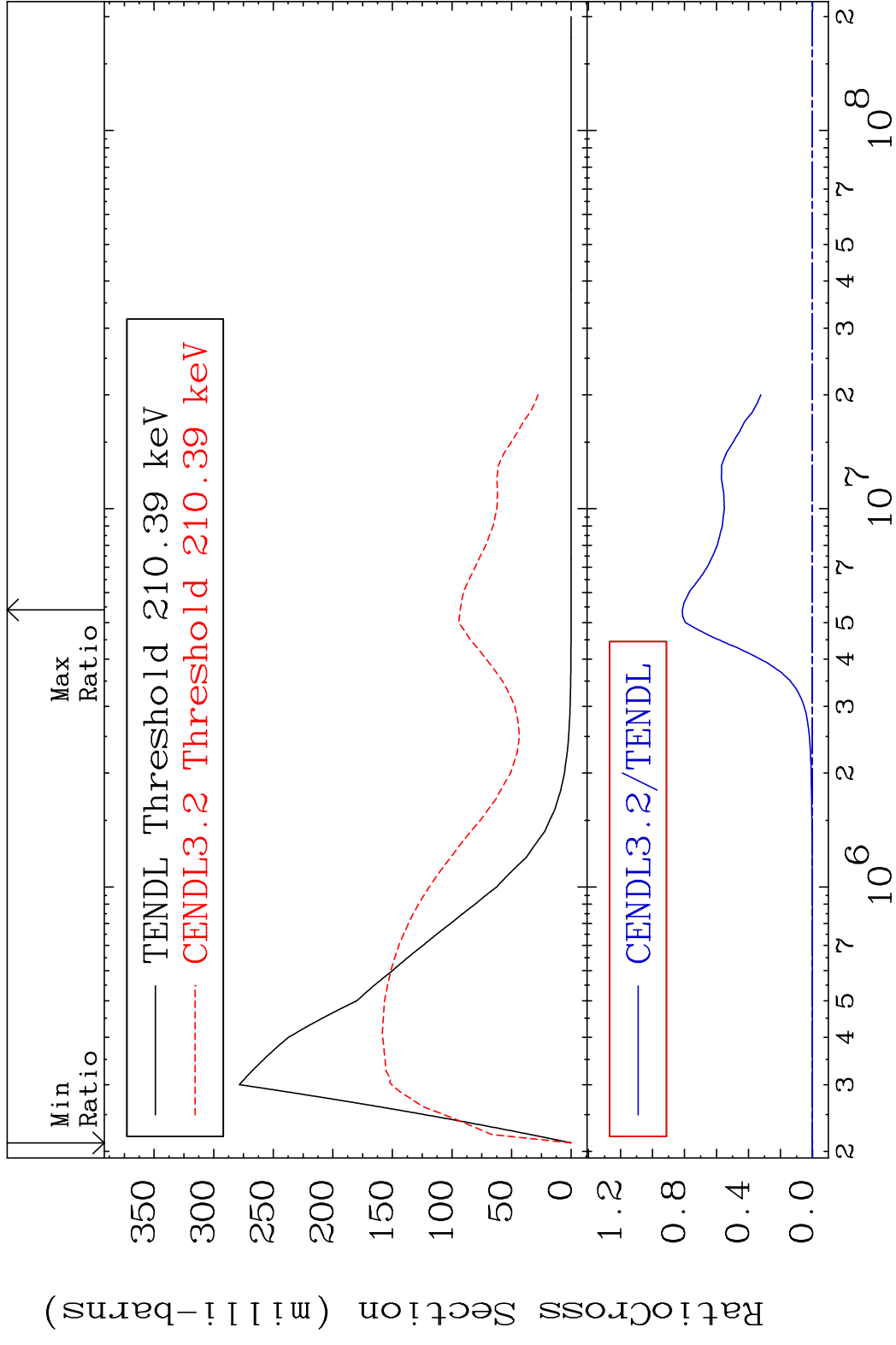
MAT 6246 MT= 58 (n, n') Level 62-Sm-151  
 Cross Section -60.26 To 390.8 %



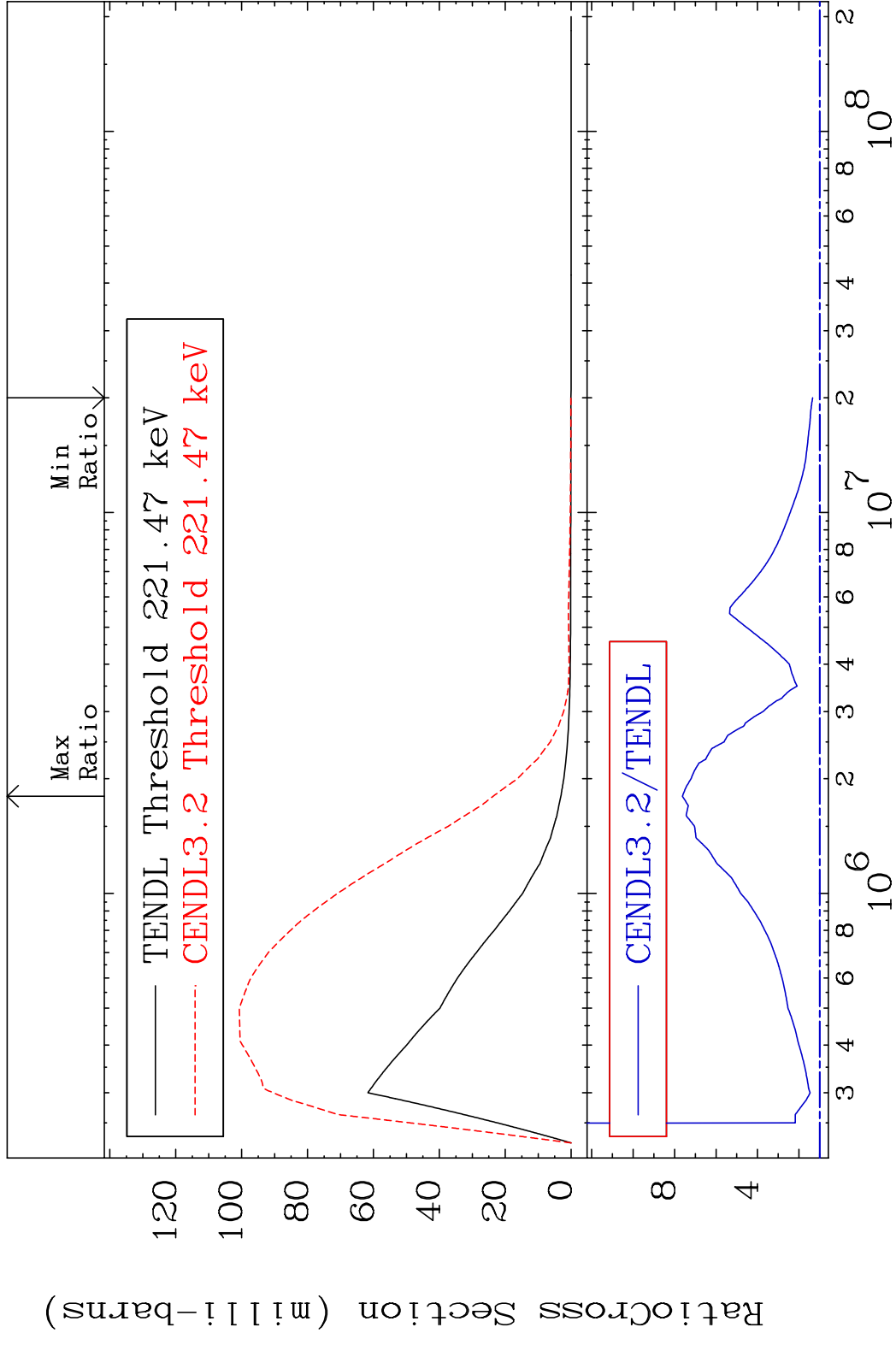
MAT 6246 MT= 59 (n, n') Level 62-Sm-151  
 Cross Section -100.0 To 9999. %



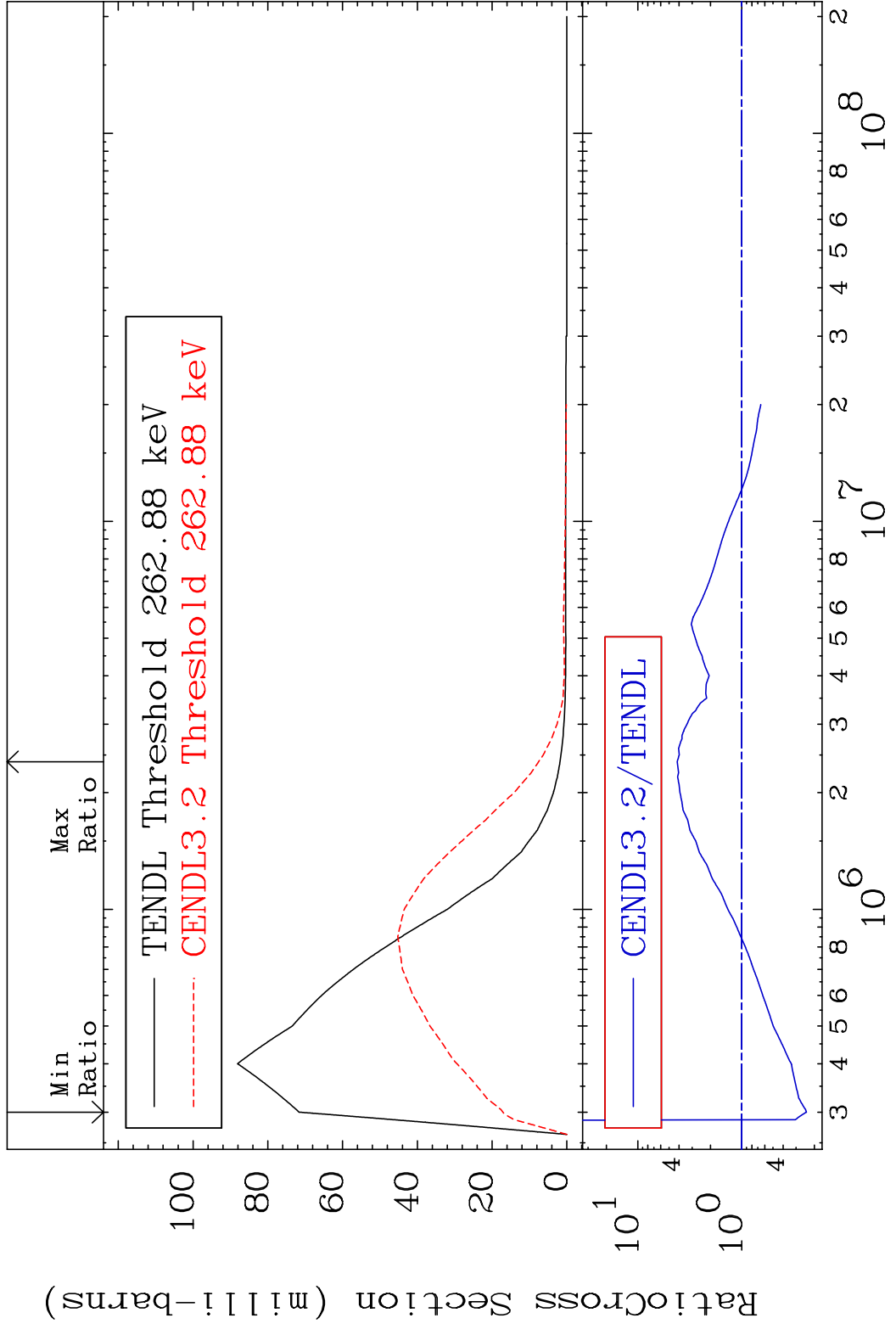
MAT 6246 MT= 60 (n, n') Level 62-Sm-151  
 Cross Section -100.0 To 9999. %



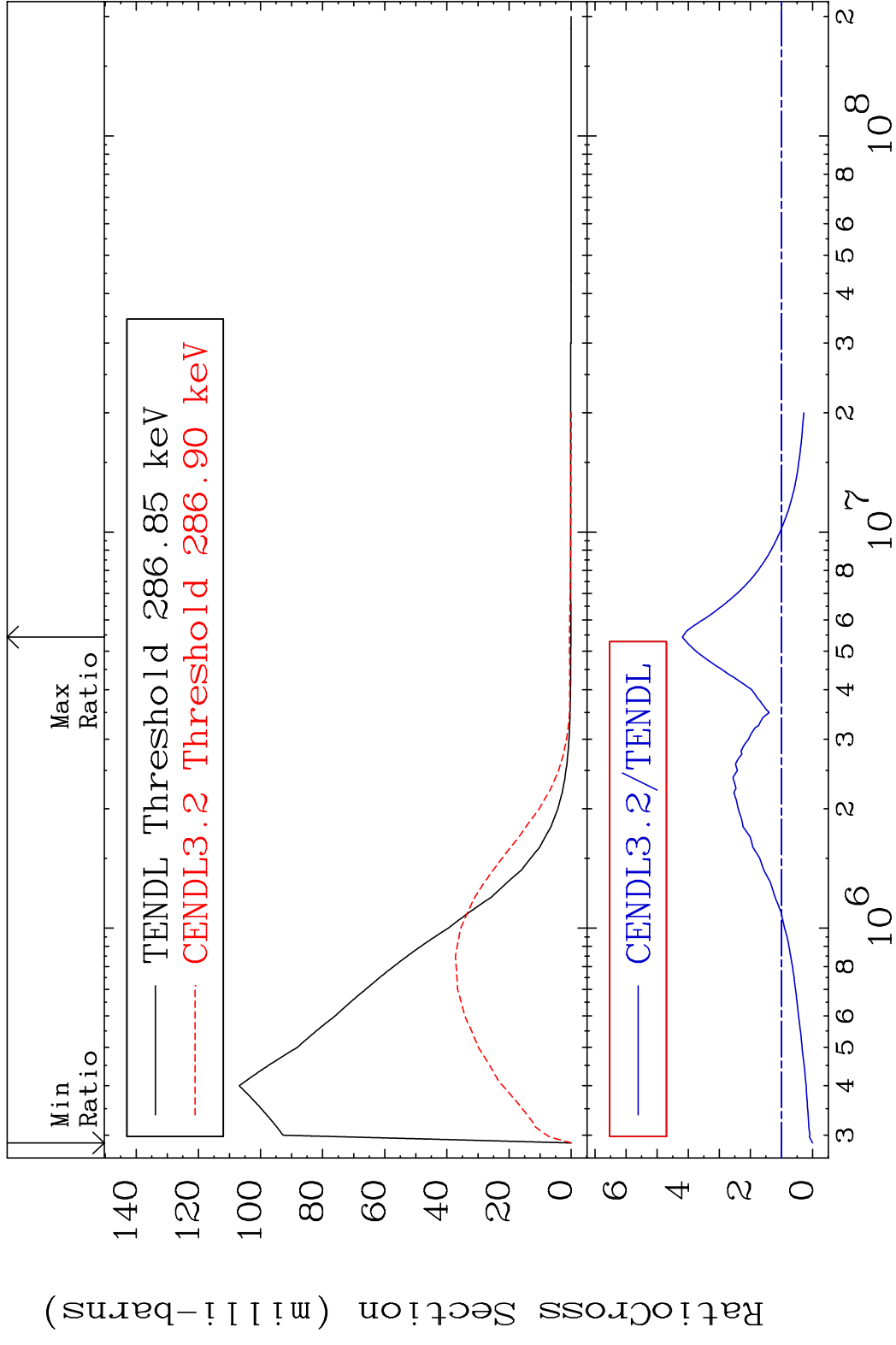
MAT 6246 MT= 61 (n, n') Level 62-Sm-151  
 Cross Section 34.43 To 662.4 %



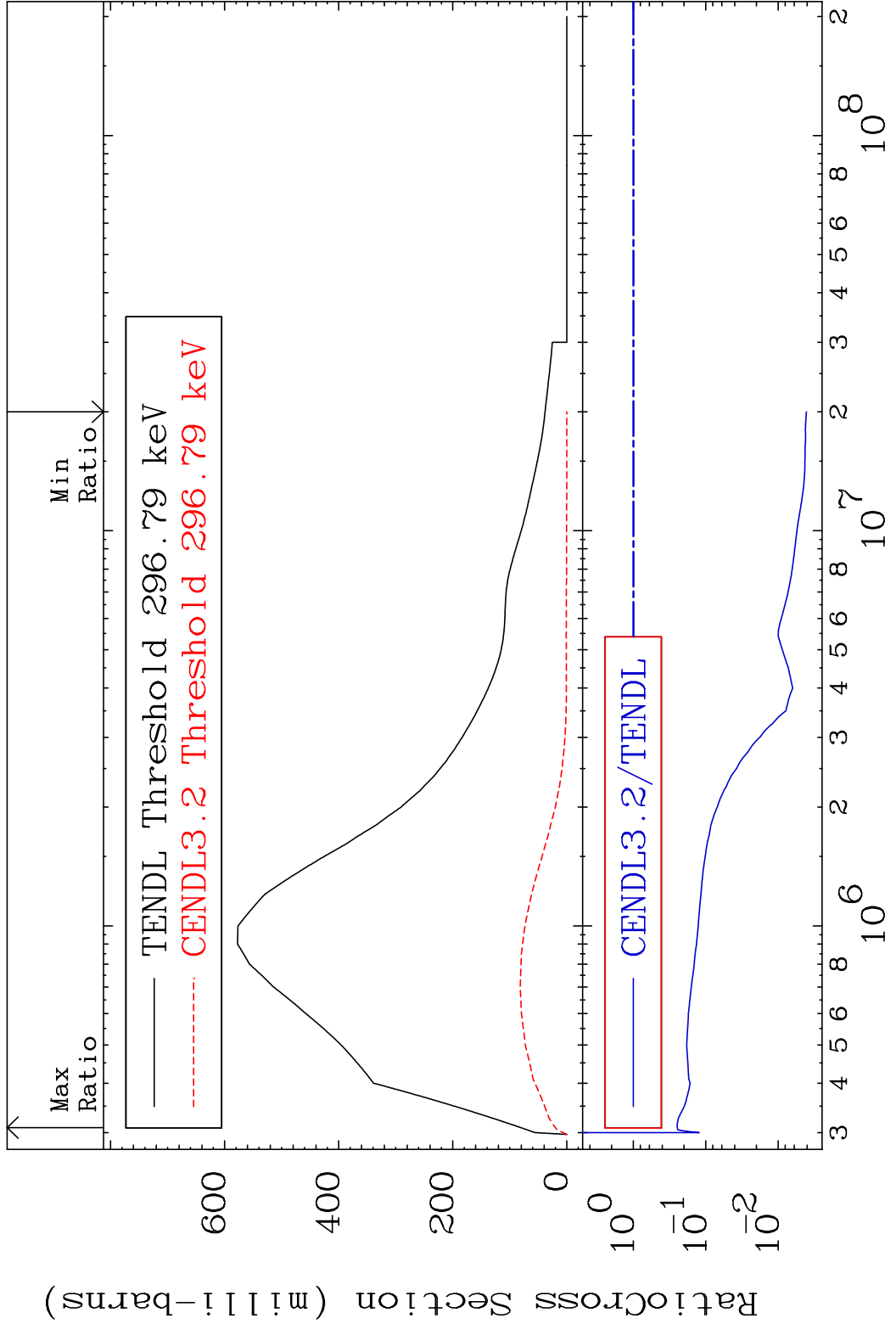
MAT 6246 MT= 62 (n, n') Level 62-Sm-151  
 Cross Section -76.11 To 317.6 %



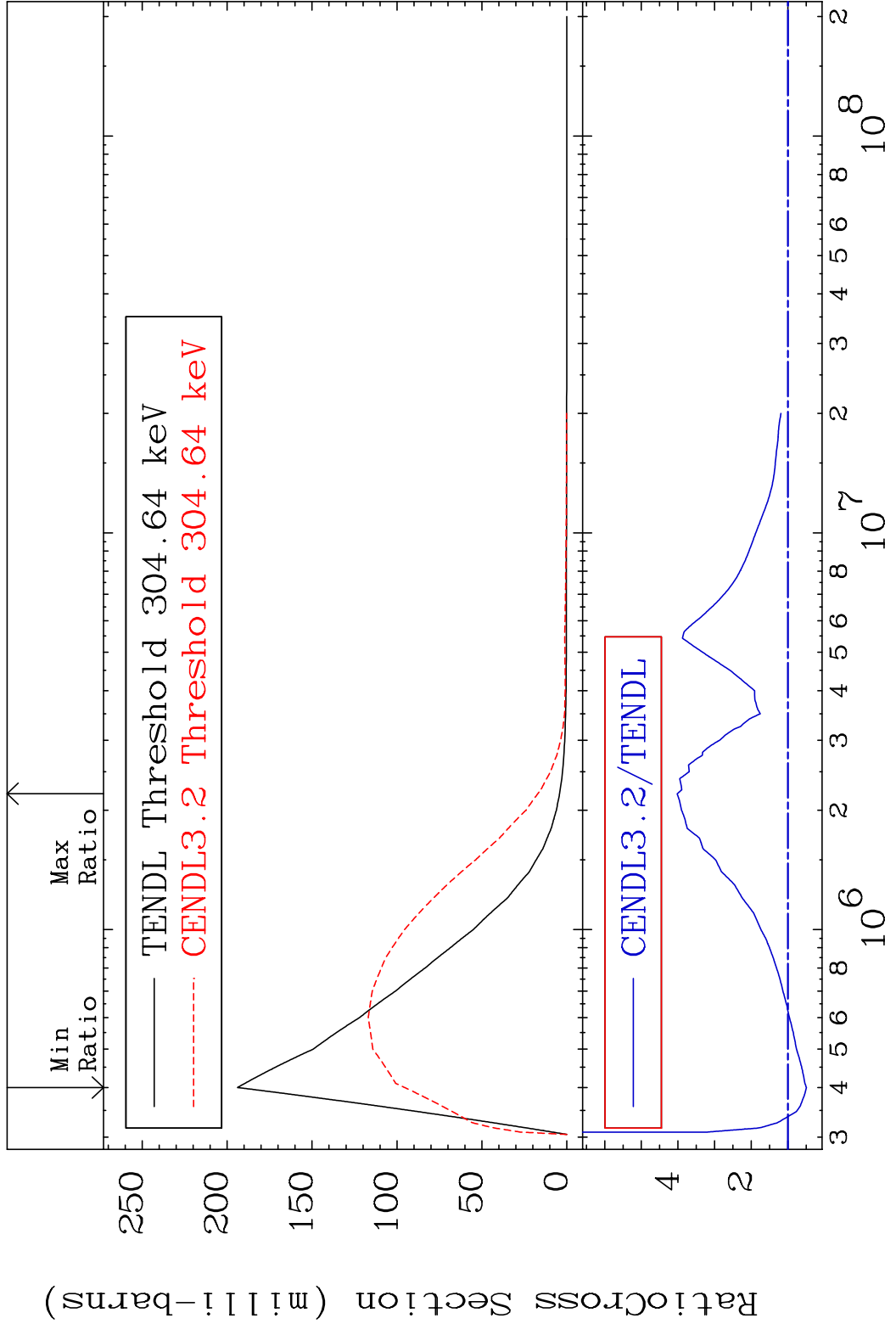
MAT 6246 MT= 63 (n, n') Level 62-Sm-151  
 Cross Section -100.0 To 319.0 %



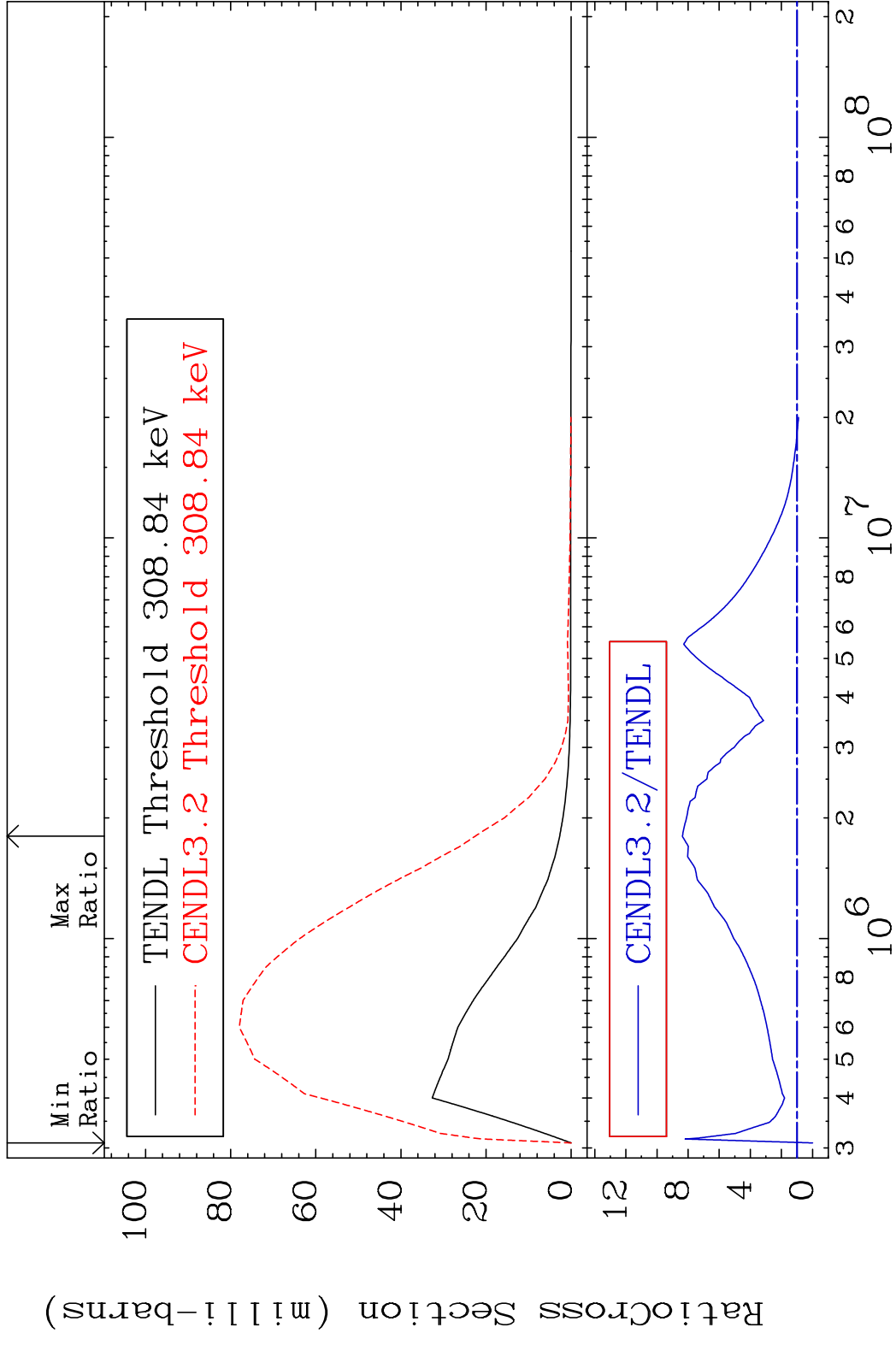
MAT 6246 MT= 64 (n, n') Level 62-Sm-151  
 Cross Section -99.59 To -75.13%



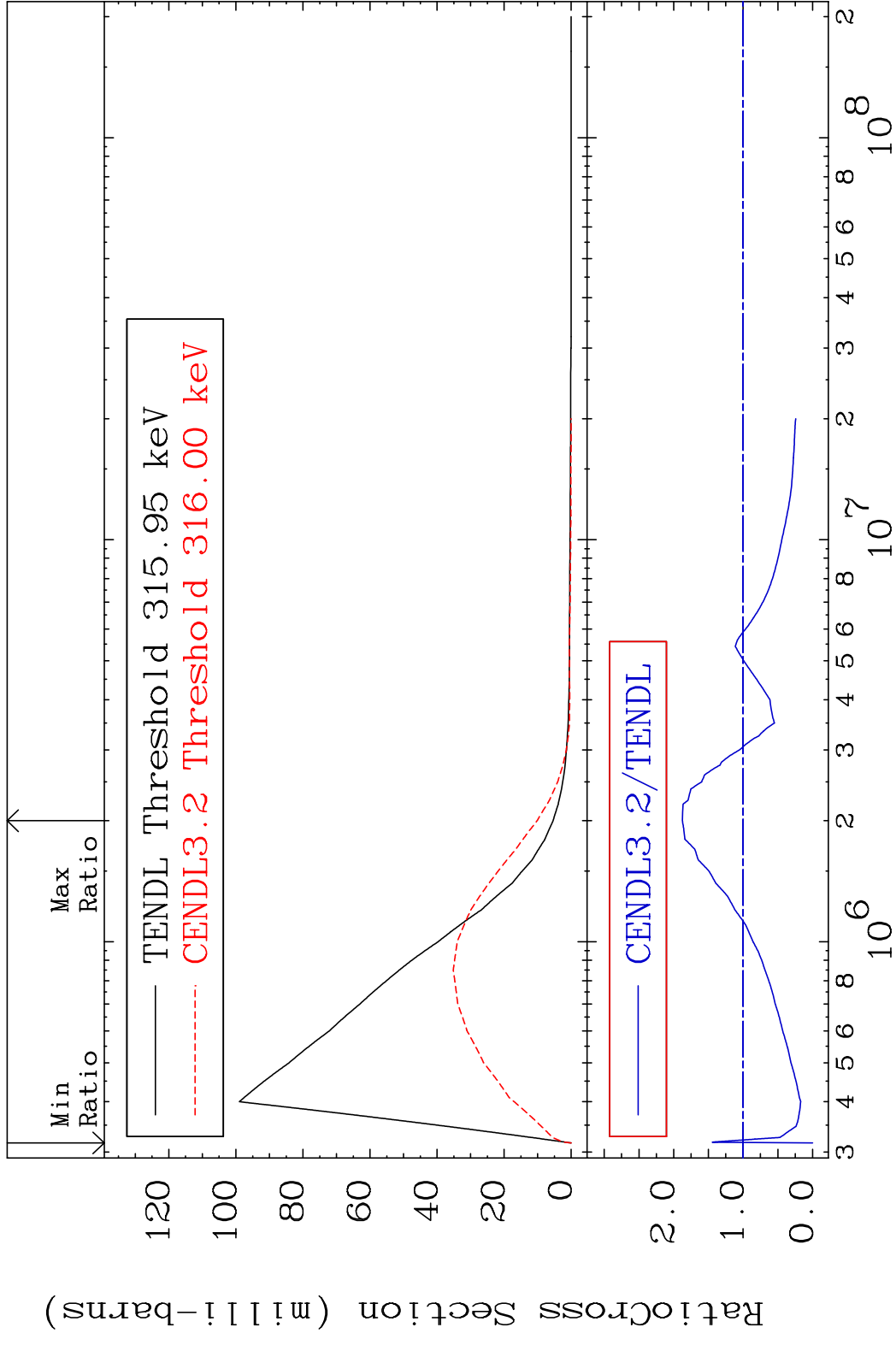
MAT 6246 MT= 65 (n,n') Level 62-Sm-151  
 Cross Section -50.74 To 302.1 %



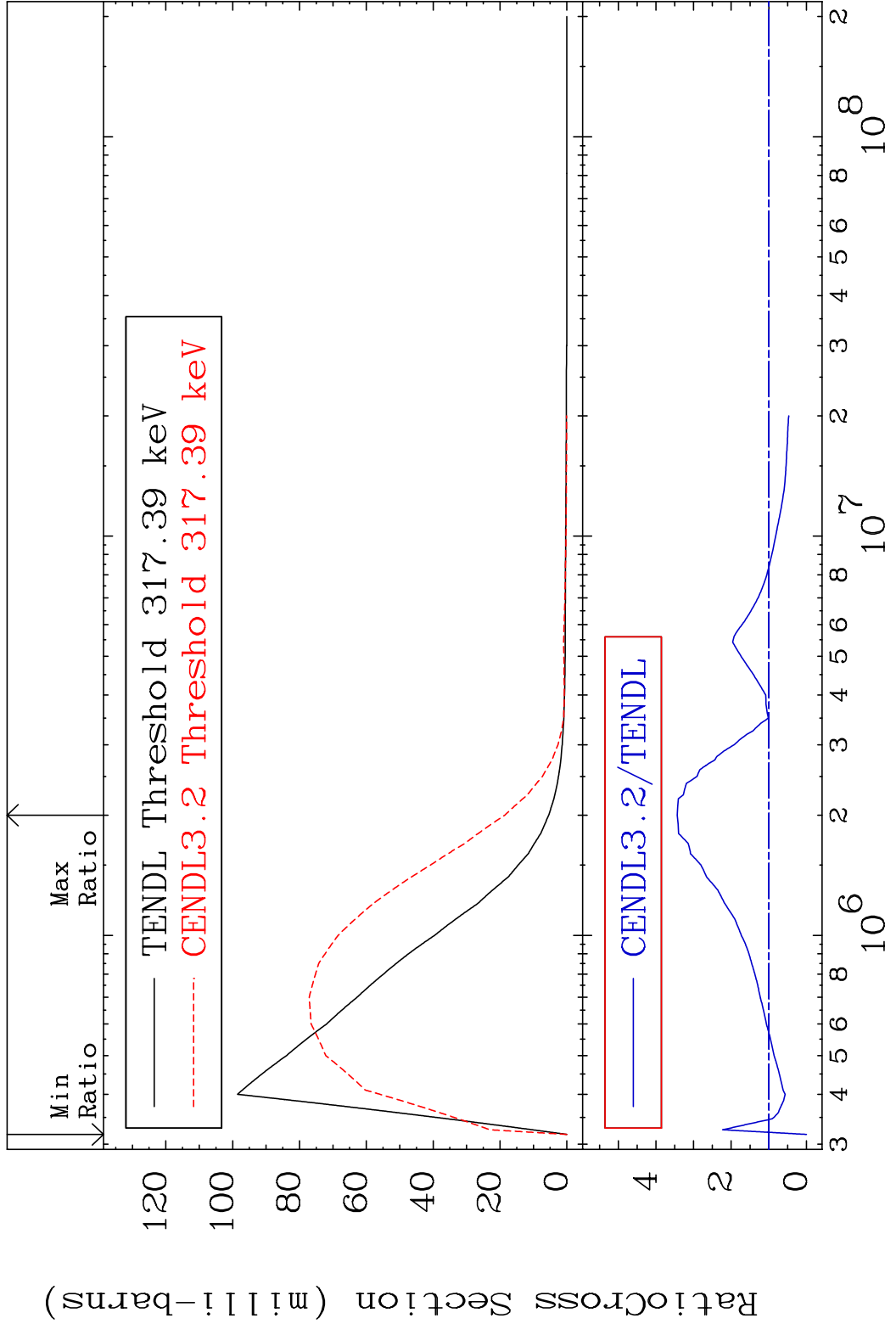
MAT 6246 MT= 66 (n,n') Level 62-Sm-151  
 Cross Section -100.0 To 736.8 %



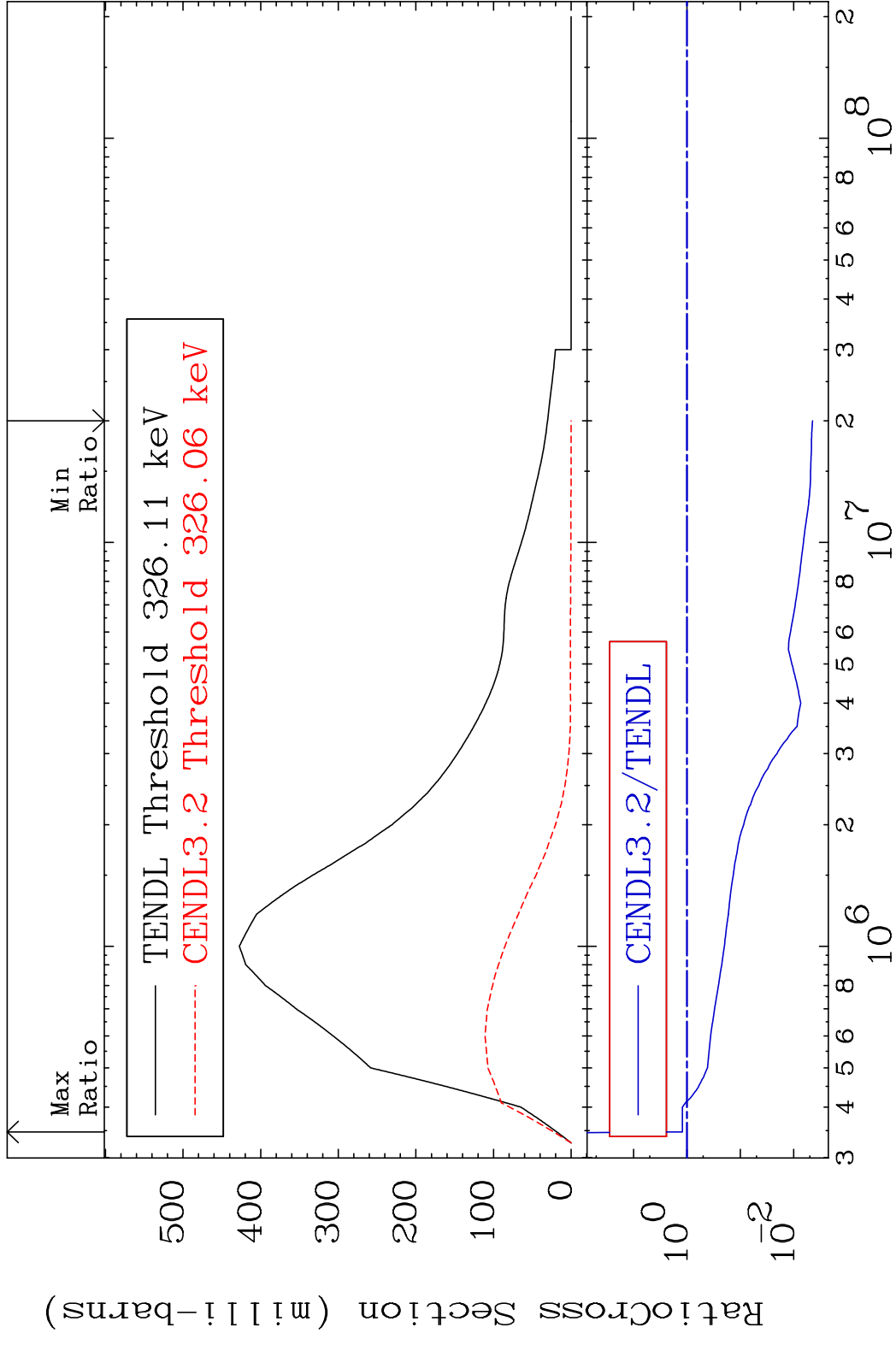
MAT 6246 MT= 67 (n,n') Level 62-Sm-151  
 Cross Section -100.0 To 87.52 %



MAT 6246 MT= 68 (n, n') Level 62-Sm-151  
 Cross Section -100.0 To 243.6 %



MAT 6246 MT= 69 (n, n') Level 62-Sm-151  
 Cross Section -99.55 To 22.18 %

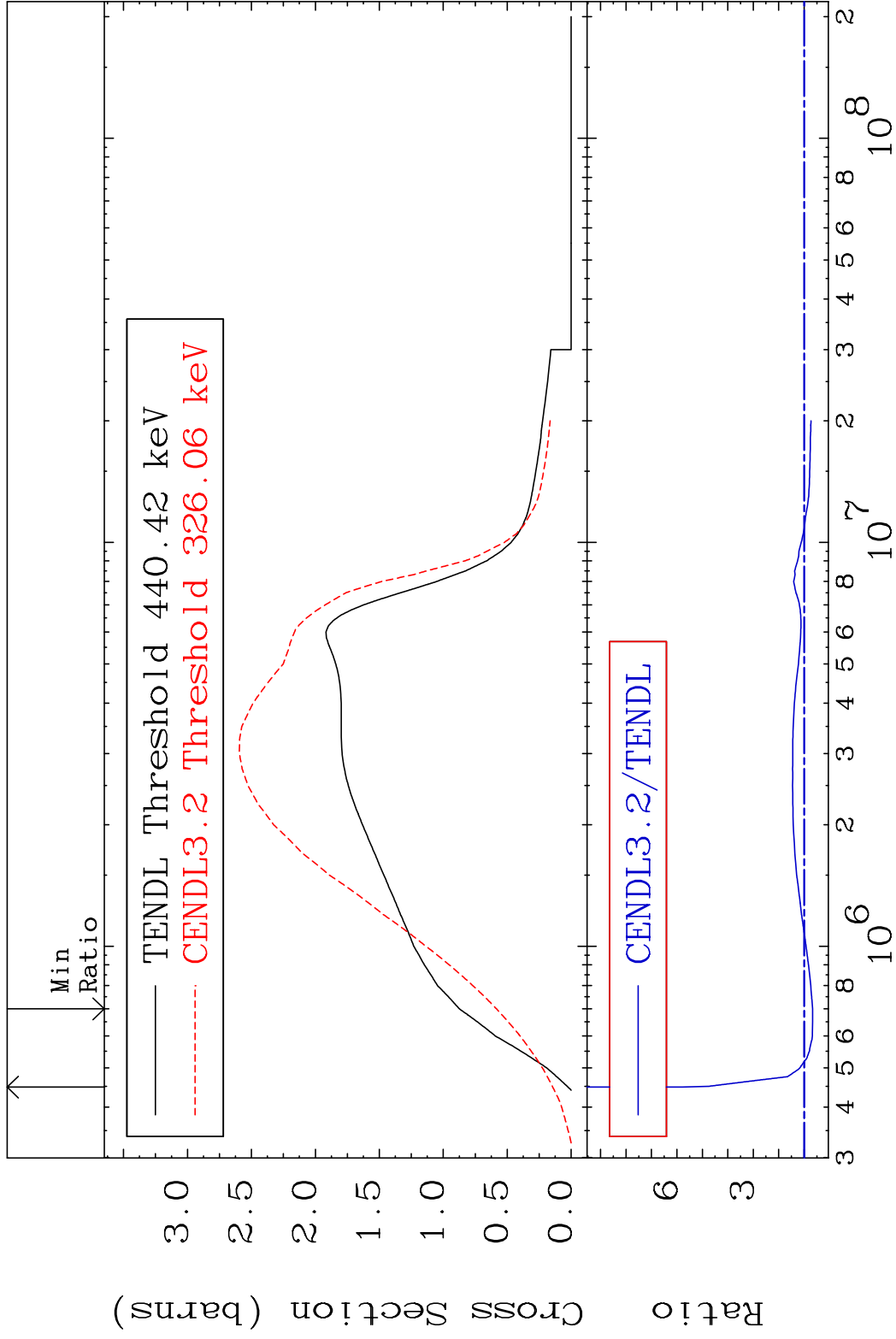


MAT 6246

(n, n') Continuum

62-Sm-151

Cross Section -33.19 To 478.6 %

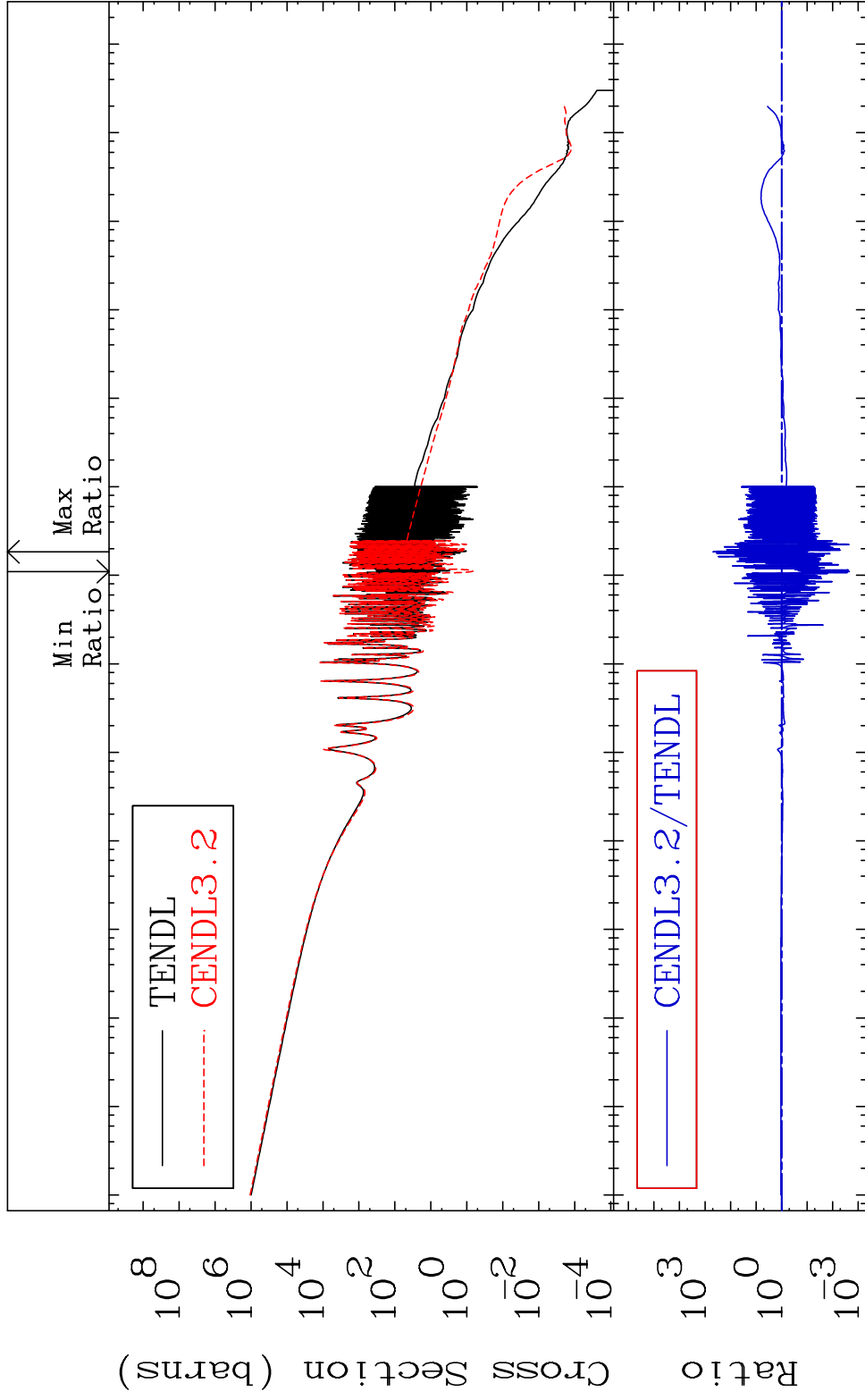


MAT 6246

(n,  $\gamma$ )

62-Sm-151

Cross Section -99.78 To 9999. %



28

Incident Energy (eV)

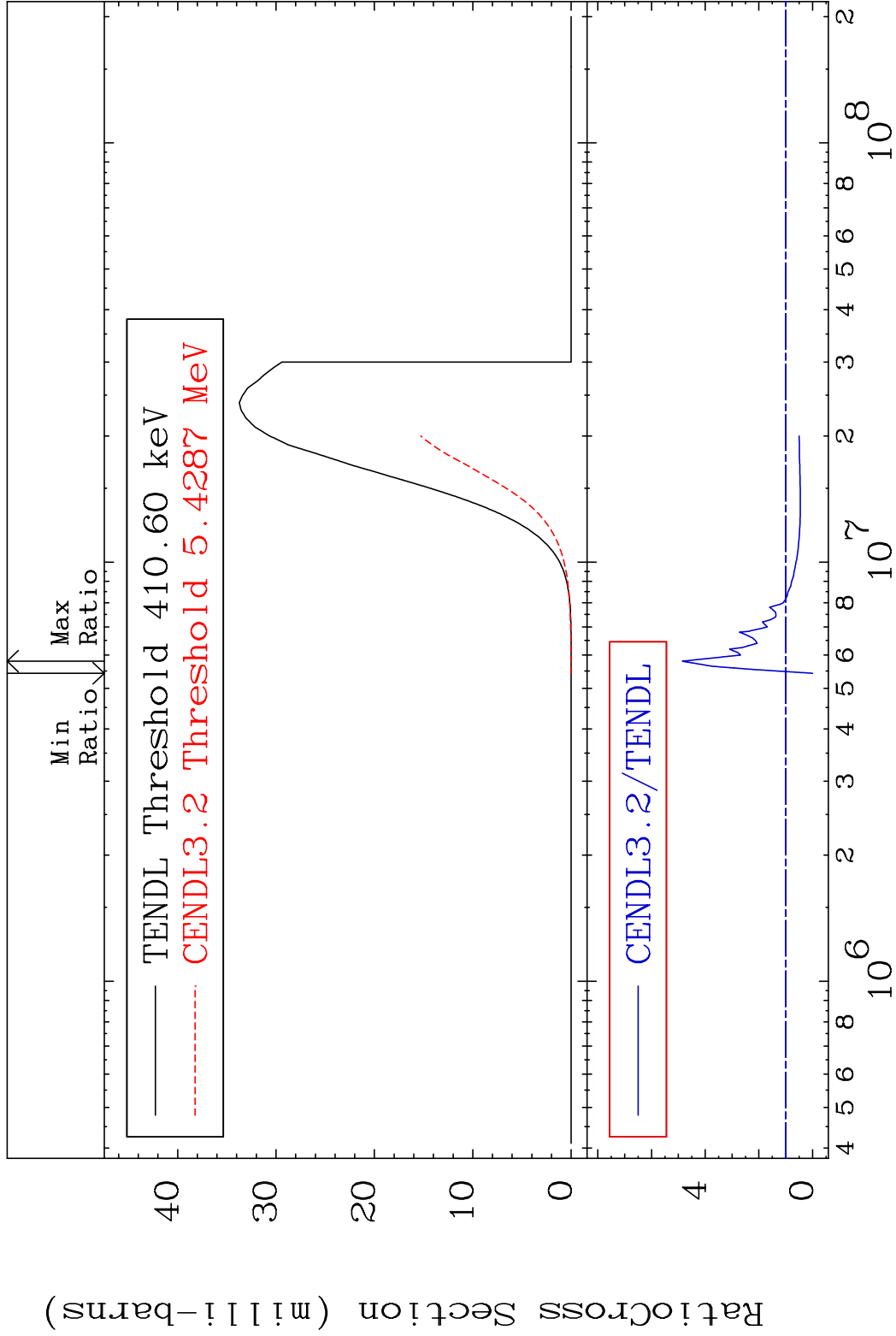
62-Sm-151

MAT 6246

(n, p)

62-Sm-151

Cross Section -100.0 To 385.2 %



29

Incident Energy (eV)

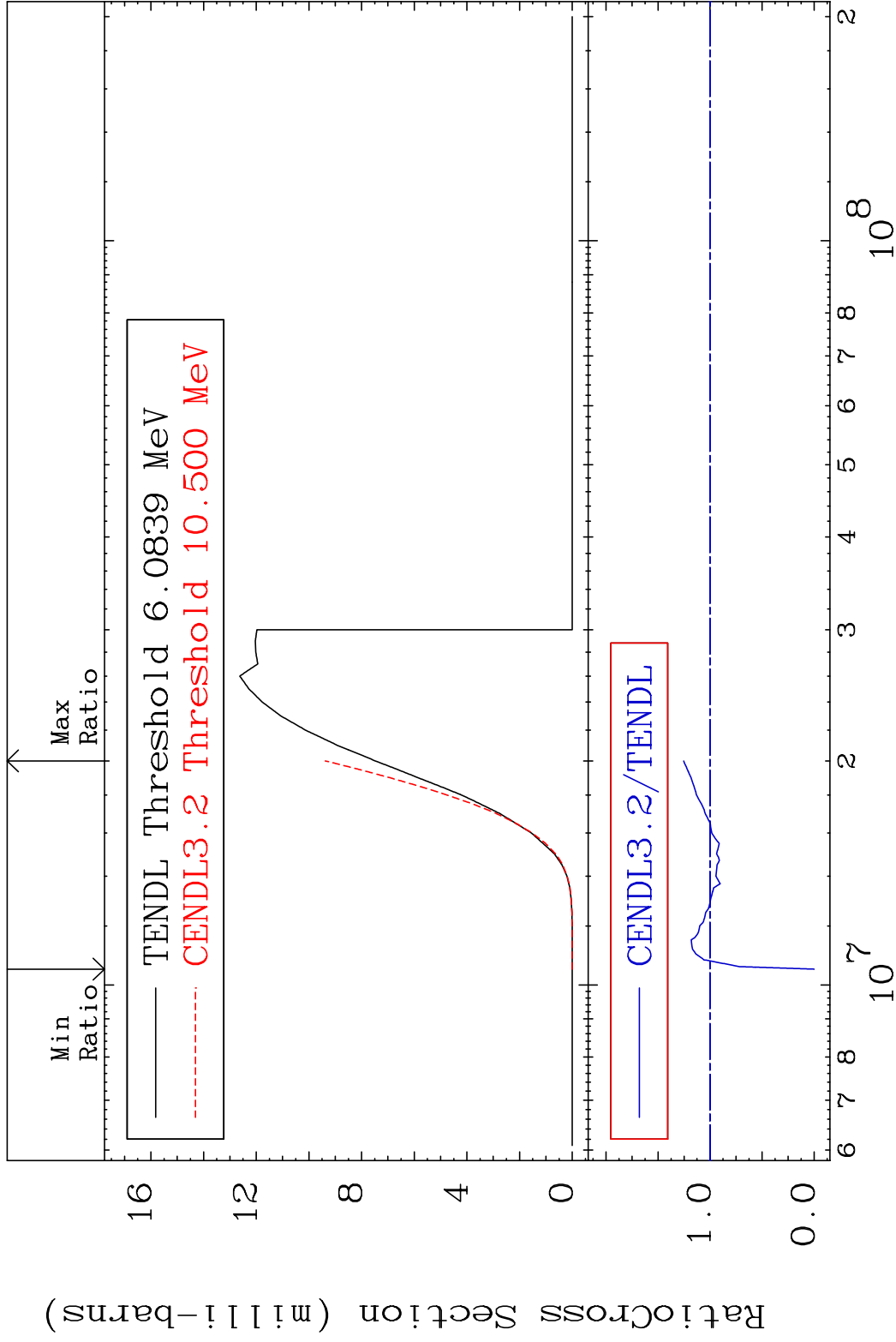
62-Sm-151

MAT 6246

(n, d)

62-Sm-151

Cross Section -100.0 To 25.37 %

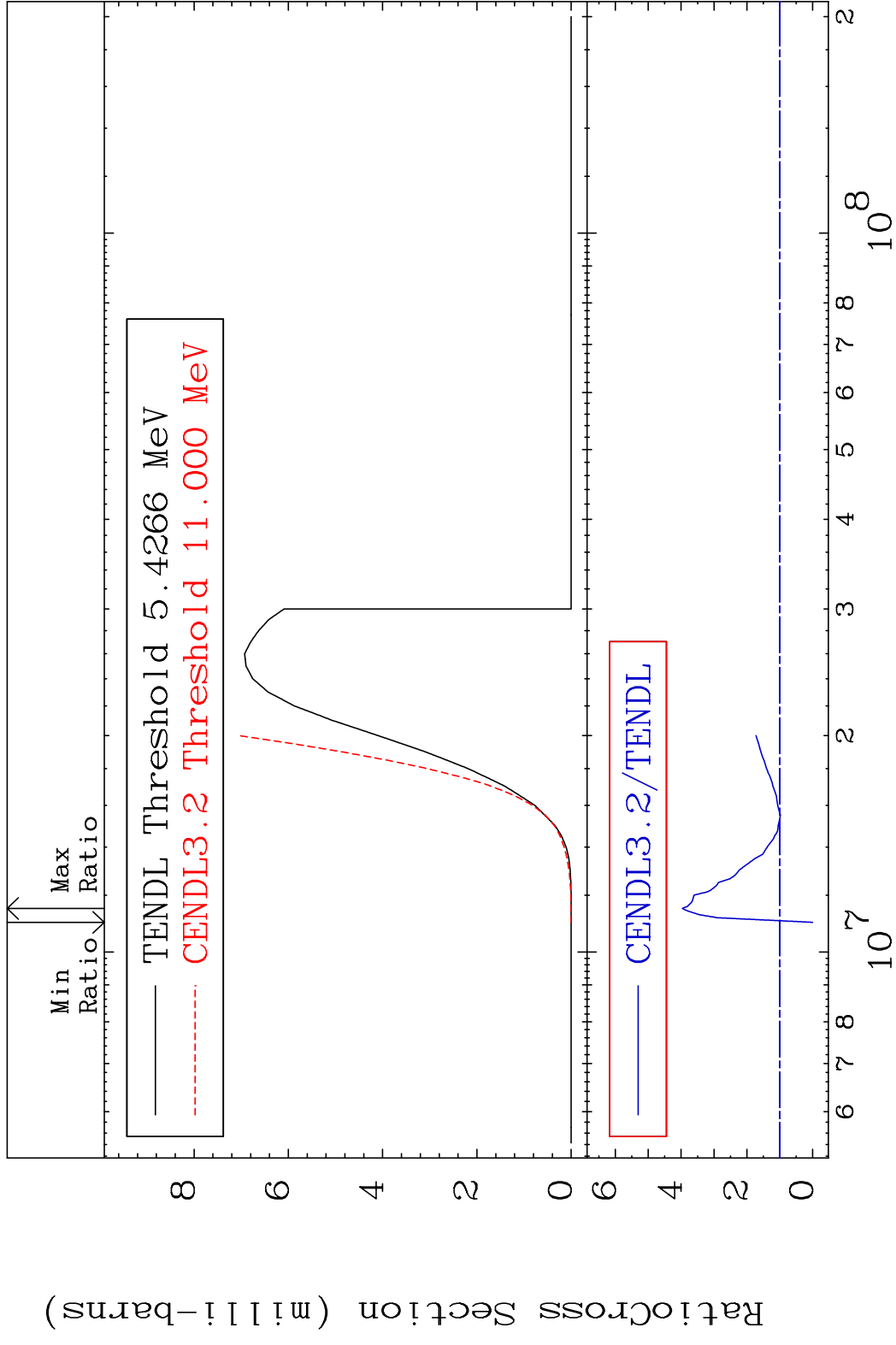


30

Incident Energy (eV)

62-Sm-151

MAT 6246 (n, t) 62-Sm-151  
 Cross Section -100.0 To 296.3 %

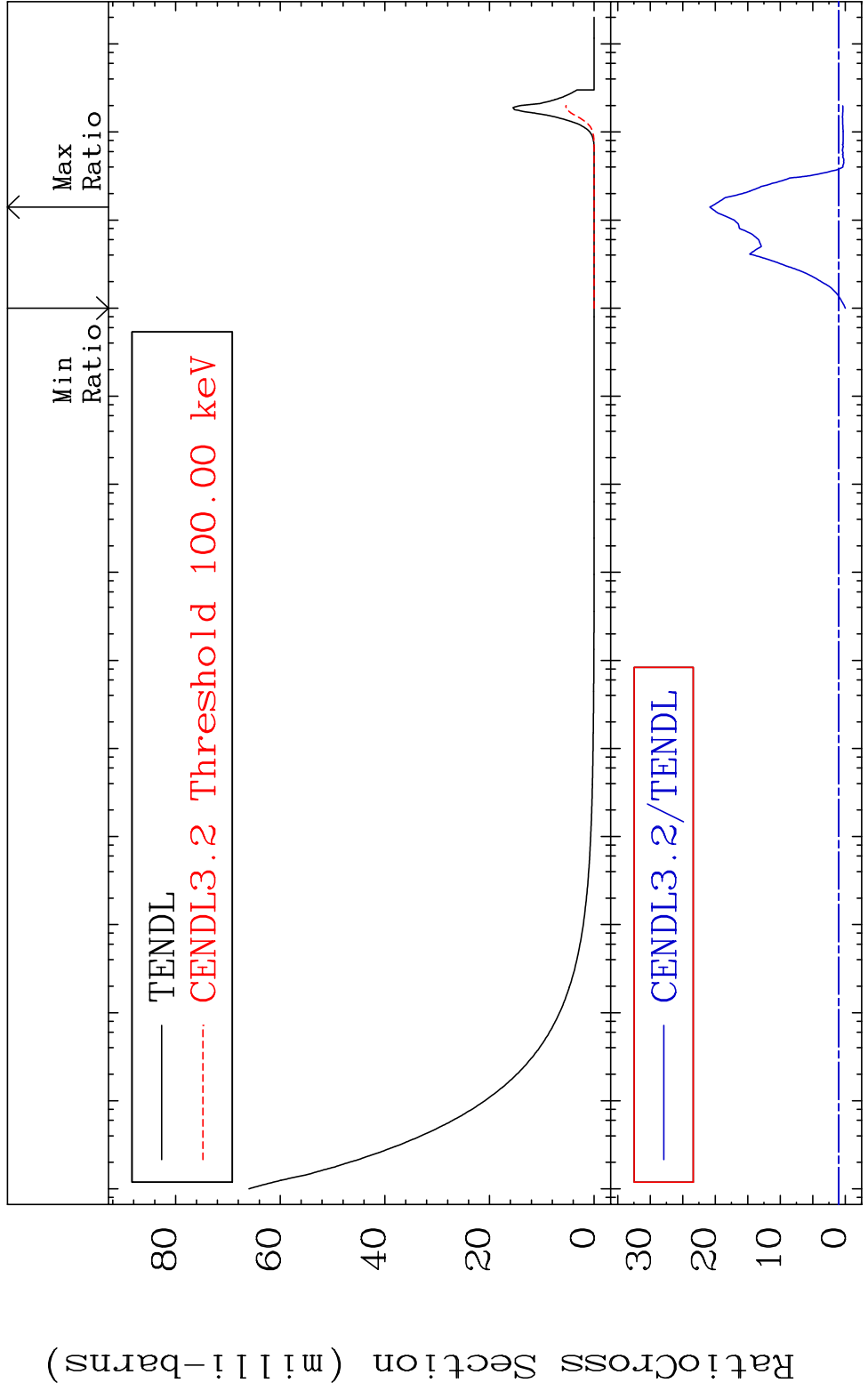


MAT 6246

(n,  $\alpha$ )

62-Sm-151

Cross Section -100.0 To 1984. %



32

Incident Energy (eV)

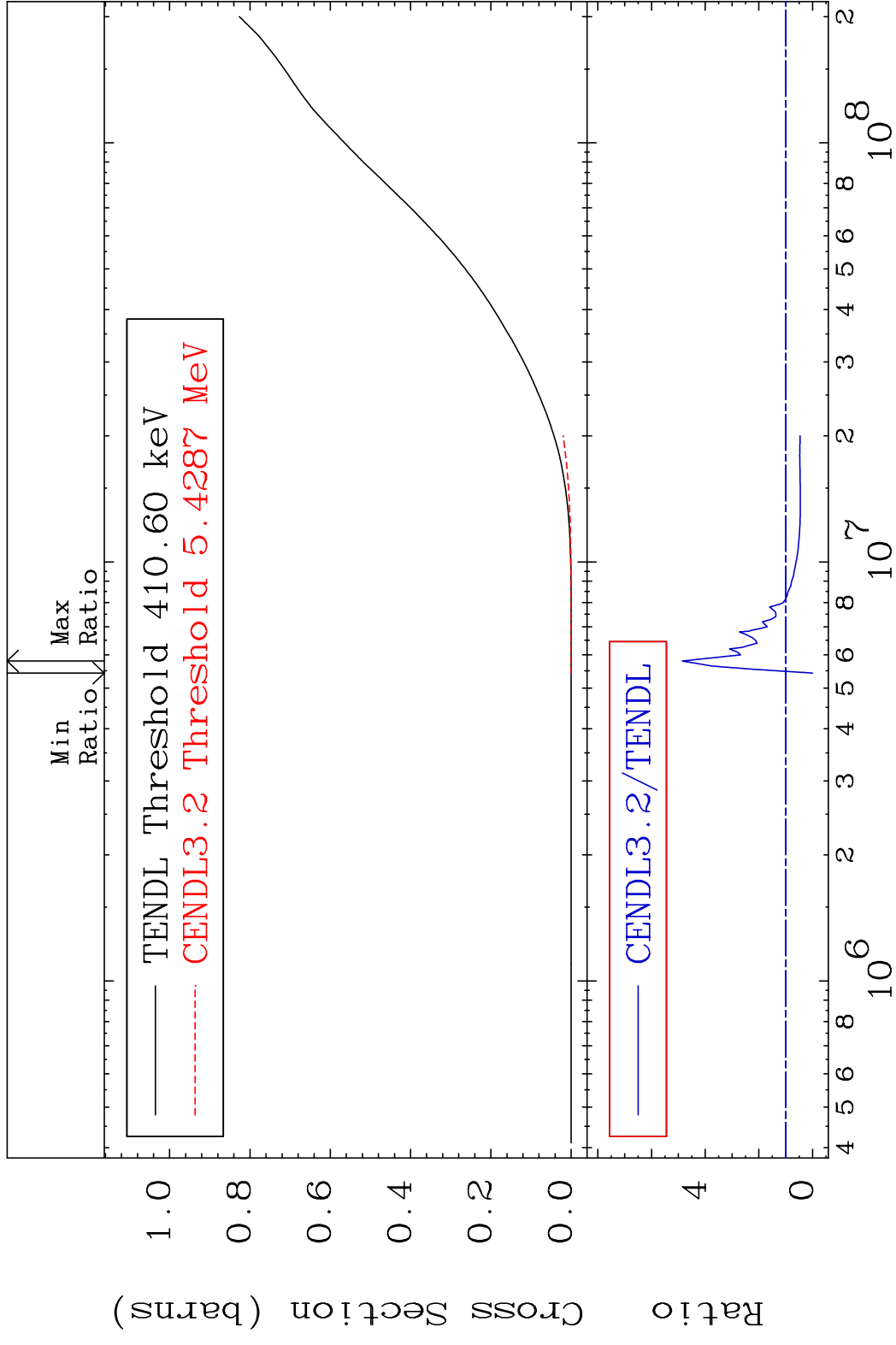
62-Sm-151

MAT 6246

Hydrogen Production

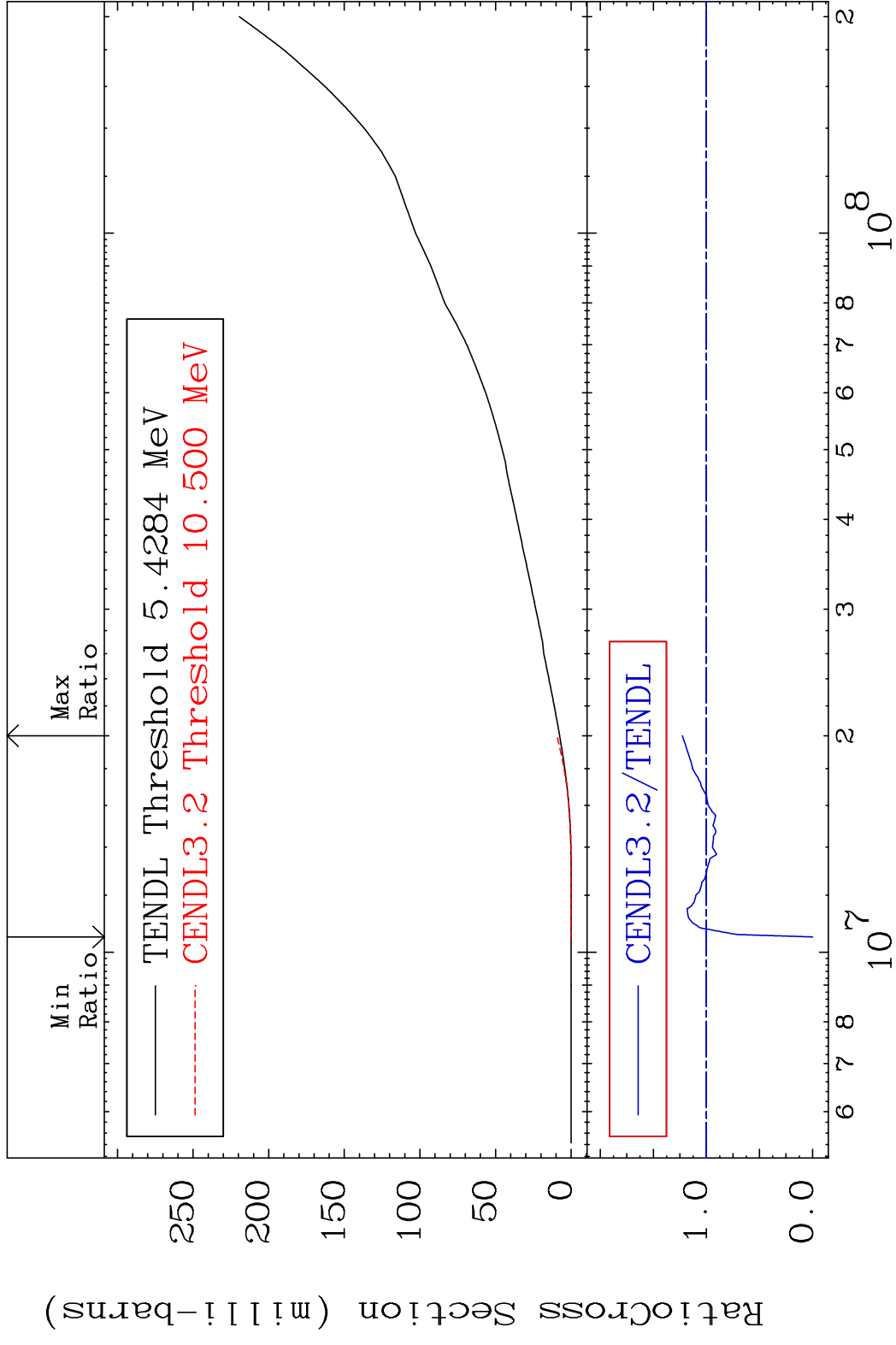
62-Sm-151

Cross Section -100.0 To 385.2 %



MAT 6246

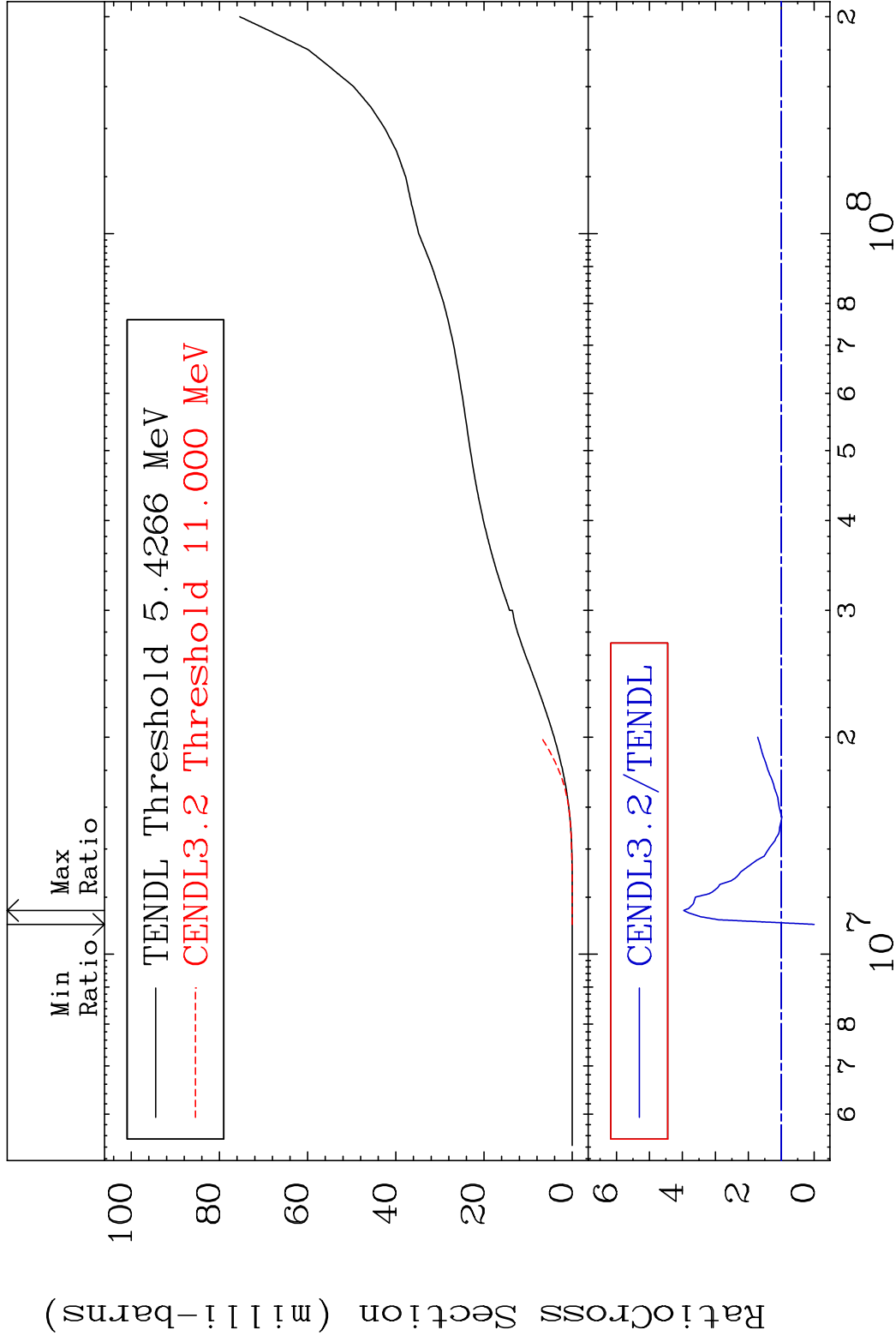
Deuterium Production 62-Sm-151  
Cross Section -100.0 To 22.66 %



MAT 6246

Tritium Production 62-Sm-151

Cross Section -100.0 To 296.3 %



35

Incident Energy (eV)

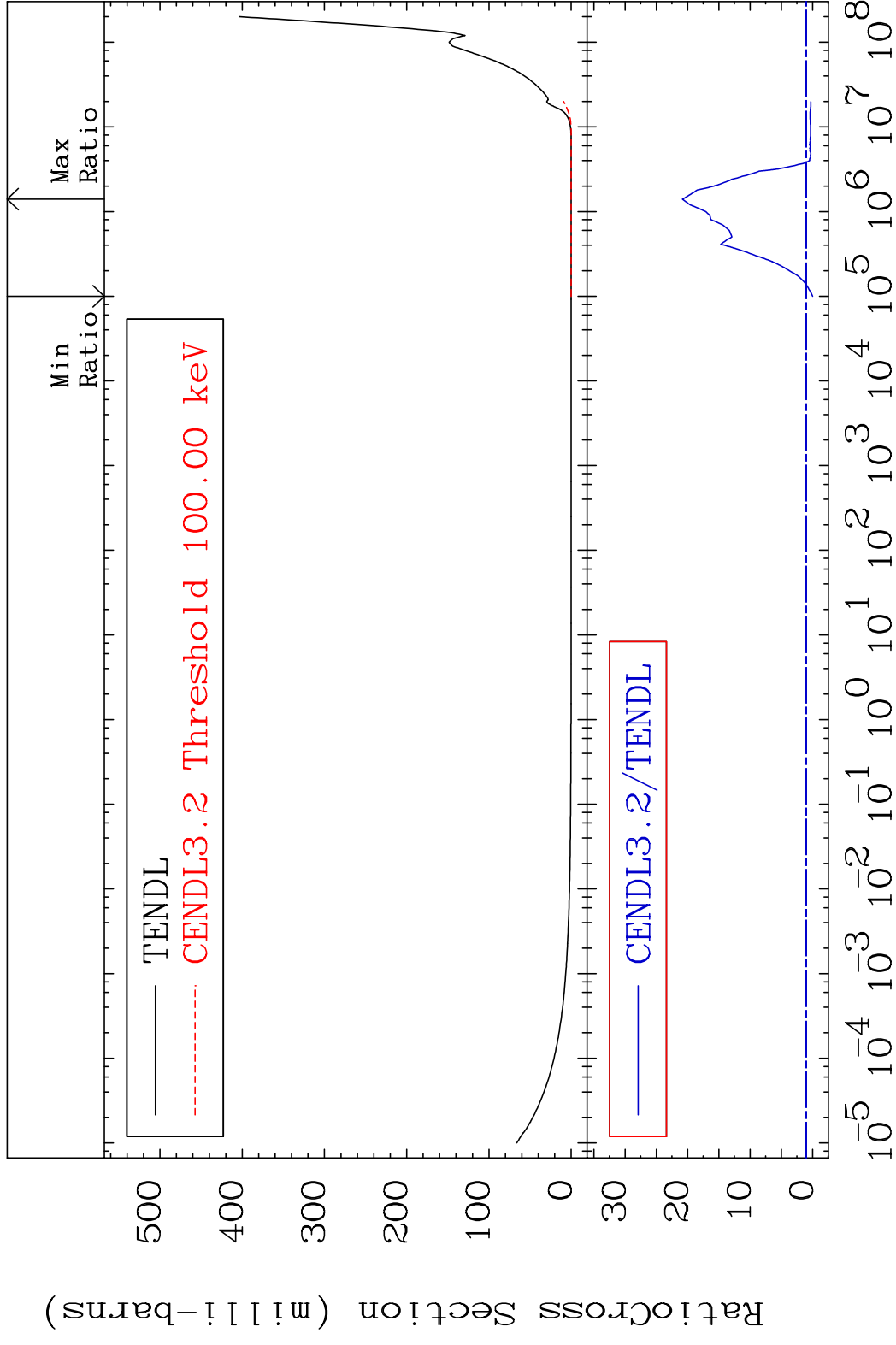
62-Sm-151

MAT 6246

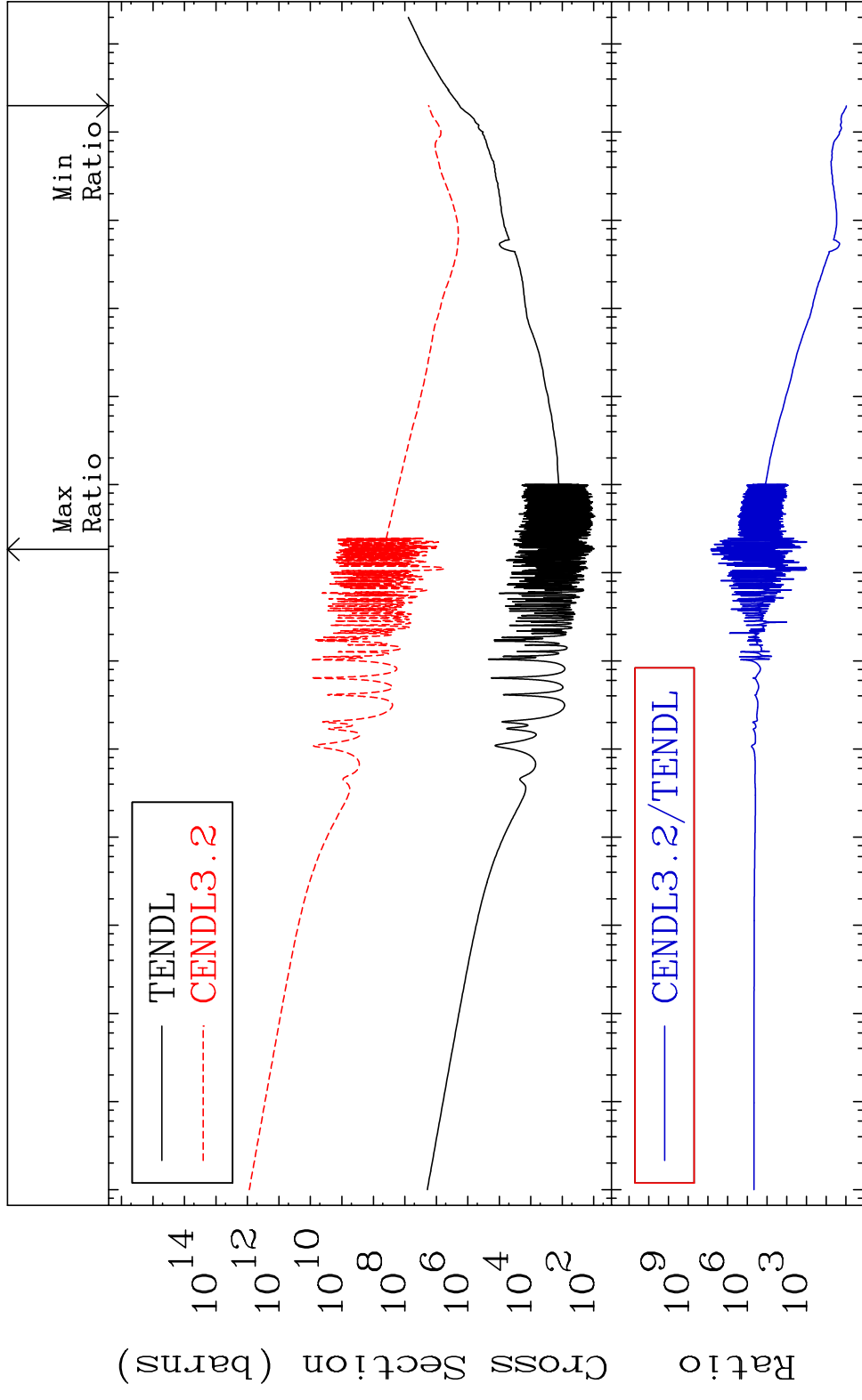
He-4 Production

62-Sm-151

Cross Section -100.0 To 1984. %

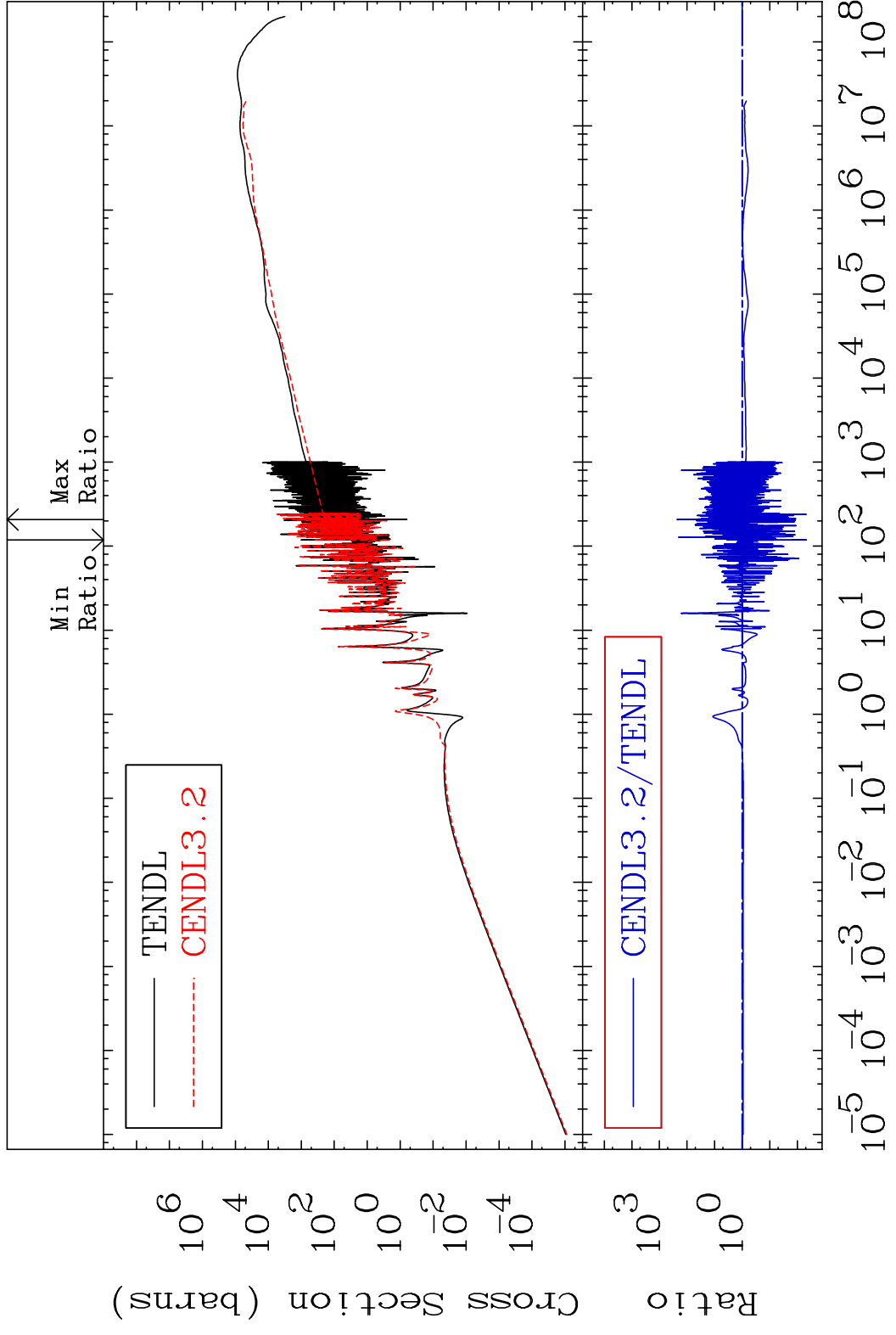


MAT 6246 Kerma total (eV-barns) 62-Sm-151  
 Cross Section 846.9 To 9999. %

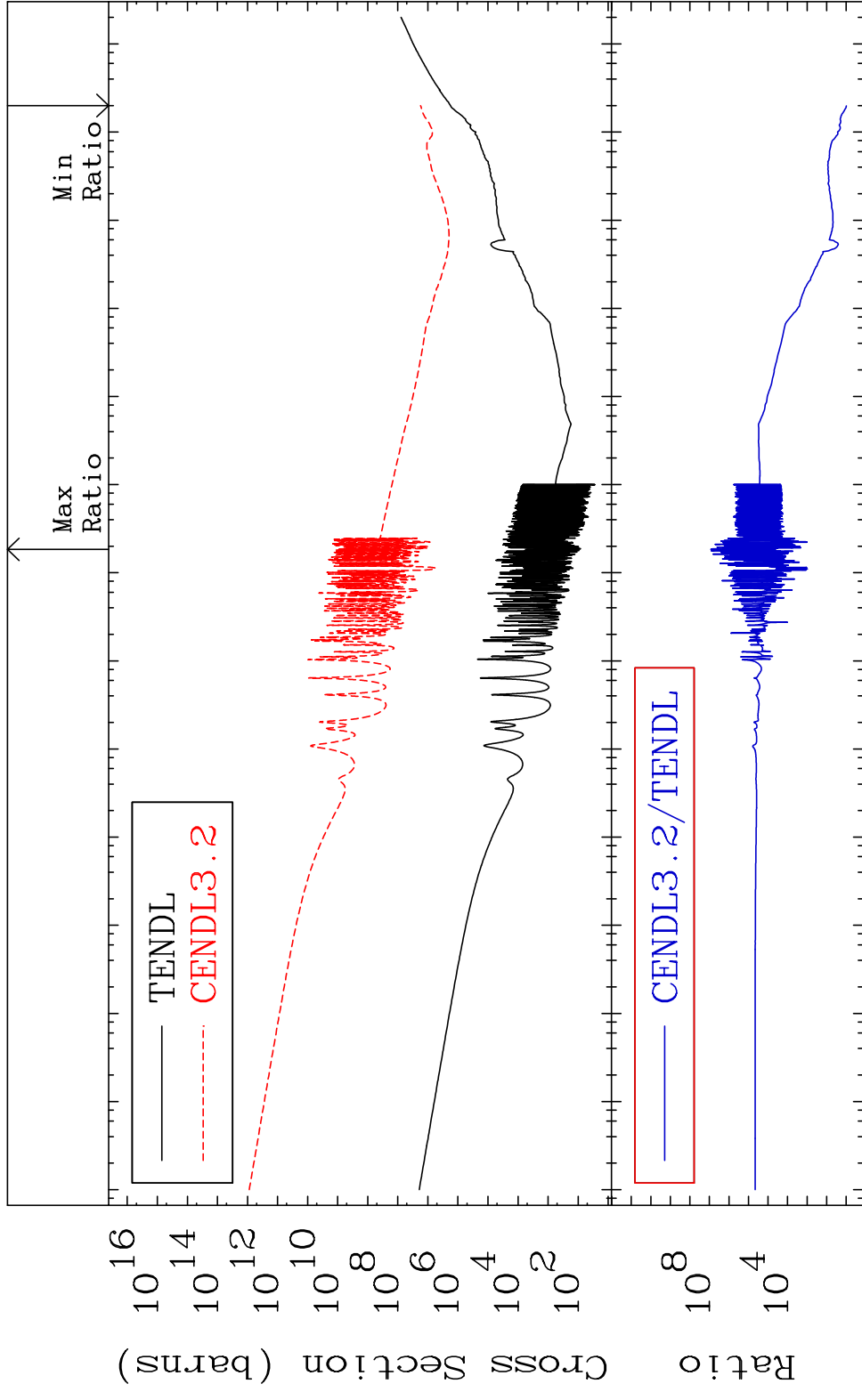


MAT 6246

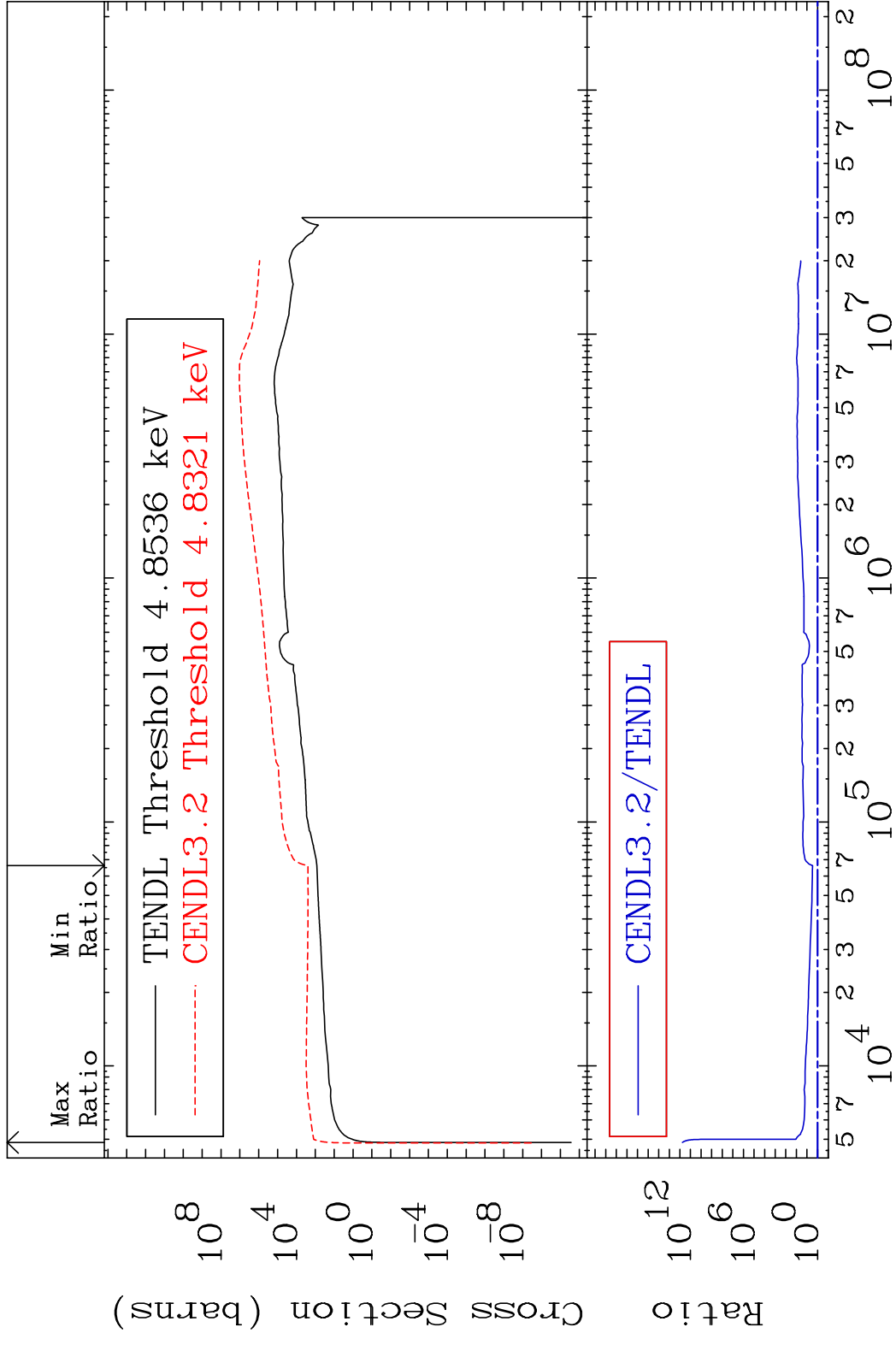
Kerma elastic Cross Section -99.53 To 9999. %  
62-Sm-151



MAT 6246 Kerma non-elastic (all but mt2) 62-Sm-151  
 Cross Section 879.3 To 9999. %

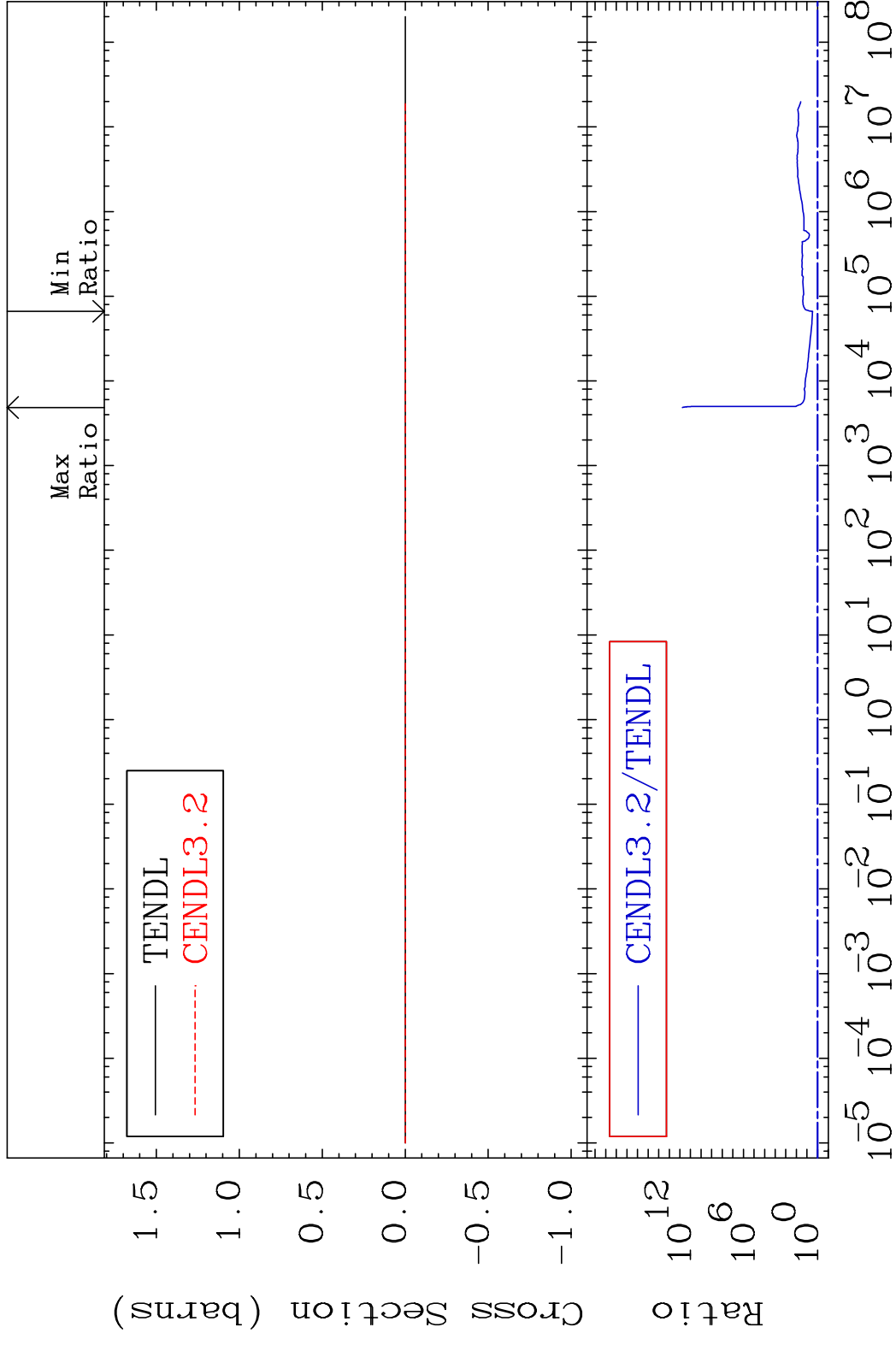


MAT 6246 Kerma inelastic (mt51-91) 62-Sm-151  
 Cross Section 198.3 To 9999. %

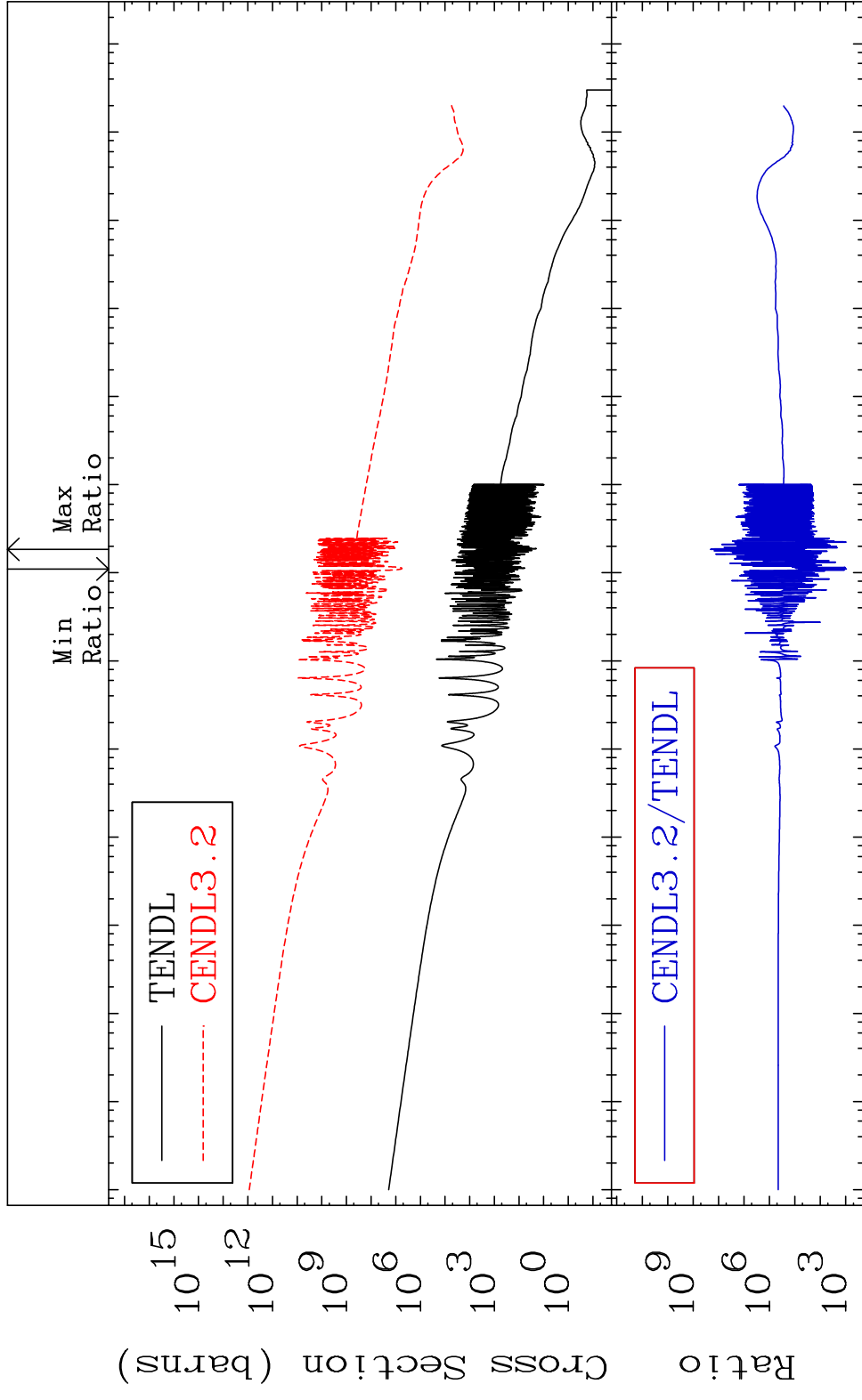


40 Incident Energy (eV) 62-Sm-151

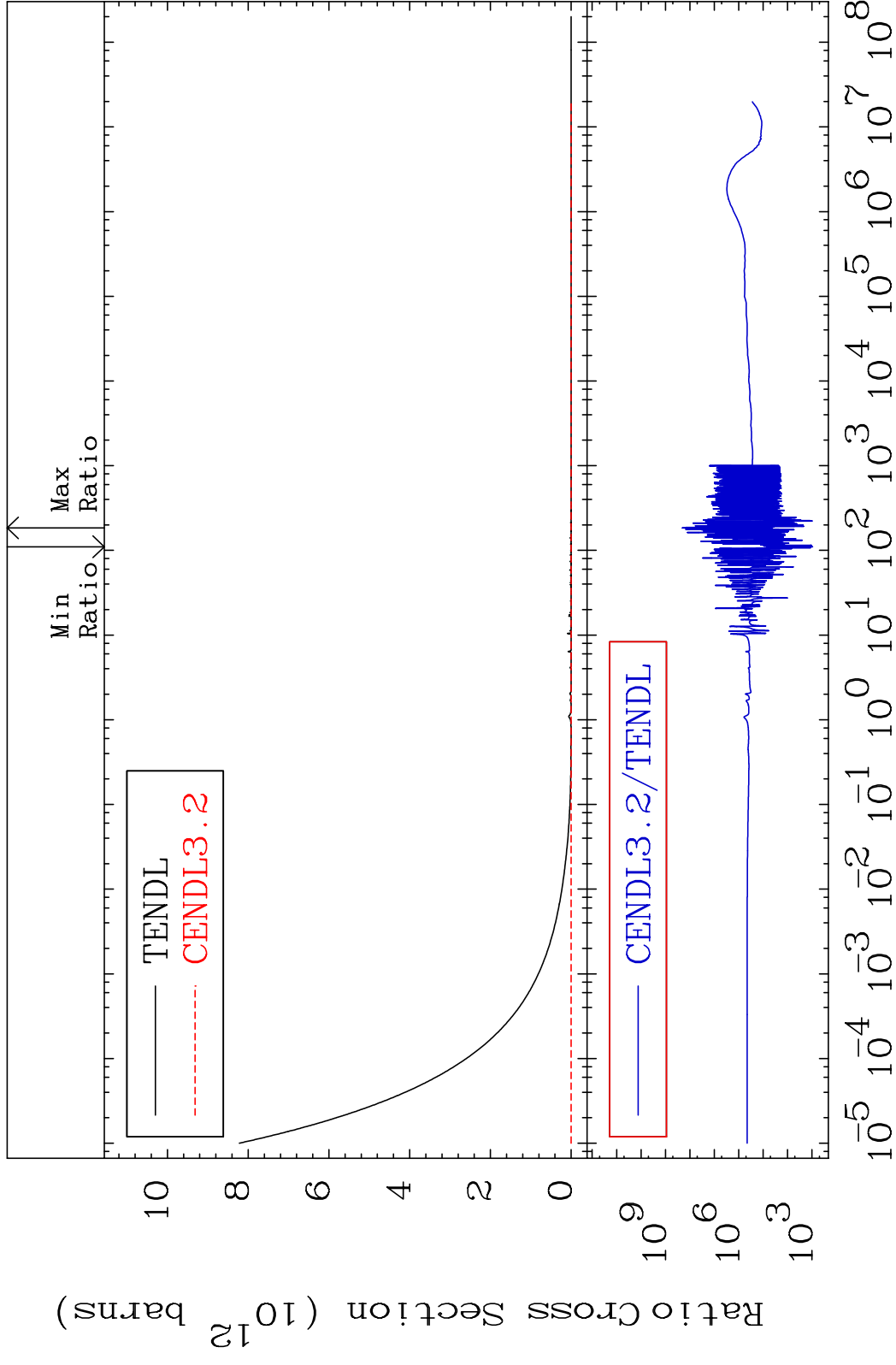
MAT 6246 Kerma fission (mt18 or mt19-20-21-38)  $^{62}\text{Sm}$ -151  
 Cross Section 198.3 To 9999. %



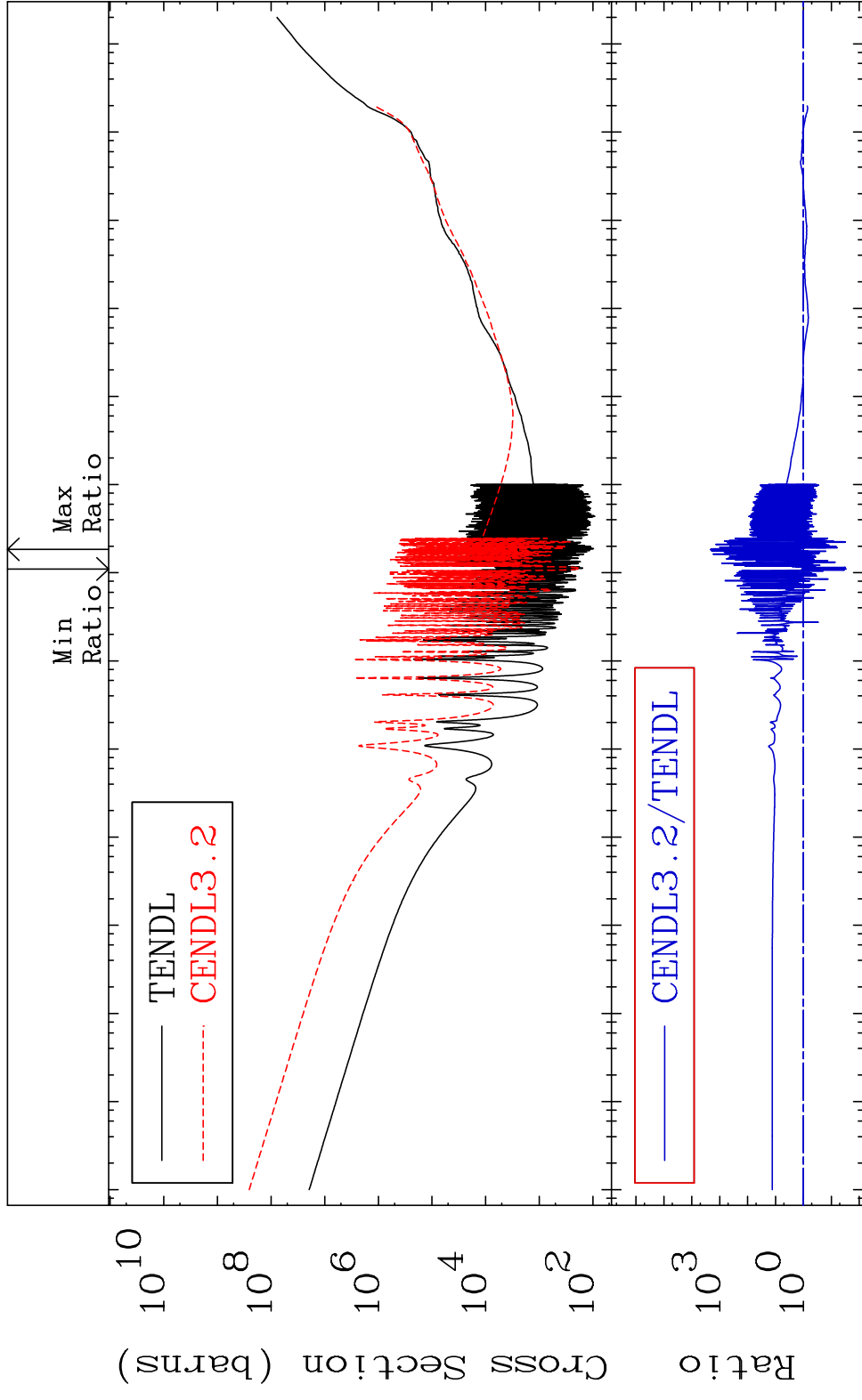
MAT 6246 Kerma capture (mt102) 62-Sm-151  
 Cross Section 9999. To 9999. %



MAT 6246 Total photon (eV-barns) 62-Sm-151  
 Cross Section 9999. To 9999. %



MAT 6246 Total kinematic kerma (high limit) 62-Sm-151  
 Cross Section -97.11 To 9999. %

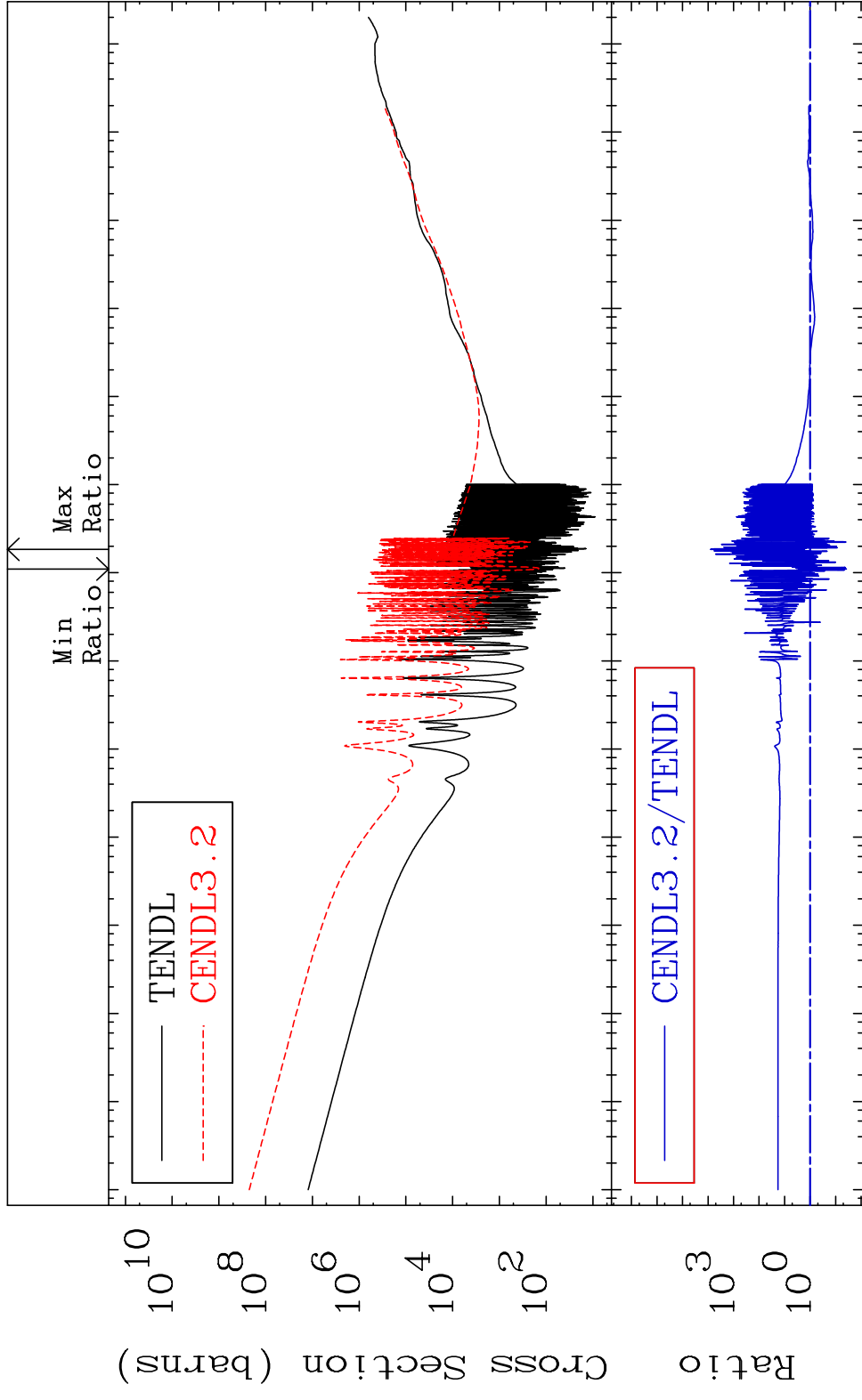


MAT 6246

Dpa total (eV-barns)

62-Sm-151

Cross Section -96.18 To 9999. %



45

Incident Energy (eV)

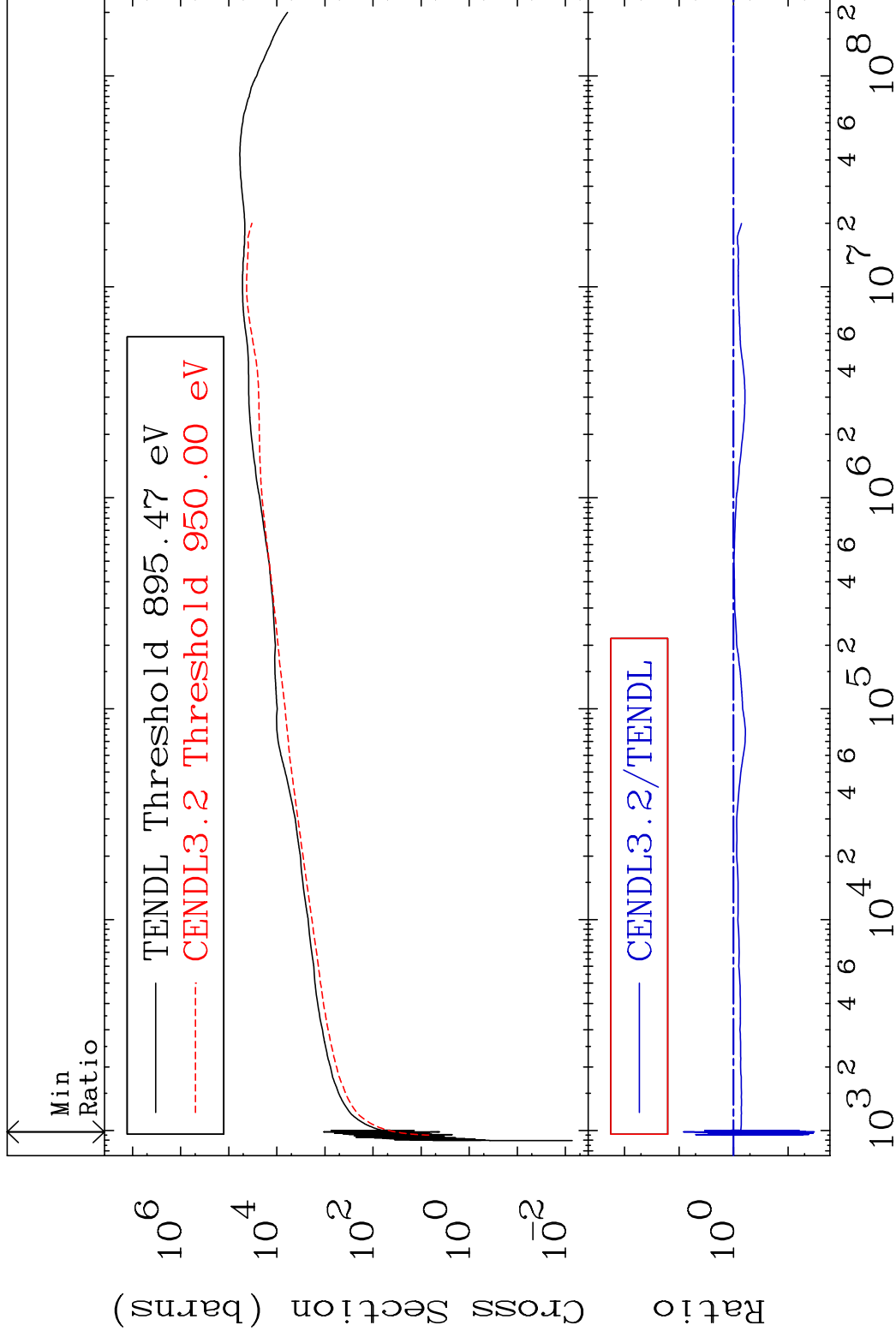
62-Sm-151

MAT 6246

Dpa elastic (mt2)

62-Sm-151

Cross Section -96.66 To 724.4 %

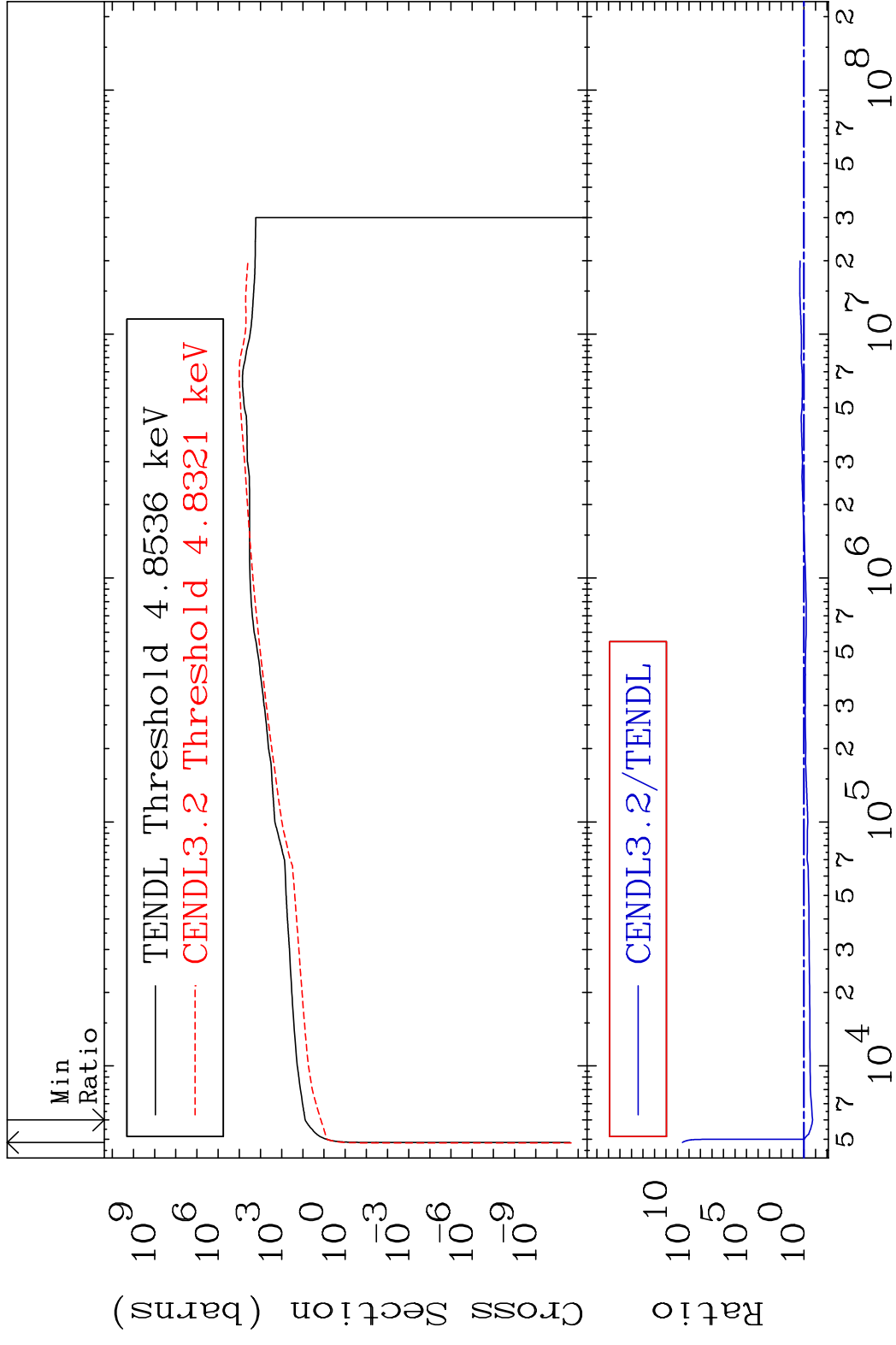


46

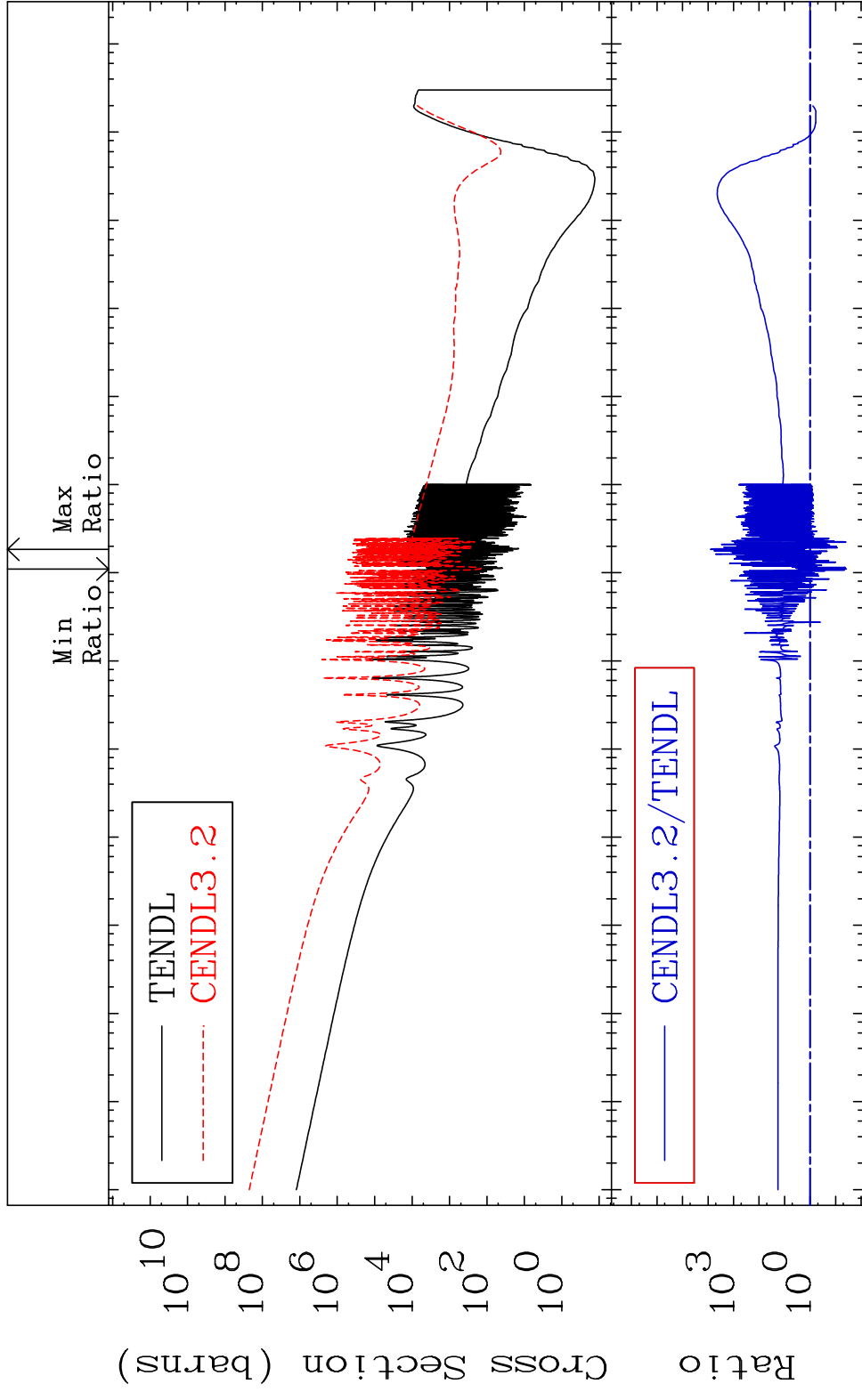
Incident Energy (eV)

62-Sm-151

MAT 6246      Dpa inelastic (mt51-91)      62-Sm-151  
 Cross Section      -81.78 To 9999. %



MAT 6246 Dpa disappearance (mt102 -120) 62-Sm-151  
 Cross Section -96.18 To 9999. %

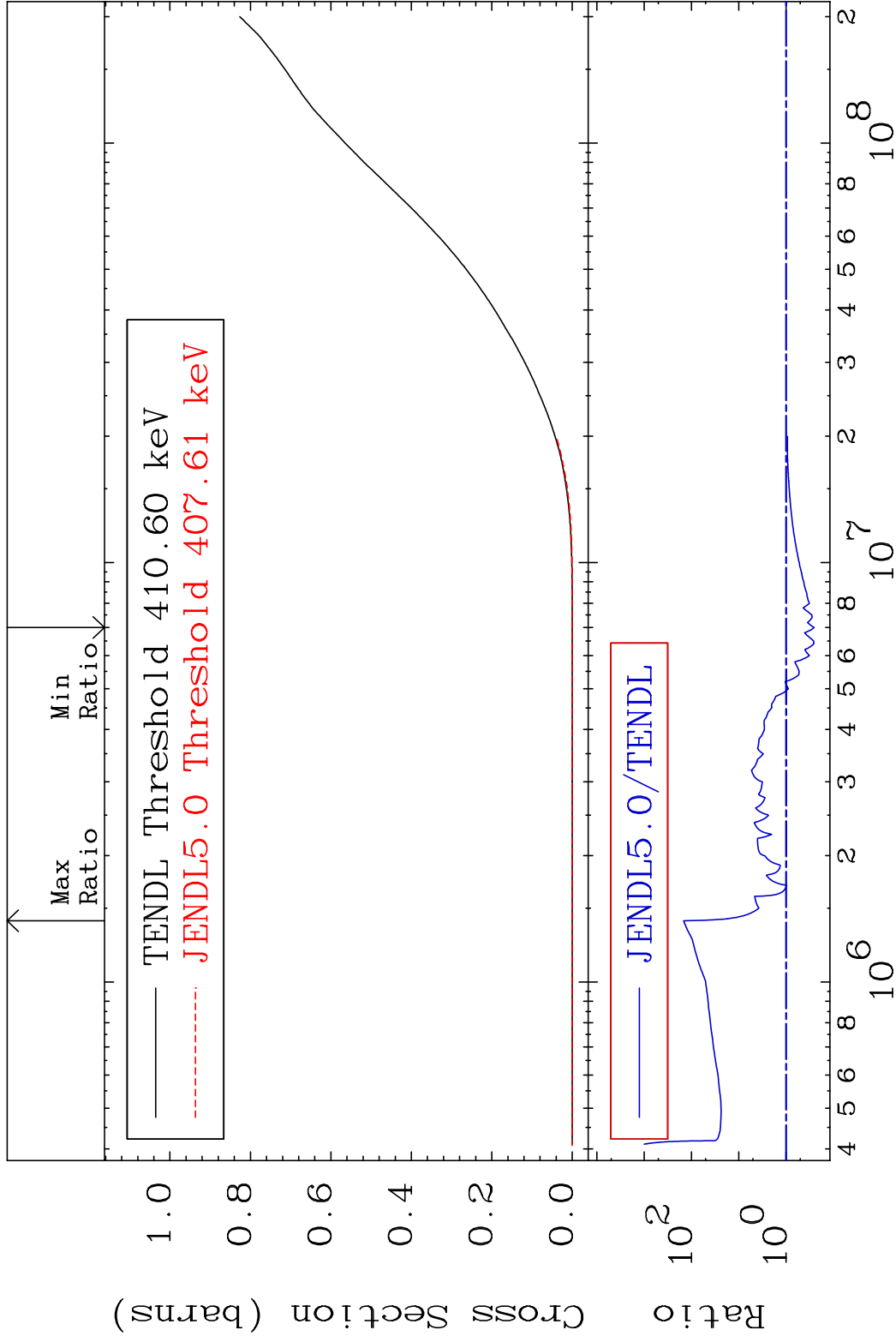


MAT 6246

Hydrogen Production

62-Sm-151

Cross Section -74.63 To 9999. %



49

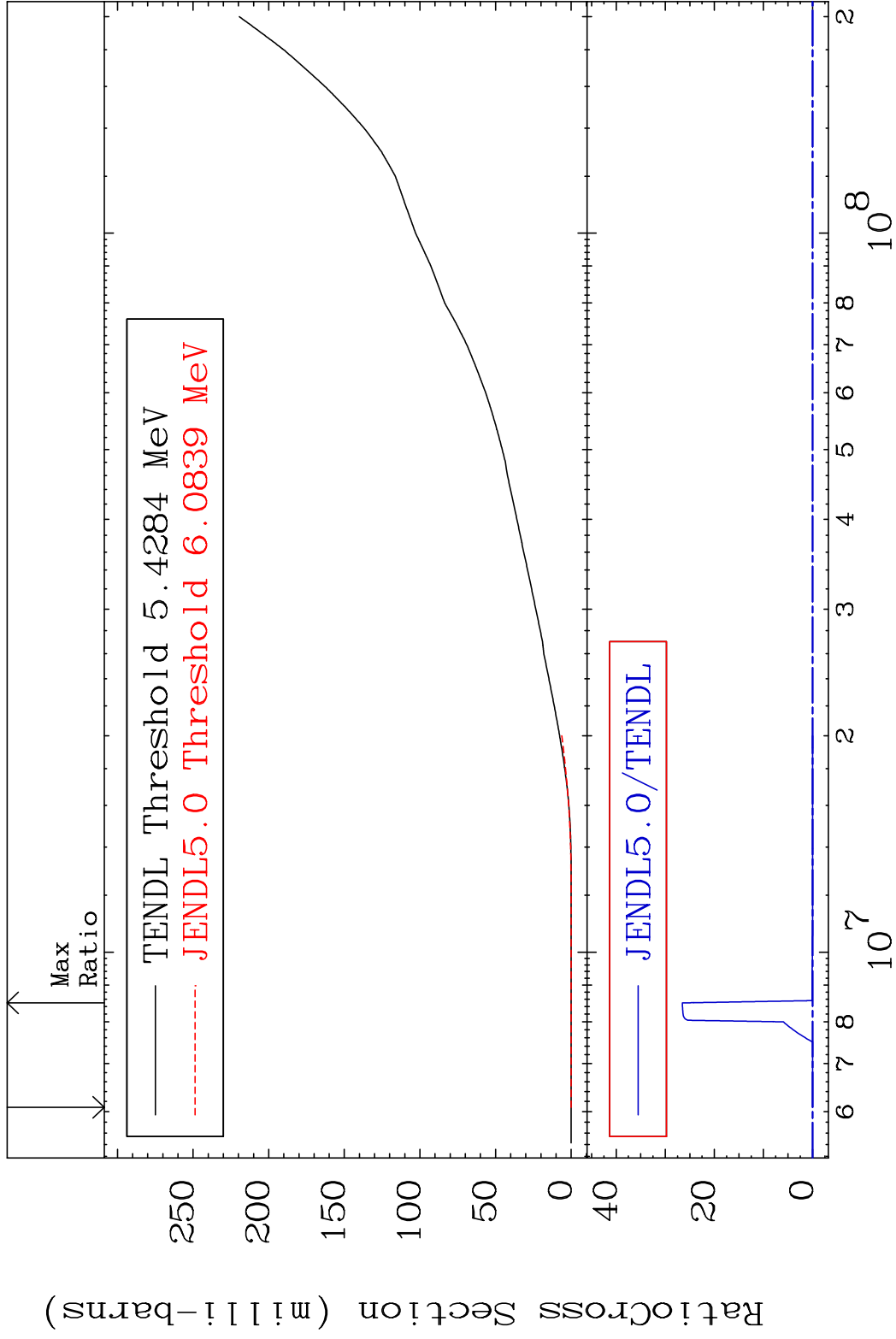
Incident Energy (eV)

62-Sm-151

MAT 6246

Deuterium Production 62-Sm-151

Cross Section -100.0 To 9999. %

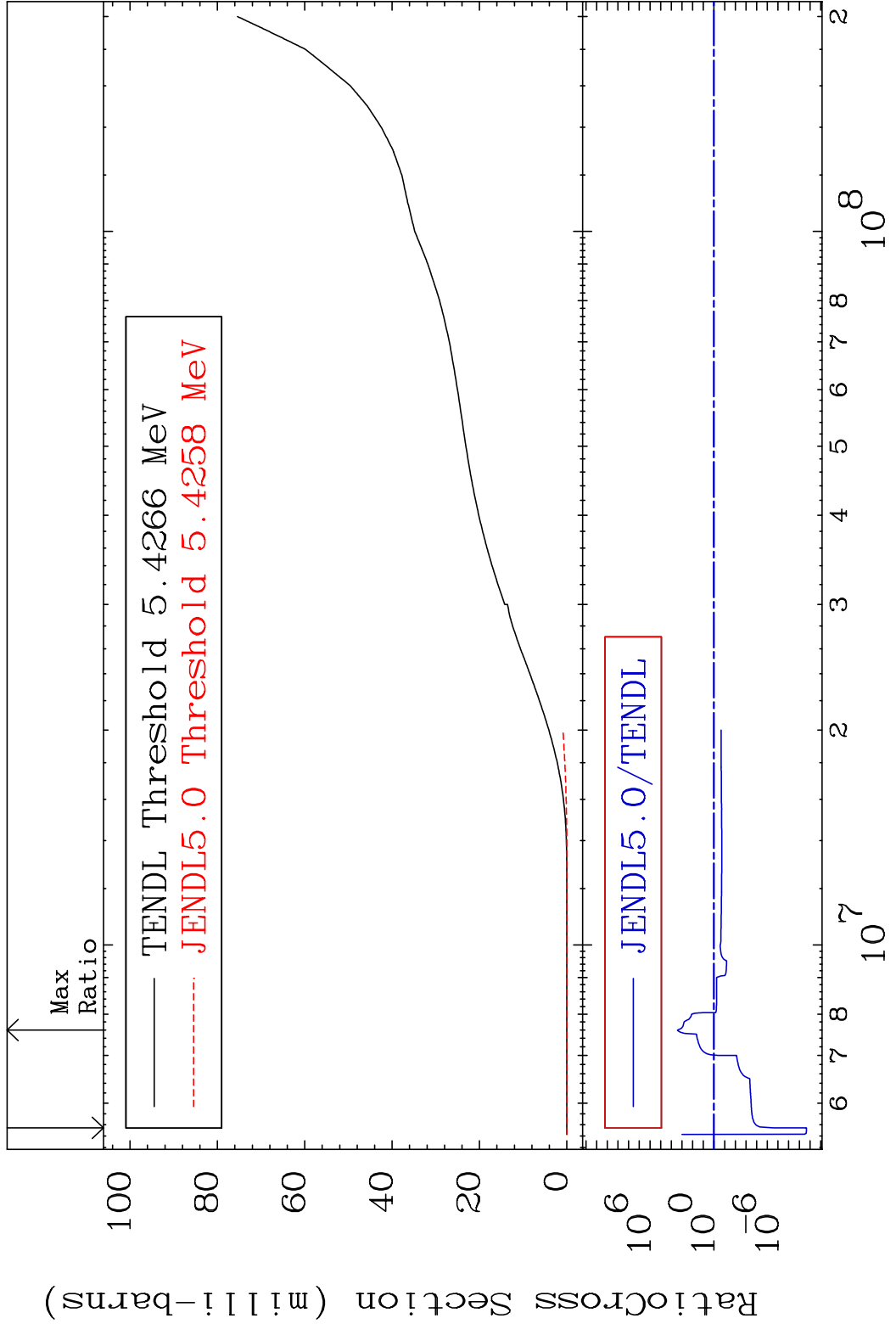


50

Incident Energy (eV)

62-Sm-151

MAT 6246 Tritium Production 62-Sm-151  
 Cross Section -100.0 To 9999. %

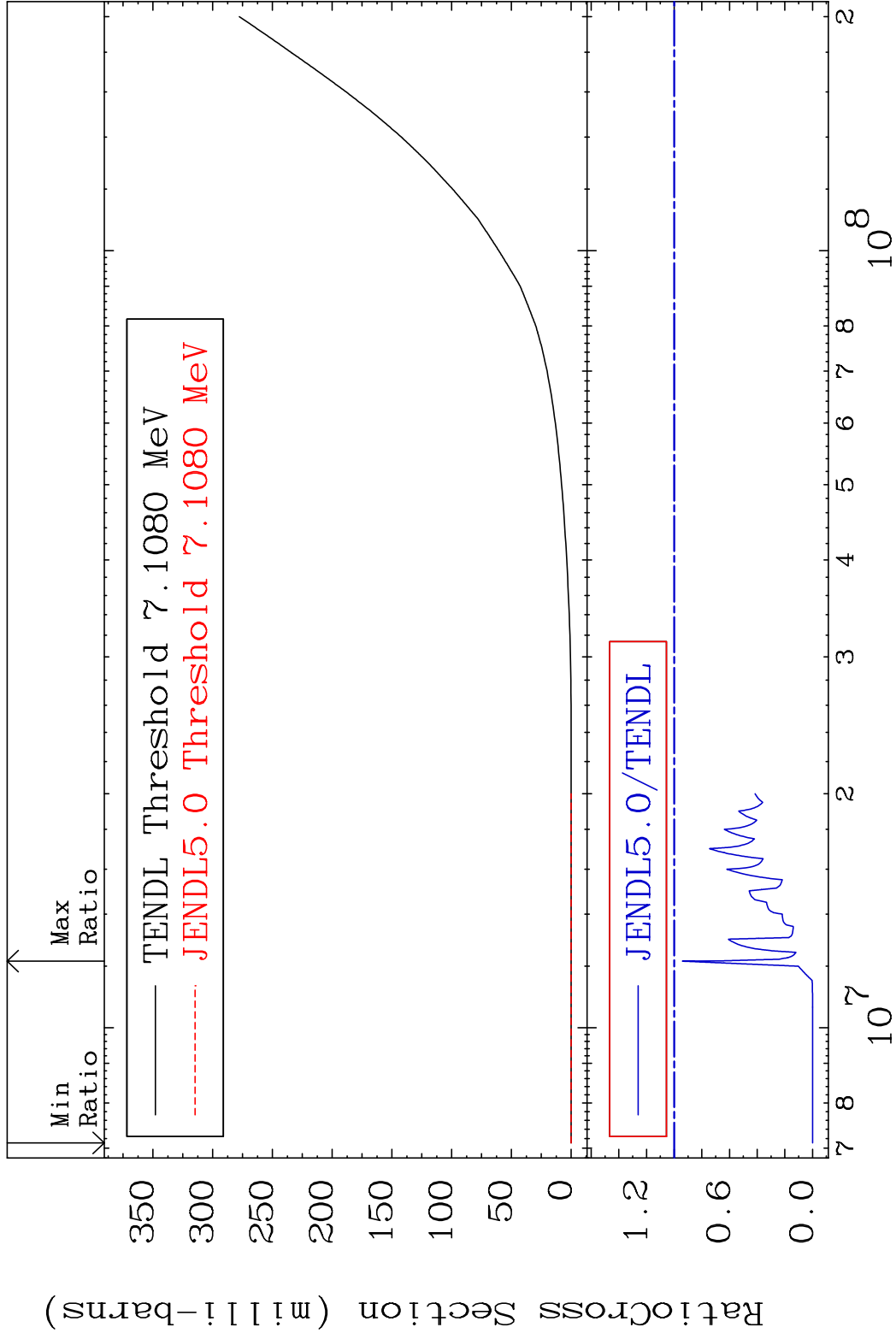


MAT 6246

He-3 Production

62-Sm-151

Cross Section -100.0 To -5.917%



52

Incident Energy (eV)

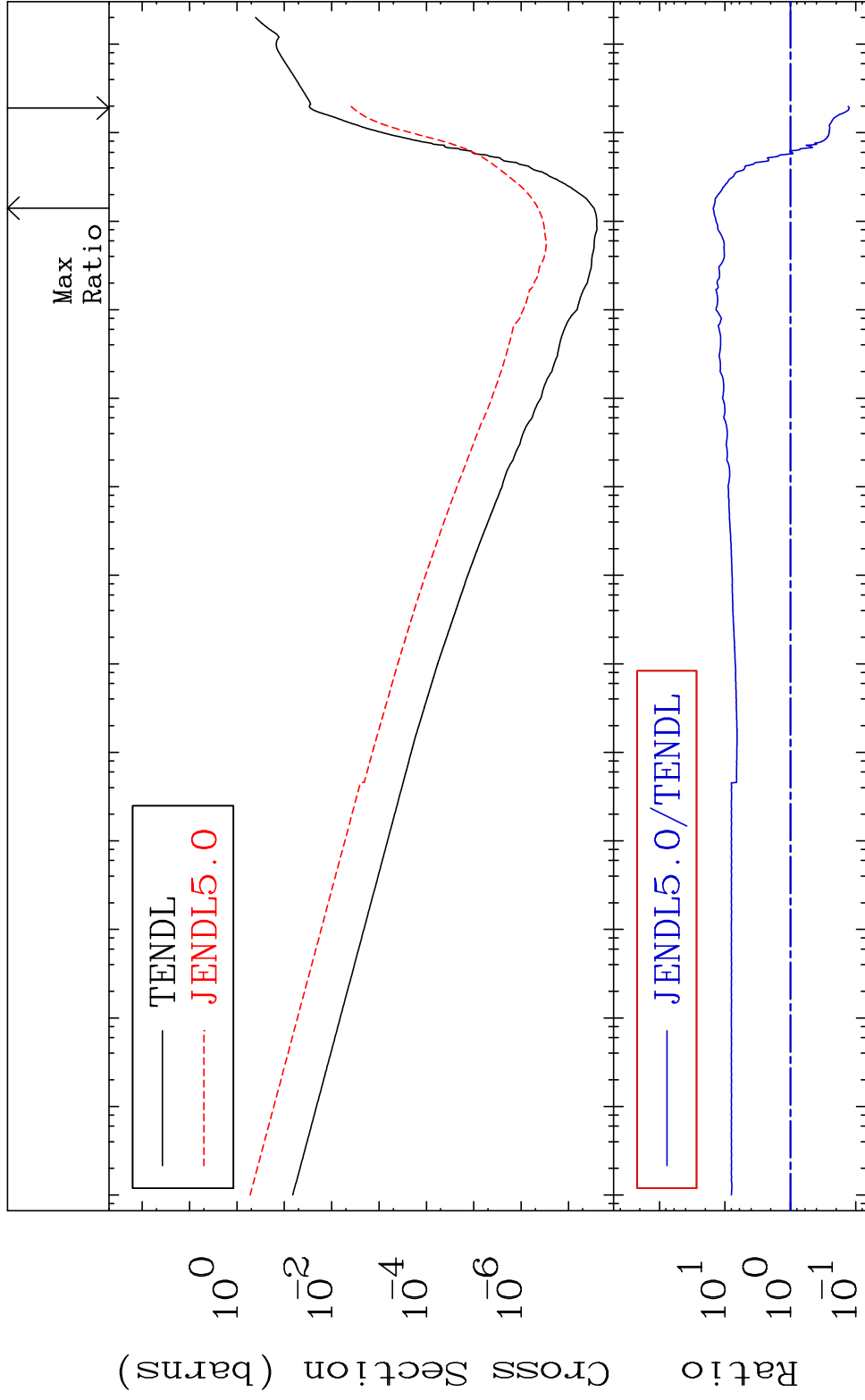
62-Sm-151

MAT 6246

He-4 Production

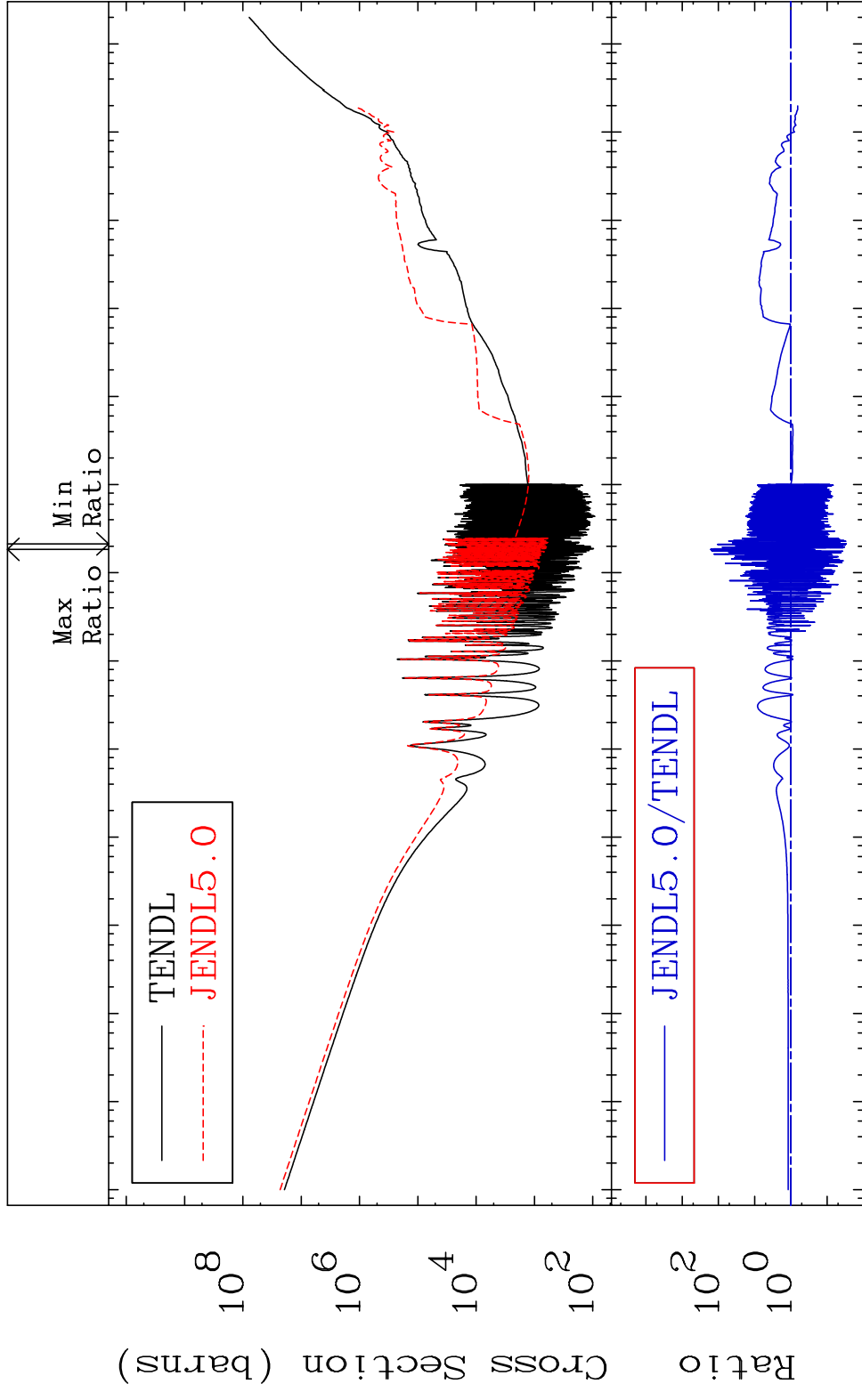
62-Sm-151

Cross Section -87.38 To 1415. %



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

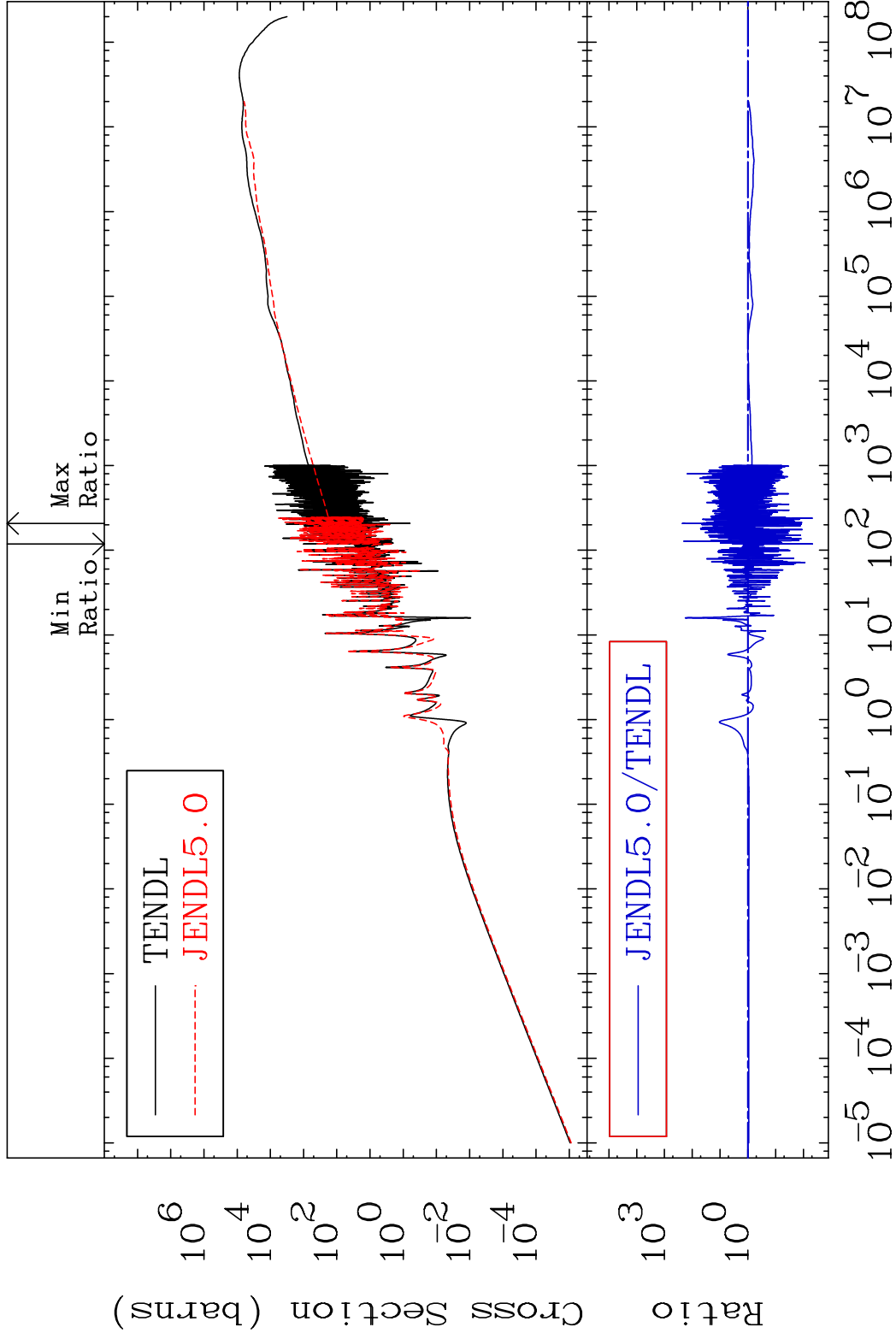
MAT 6246 Kerma total (eV-barns) 62-Sm-151  
 Cross Section -97.06 To 9999. %



MAT 6246

Kerma elastic  
Cross Section

62-Sm-151  
-99.53 To 9999. %

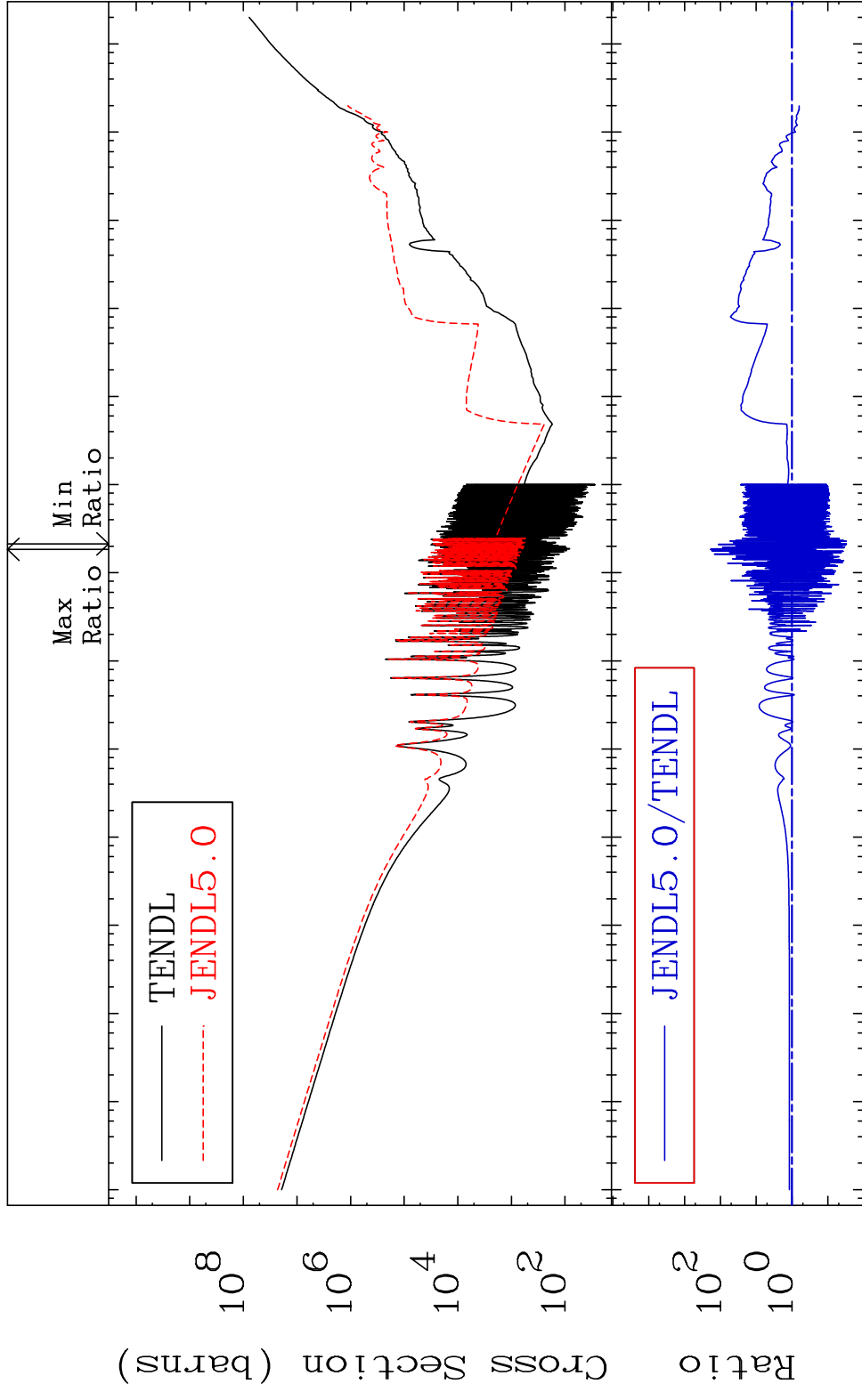


55

Incident Energy (eV)

62-Sm-151

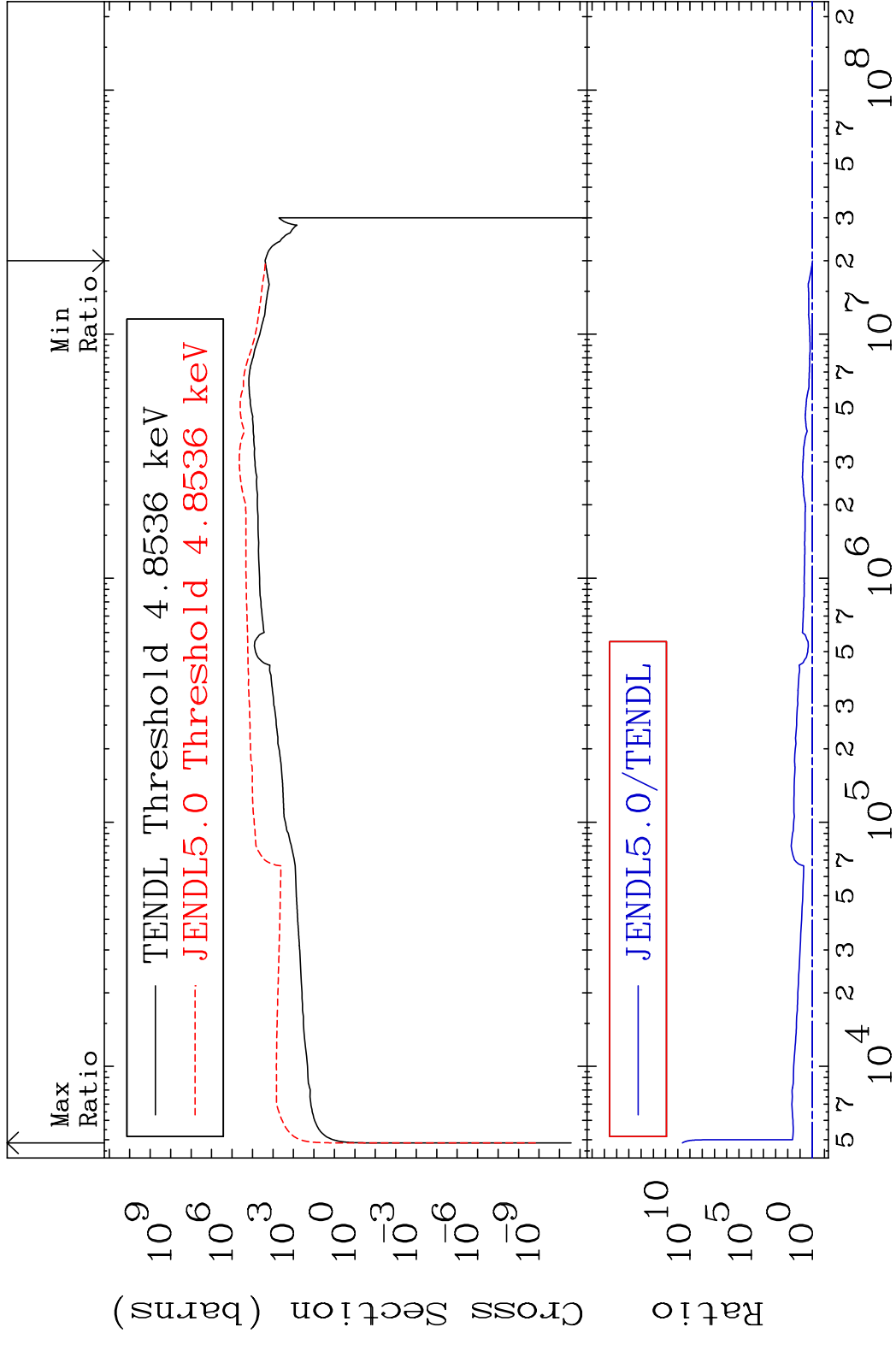
MAT 6246 Kerma non-elastic (all but mt2) 62-Sm-151  
 Cross Section -96.94 To 9999. %



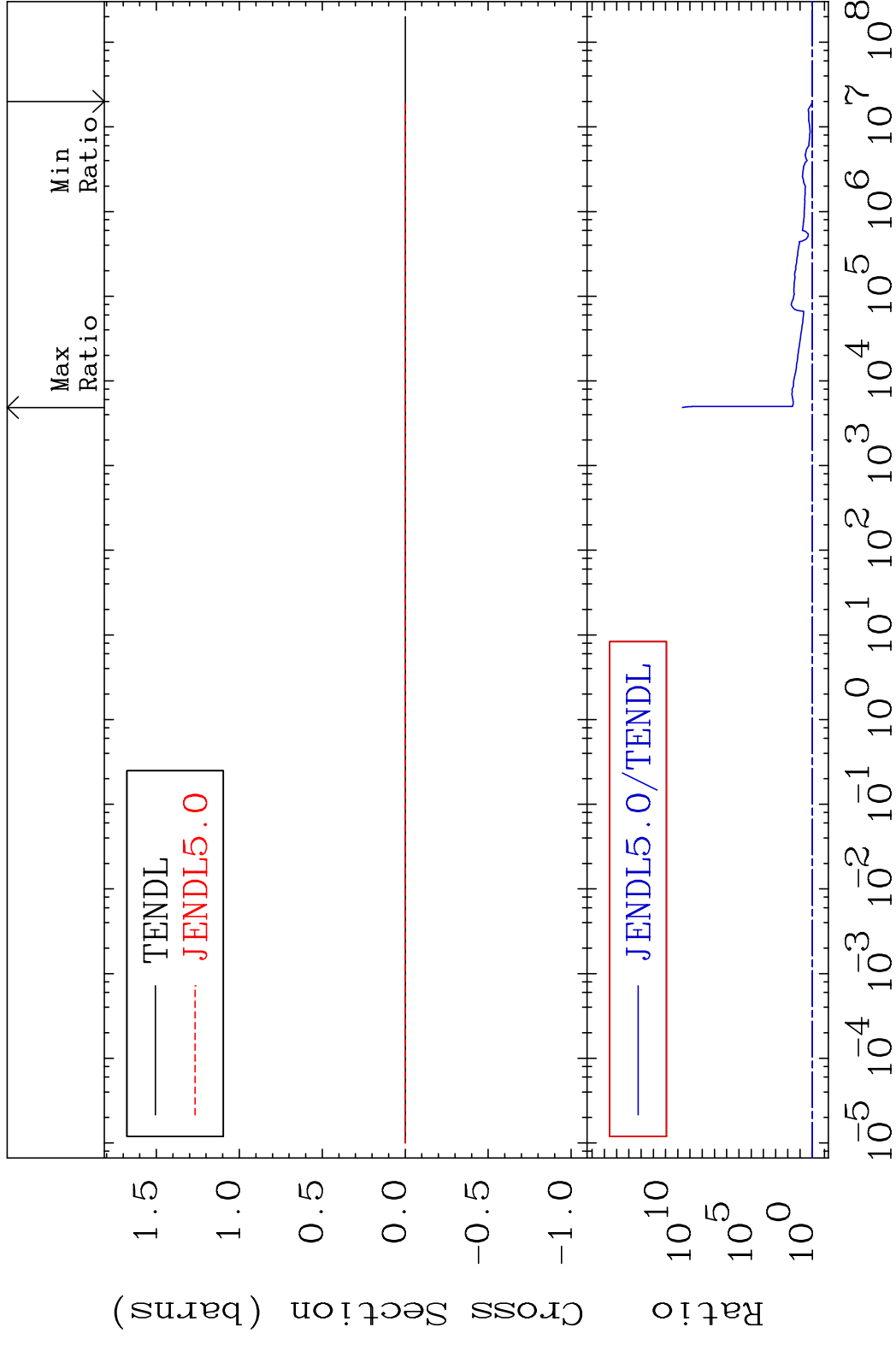
10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

Incident Energy (eV)

MAT 6246 Kerma inelastic (mt51-91) 62-Sm-151  
 Cross Section -4.853 To 9999. %



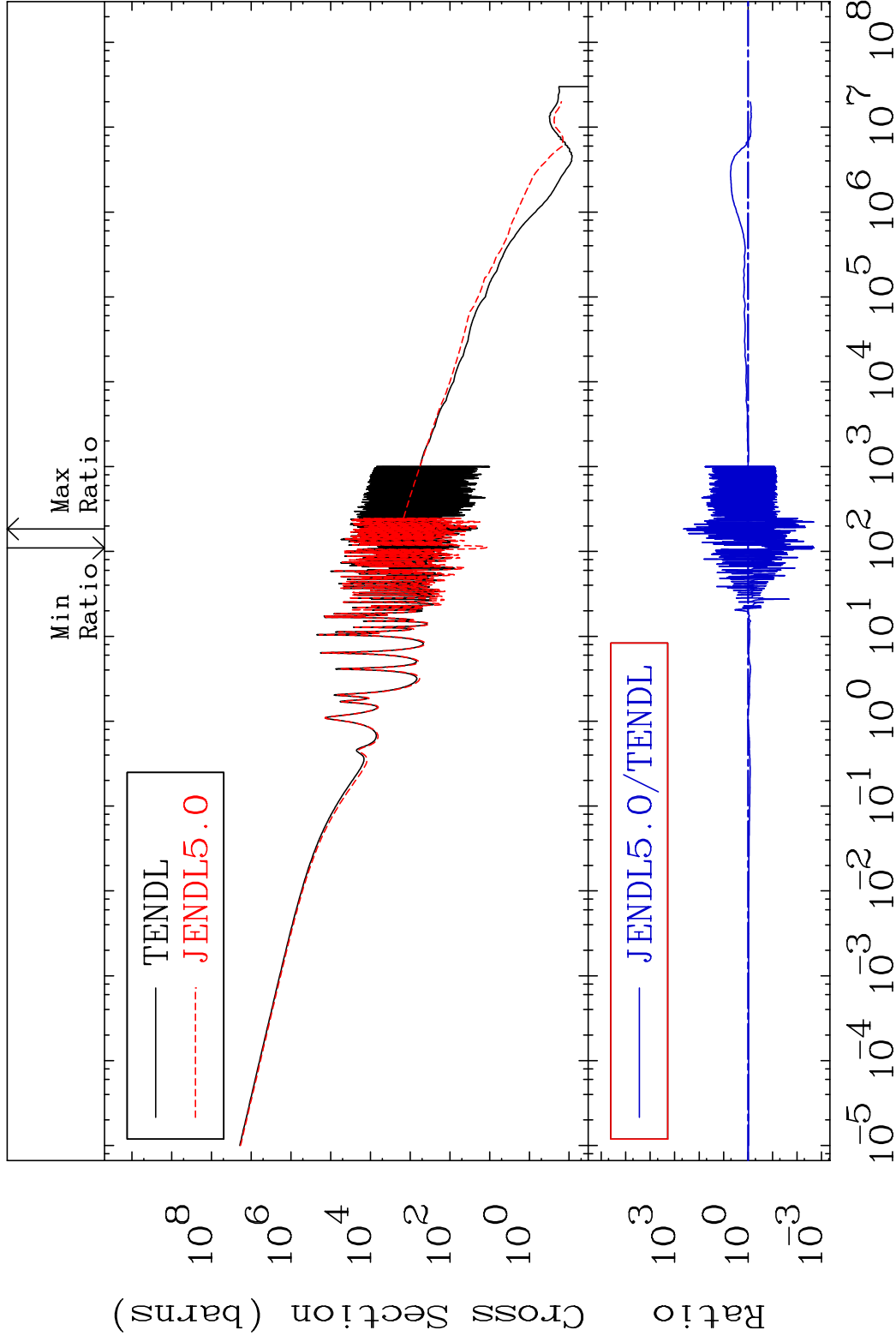
MAT 6246 Kerma fission (mt18 or mt19-20-21-38) 62-Sm-151  
 Cross Section -4.853 To 9999. %



MAT 6246

Kerma capture (mt102) 62-Sm-151

Cross Section -99.80 To 9999. %



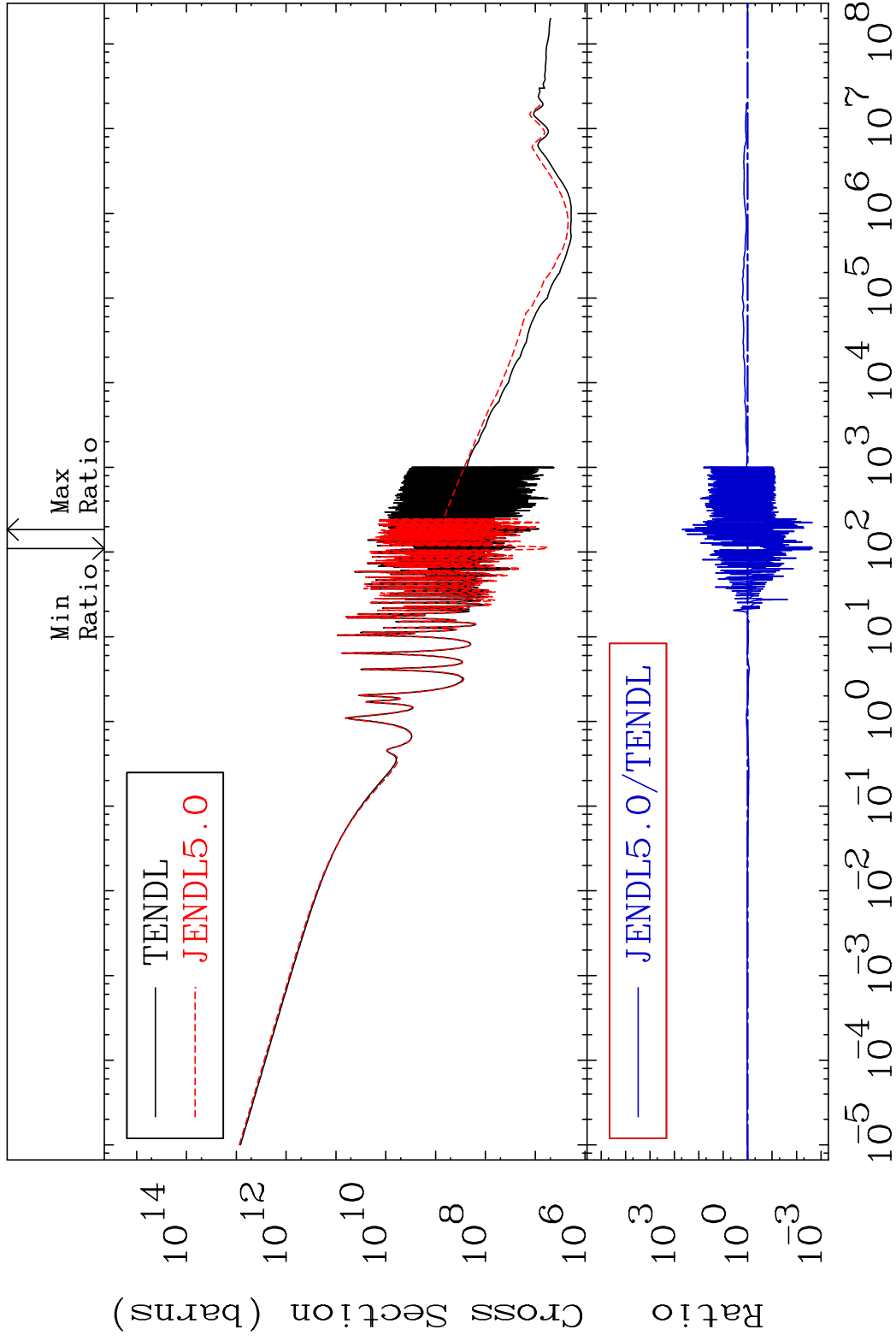
59

Incident Energy (eV)

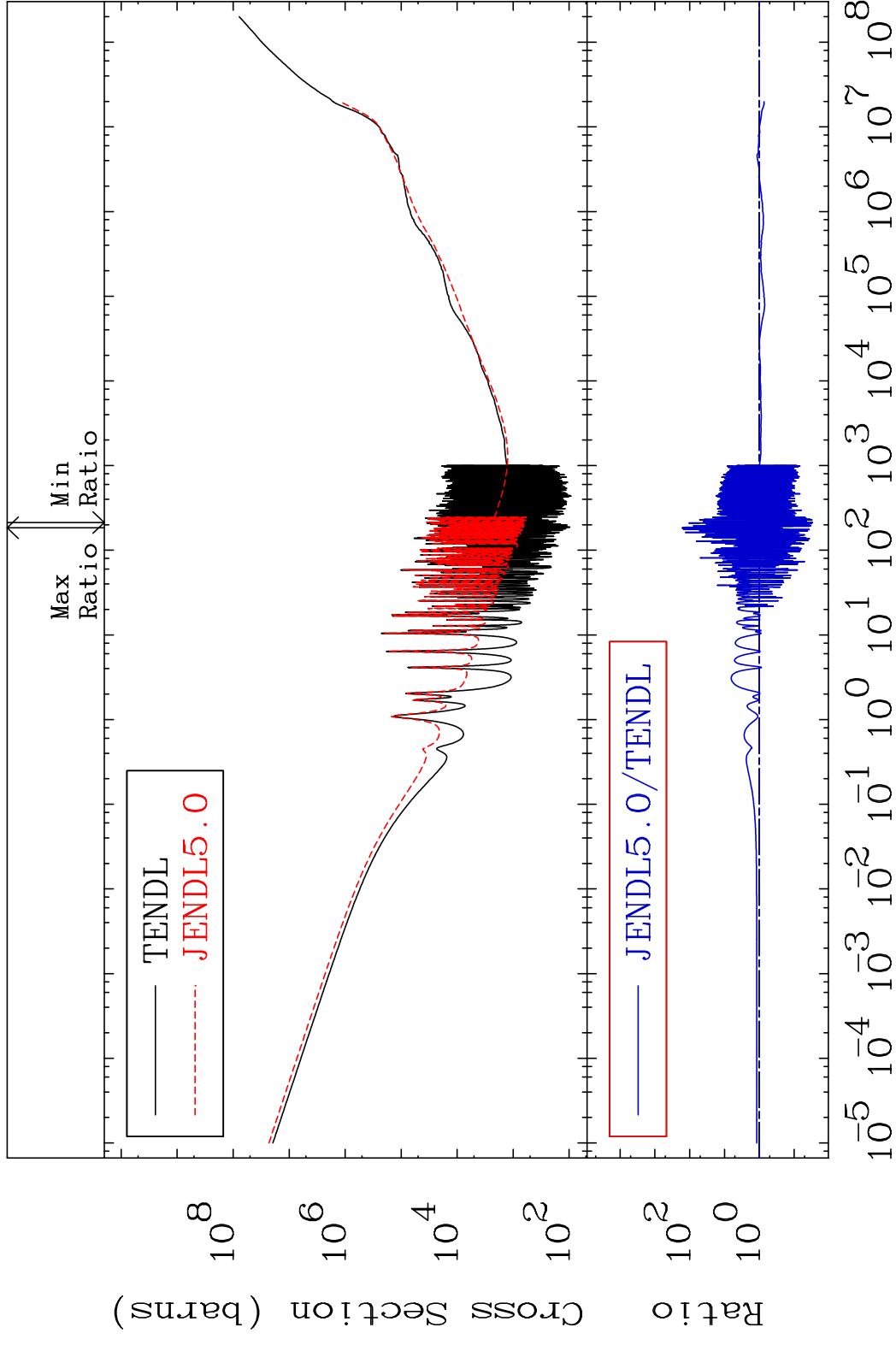
62-Sm-151

MAT 6246

Total photon (eV-barns) 62-Sm-151  
Cross Section -99.78 To 9999. %



MAT 6246 Total kinematic kerma (high limit) 62-Sm-151  
 Cross Section -97.06 To 9999. %

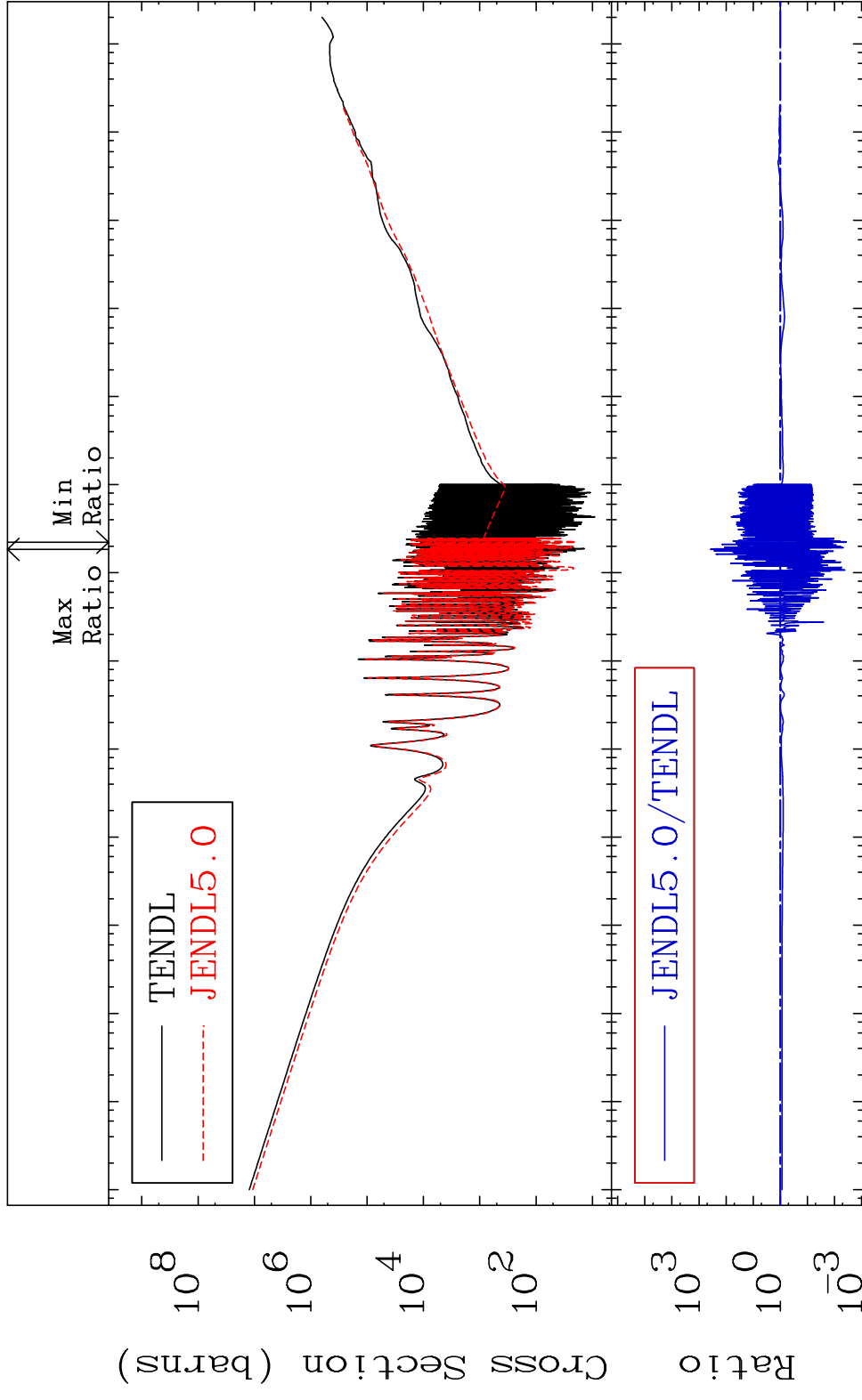


MAT 6246

Dpa total (eV-barns)

62-Sm-151

Cross Section -99.63 To 9999. %



62

Incident Energy (eV)

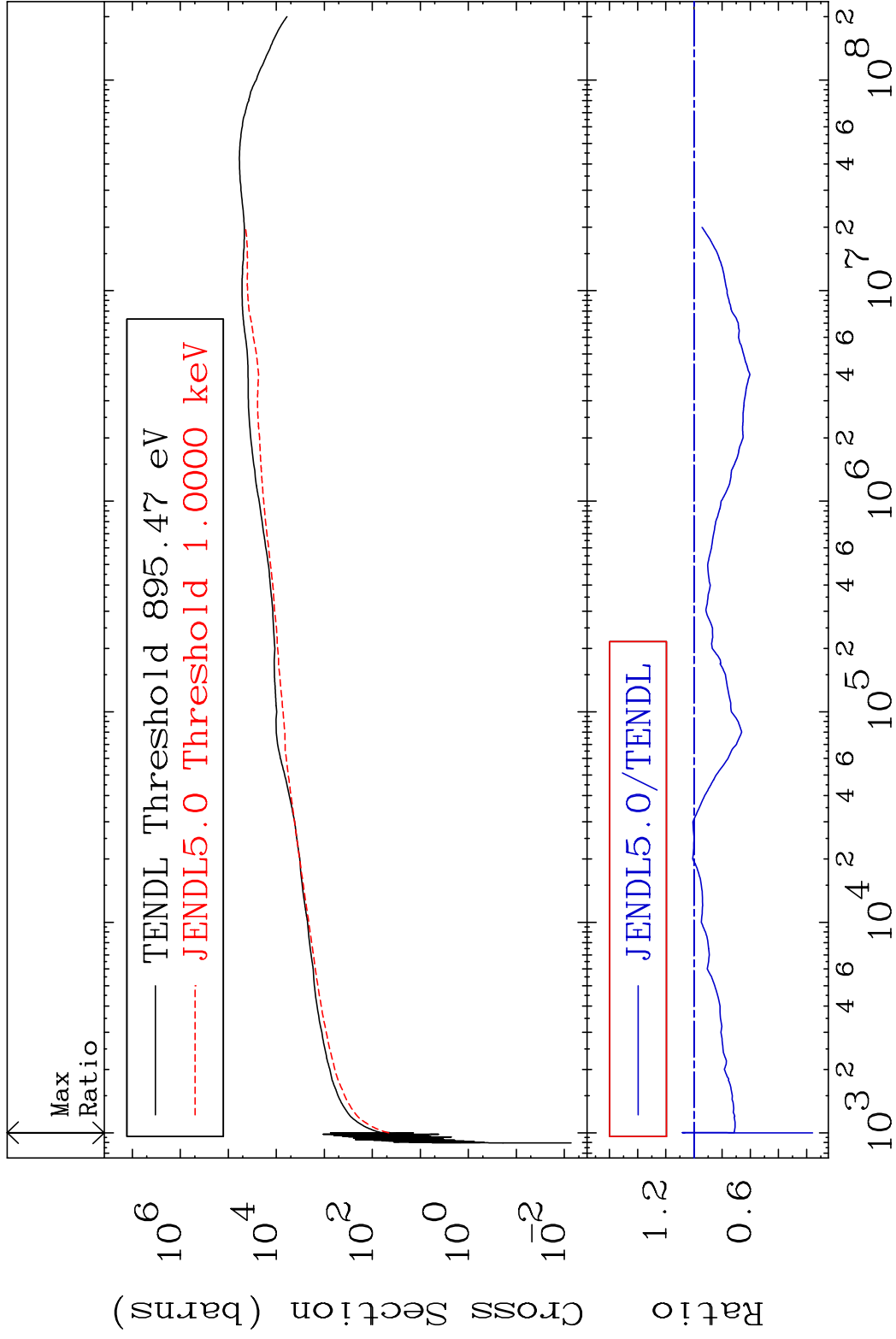
62-Sm-151

MAT 6246

Dpa elastic (mt2)

62-Sm-151

Cross Section -84.18 To 8.268 %

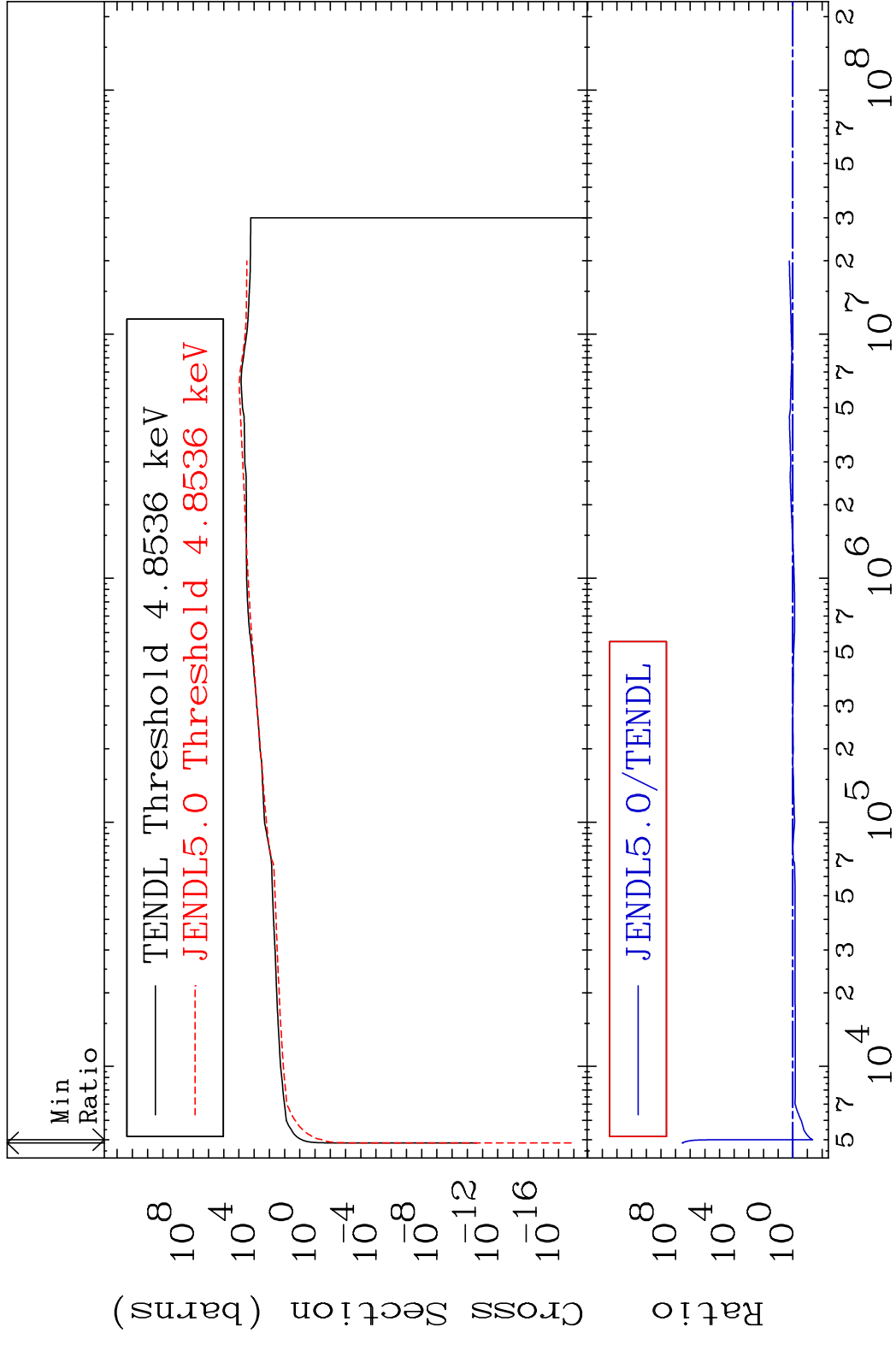


63

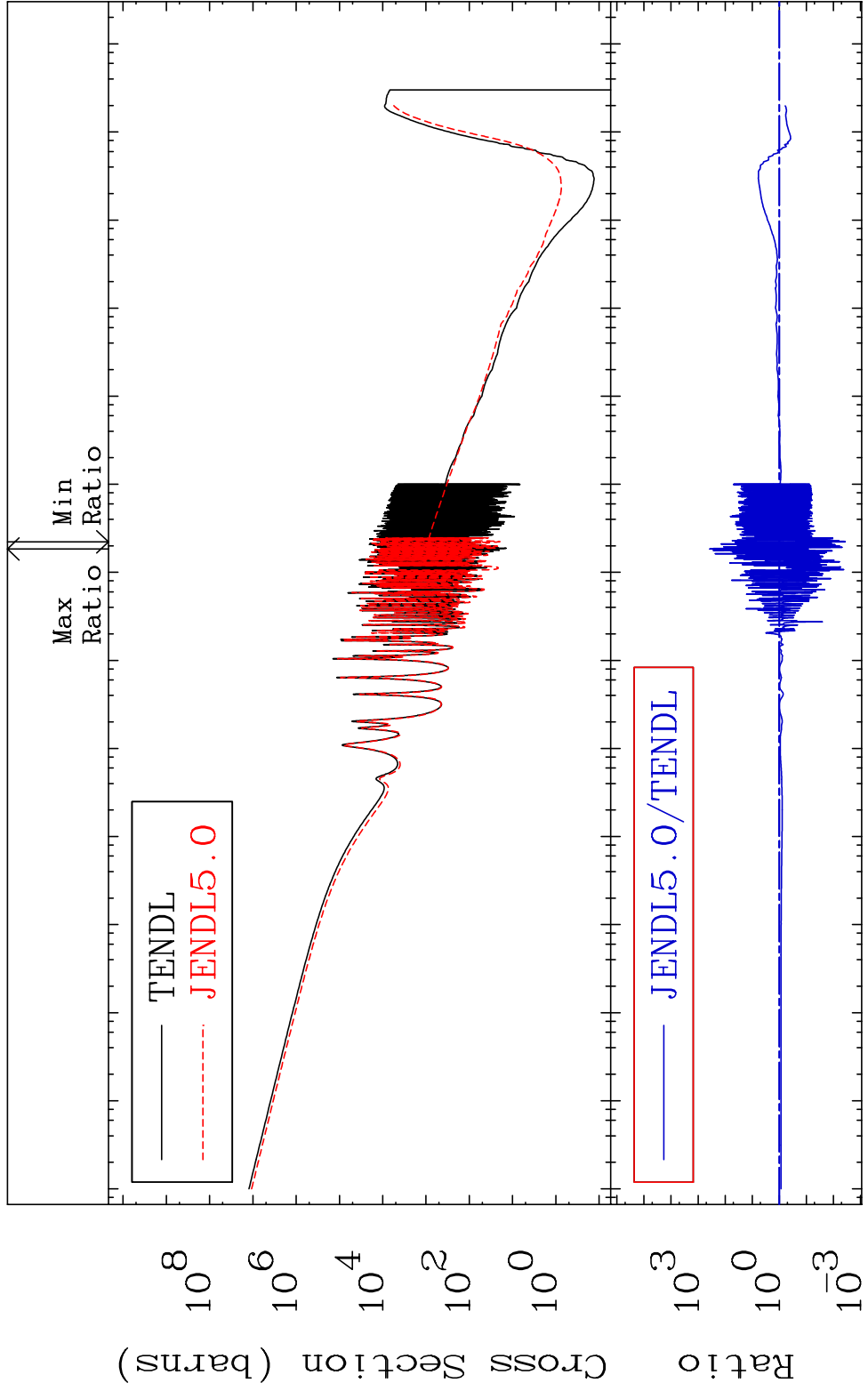
Incident Energy (eV)

62-Sm-151

MAT 6246      Dpa inelastic (mt51-91)      62-Sm-151  
 Cross Section      -95.53 To 9999. %



MAT 6246 Dpa disappearance (mt102 -120) 62-Sm-151  
 Cross Section -99.63 To 9999. %



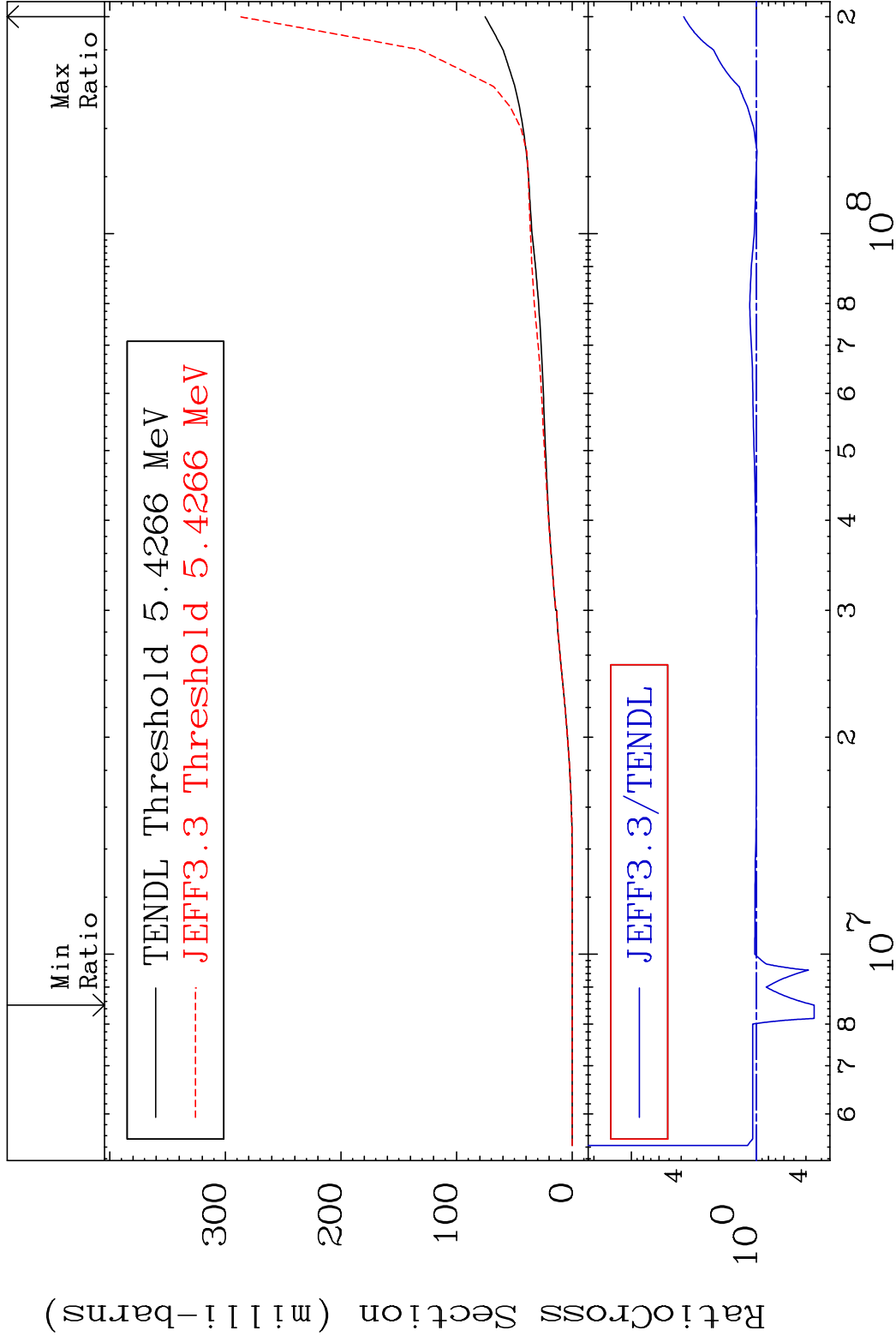
65 Incident Energy (eV) 62-Sm-151

MAT 6246

Tritium Production

62-Sm-151

Cross Section -65.59 To 281.5 %



66

Incident Energy (eV)

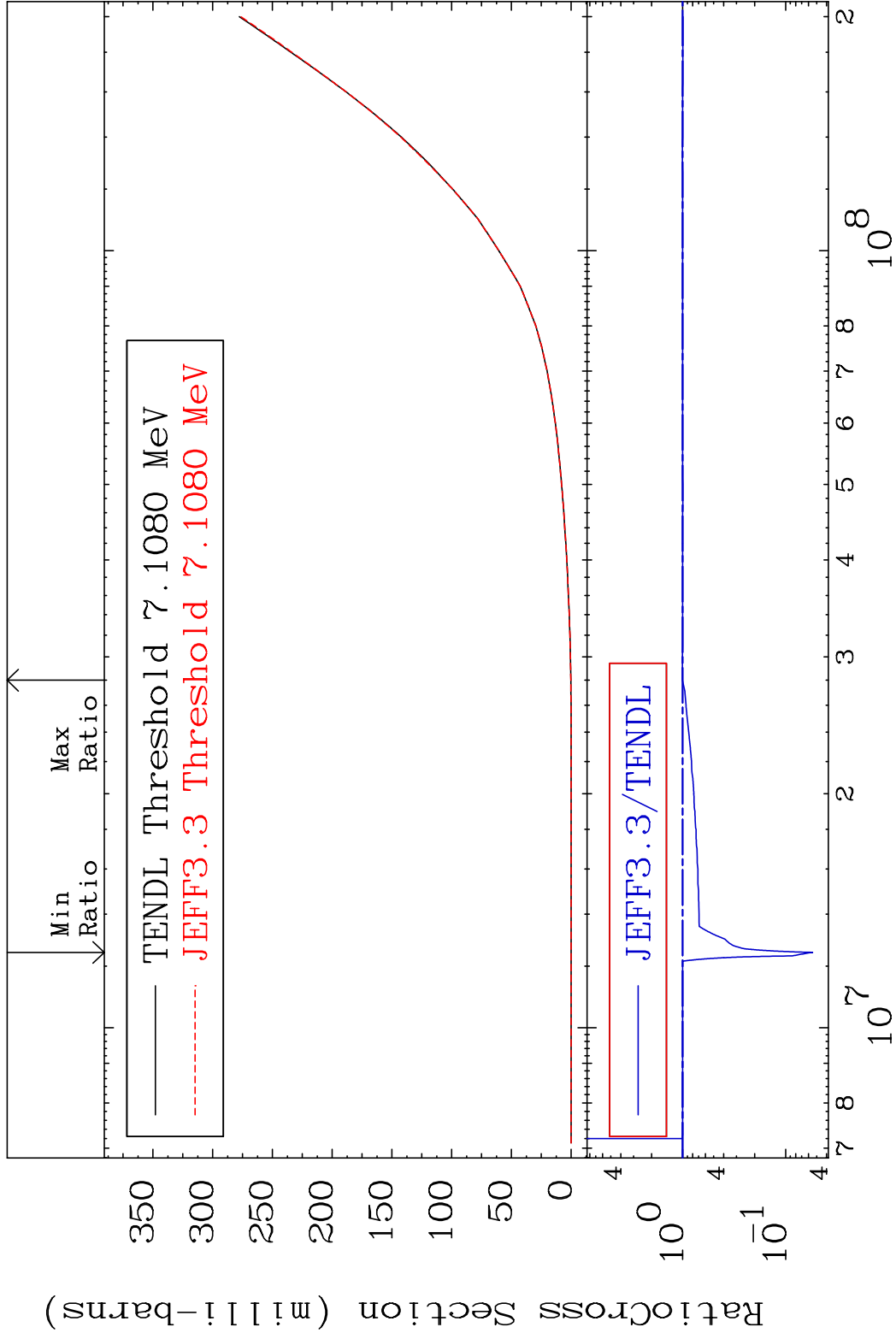
62-Sm-151

MAT 6246

He-3 Production

62-Sm-151

Cross Section -94.52 To 0.757 %



67

Incident Energy (eV)

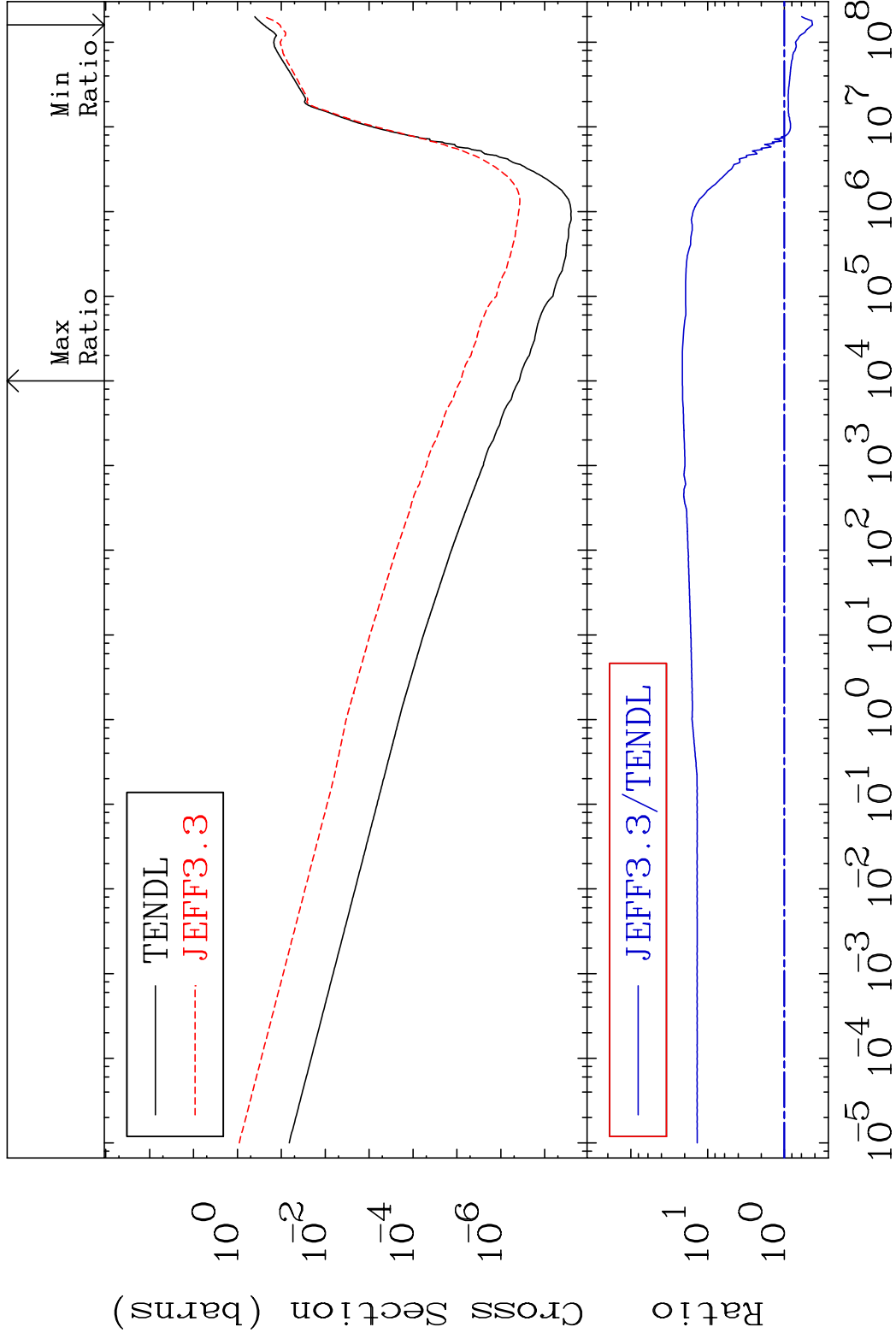
62-Sm-151

MAT 6246

He-4 Production

62-Sm-151

Cross Section -57.10 To 2038. %



68

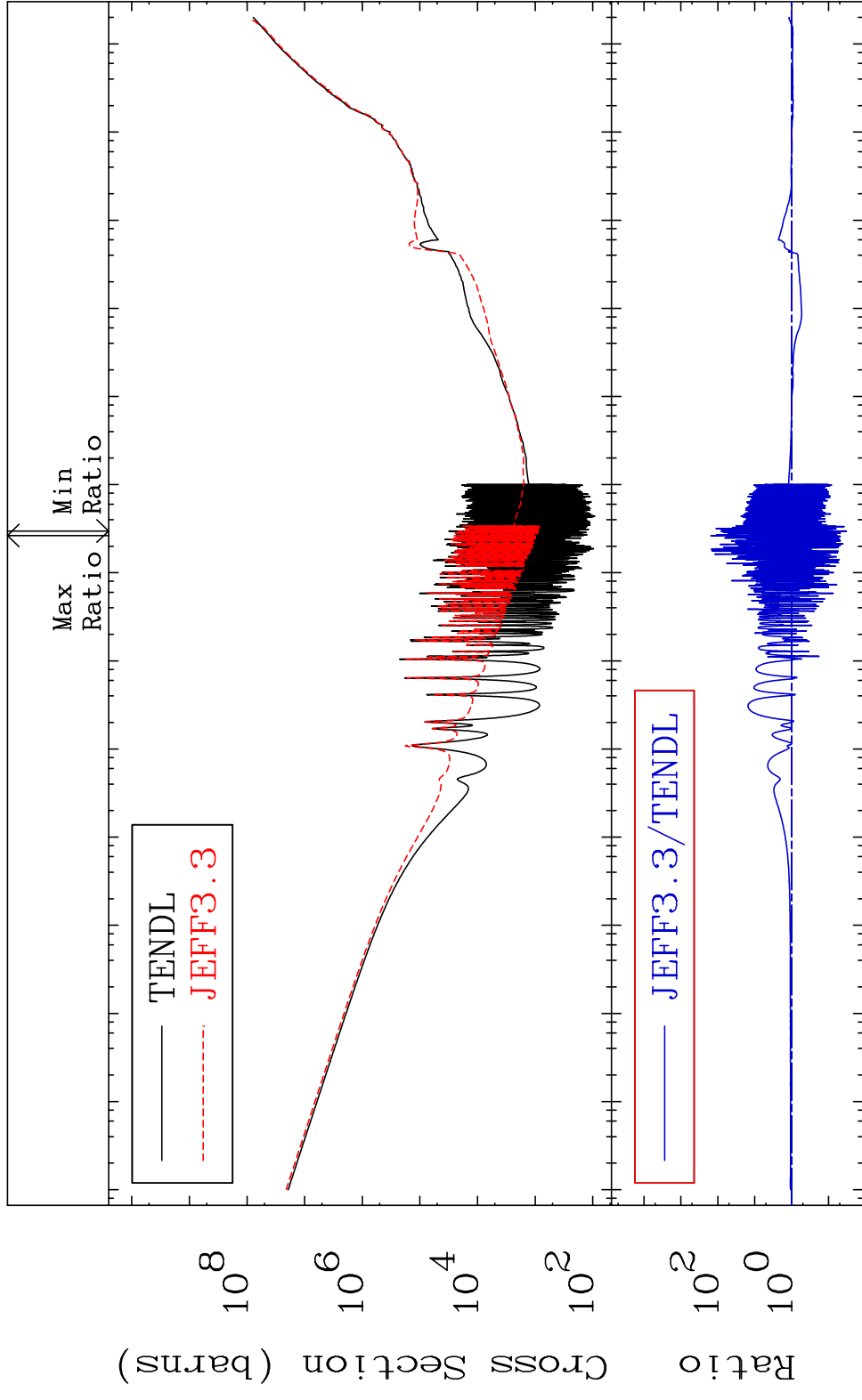
Incident Energy (eV)

62-Sm-151

MAT 6246

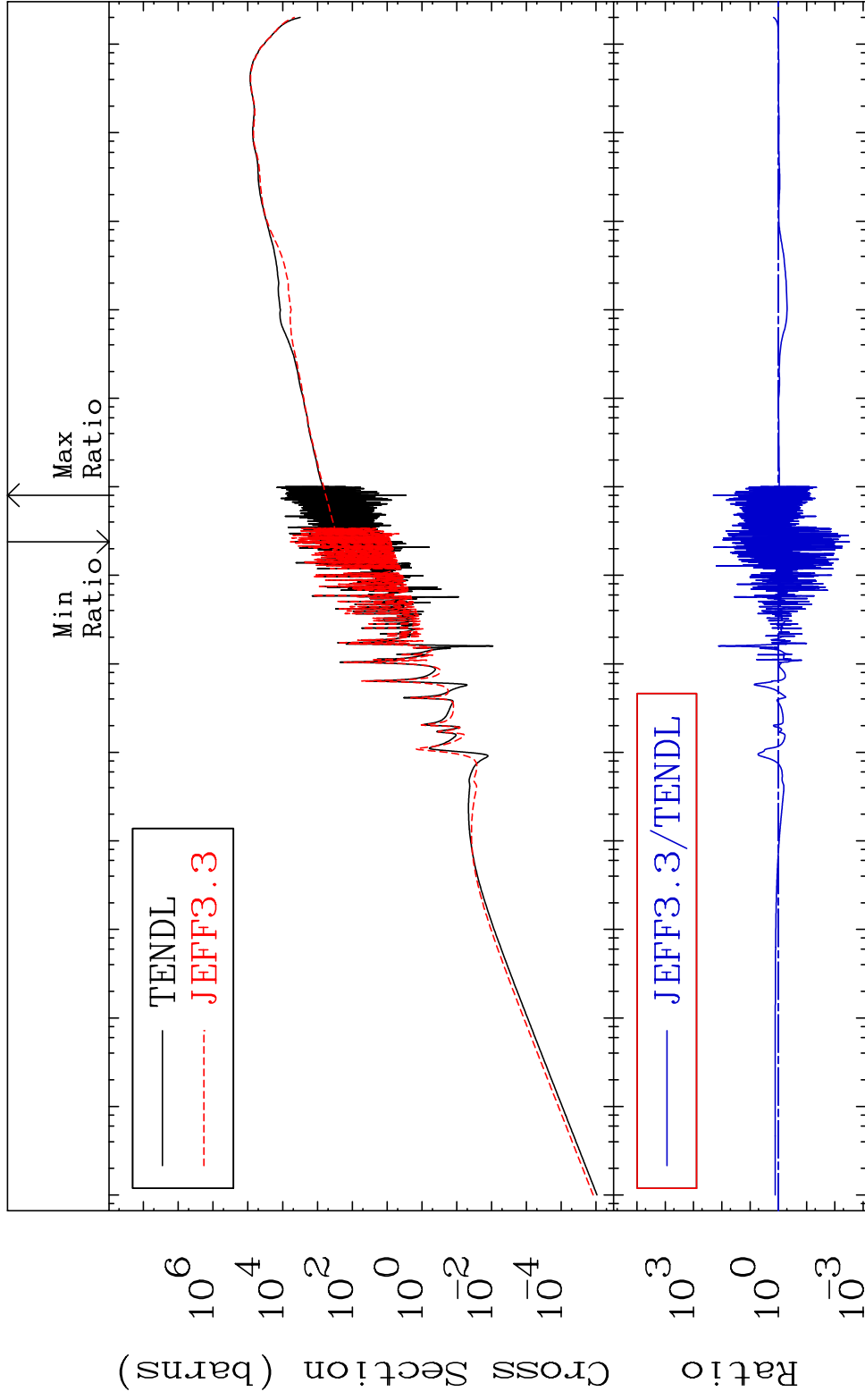
Kerma total (eV-barns) 62-Sm-151

Cross Section -96.67 To 9999. %



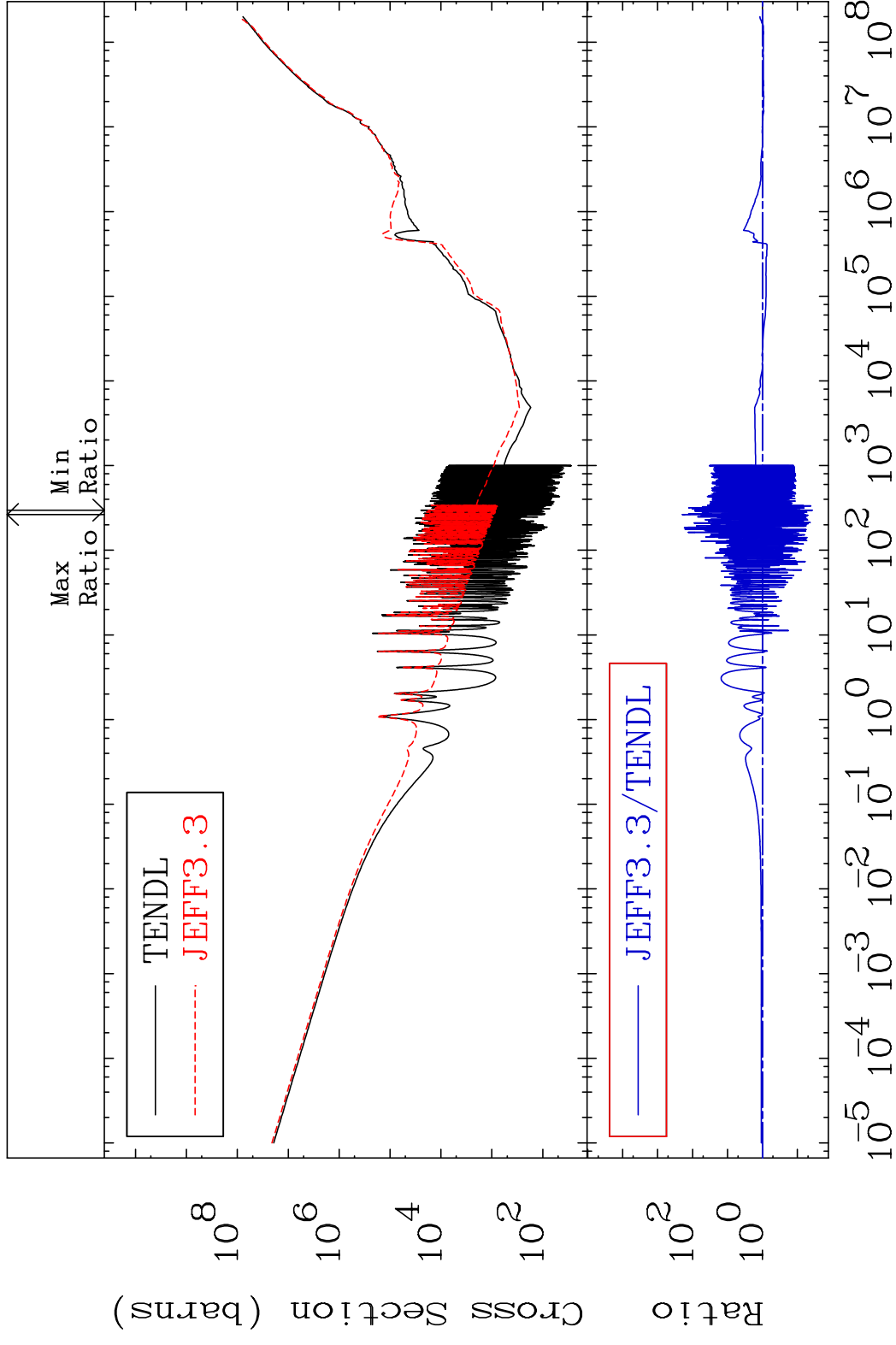
MAT 6246

Kerma elastic Cross Section -99.69 To 9999. %  
62-Sm-151

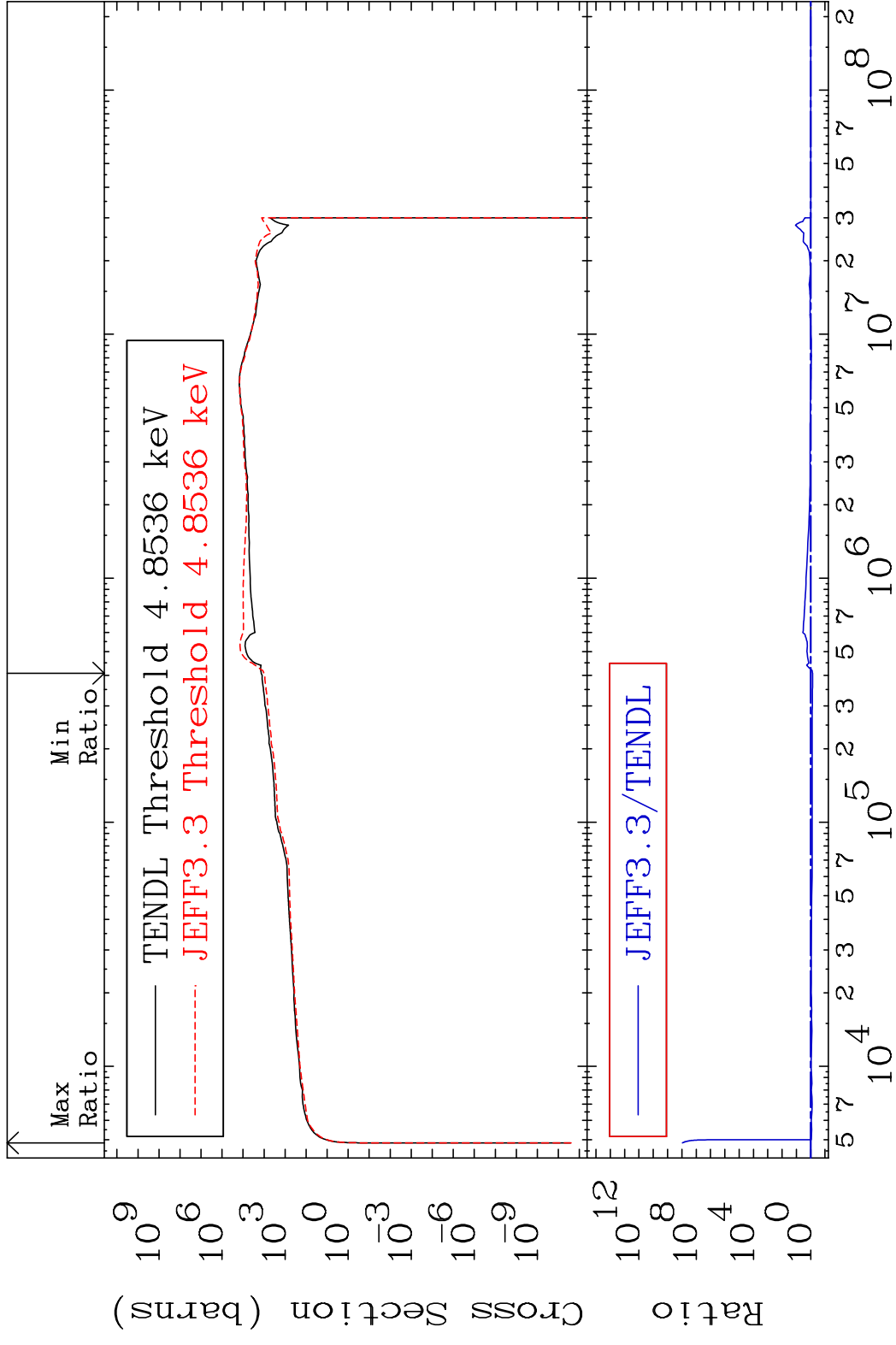


70 Incident Energy (eV) 62-Sm-151

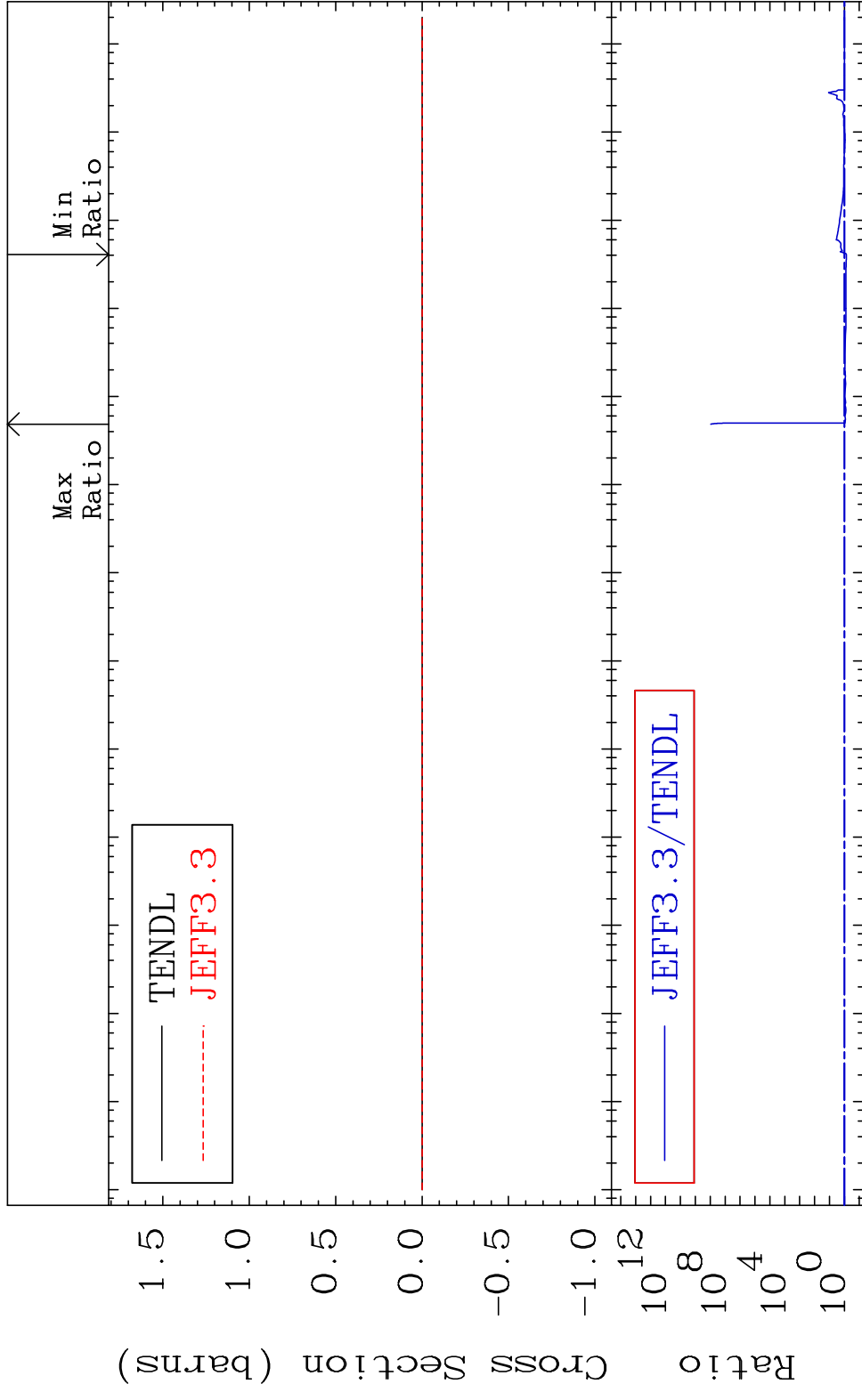
MAT 6246 Kerma non-elastic (all but mt2) 62-Sm-151  
 Cross Section -96.31 To 9999. %



MAT 6246 Kerma inelastic (mt51-91) 62-Sm-151  
 Cross Section -25.79 To 9999. %



MAT 6246 Kerma fission (mt18 or mt19-20-21-38) 62-Sm-151  
 Cross Section -25.79 To 9999. %

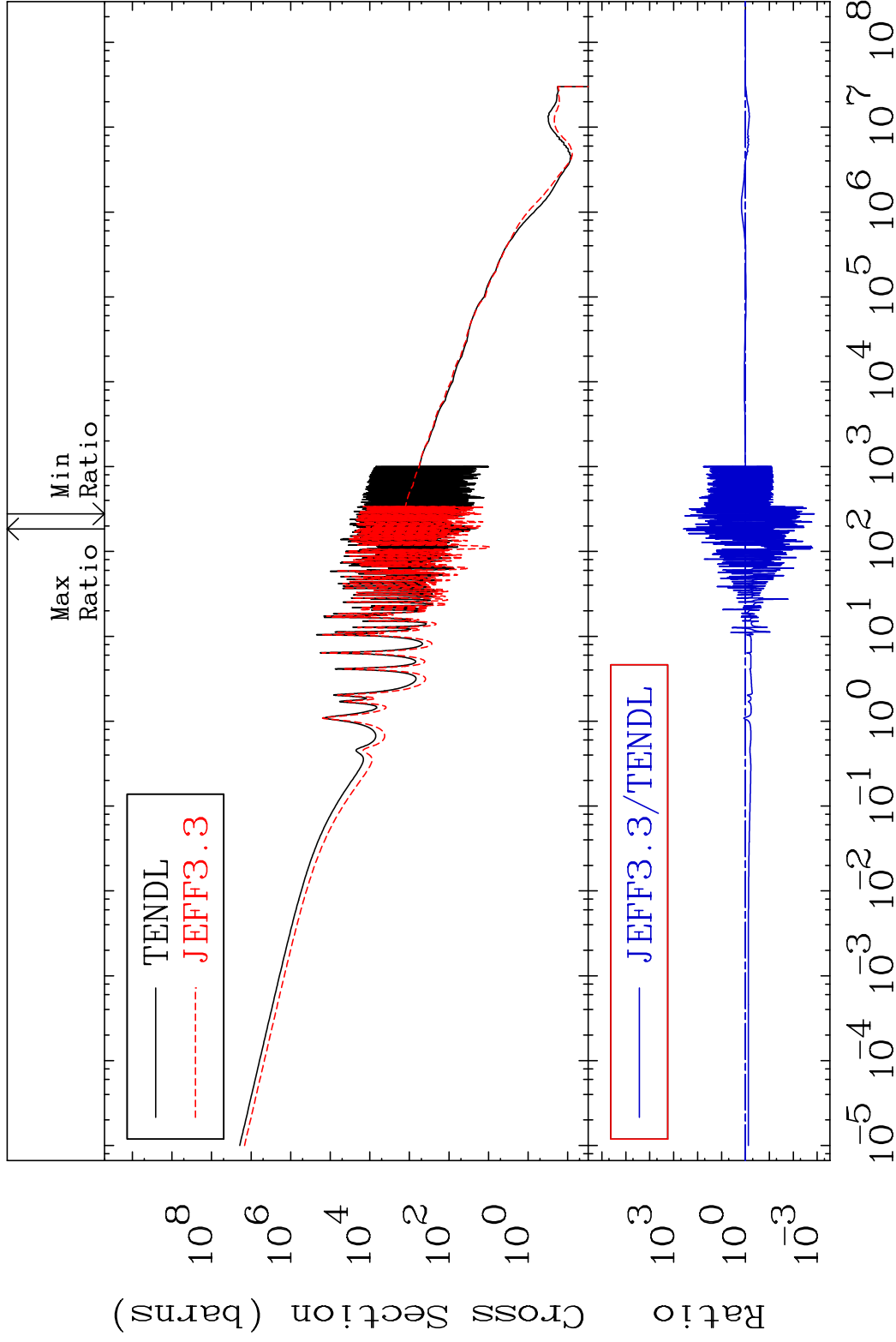


73 Incident Energy (eV) 62-Sm-151

MAT 6246

Kerma capture (mt102) 62-Sm-151

Cross Section -99.87 To 9999. %



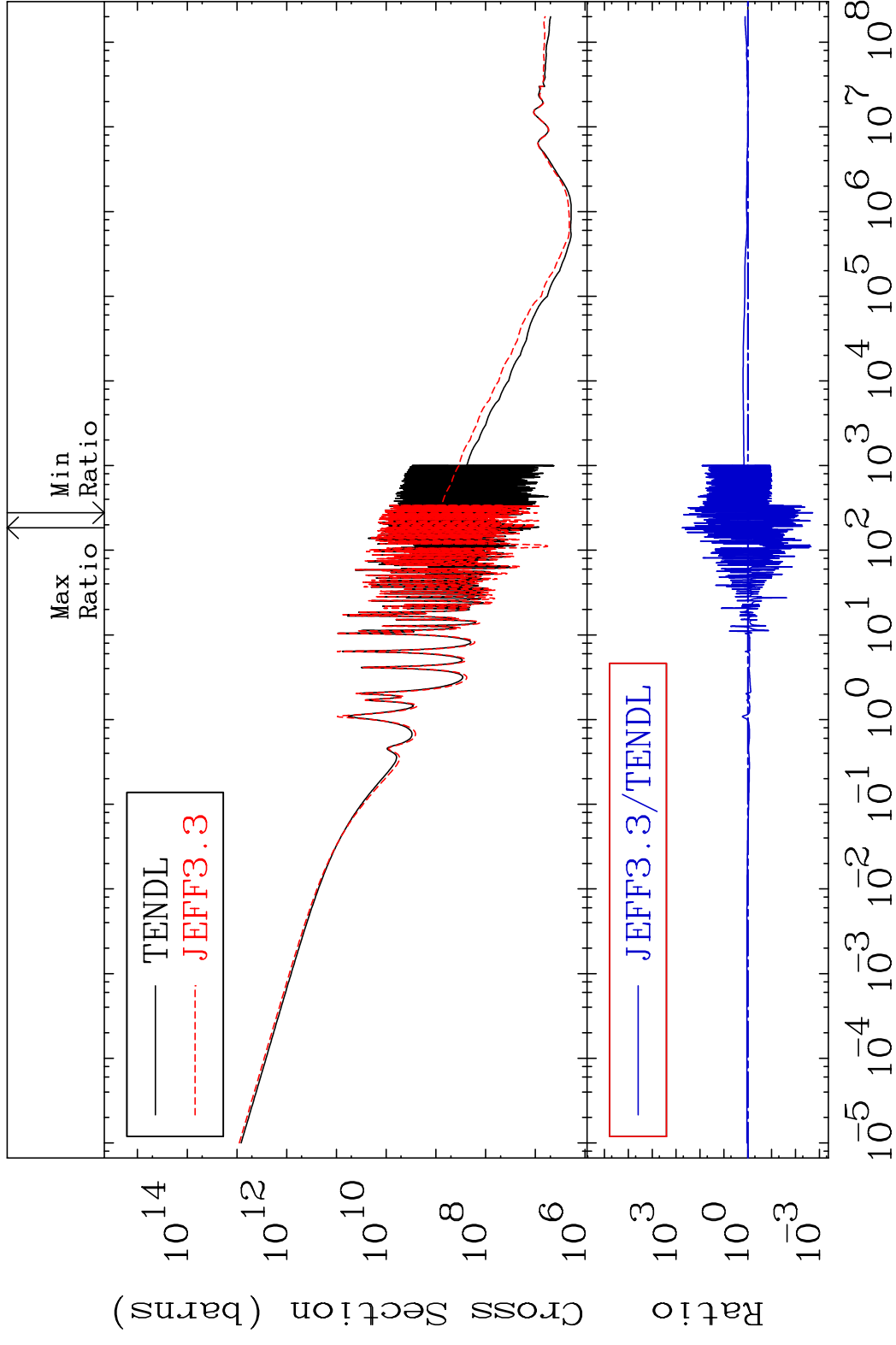
74

Incident Energy (eV)

62-Sm-151

MAT 6246

Total photon (eV-barns) 62-Sm-151  
Cross Section -99.81 To 9999. %

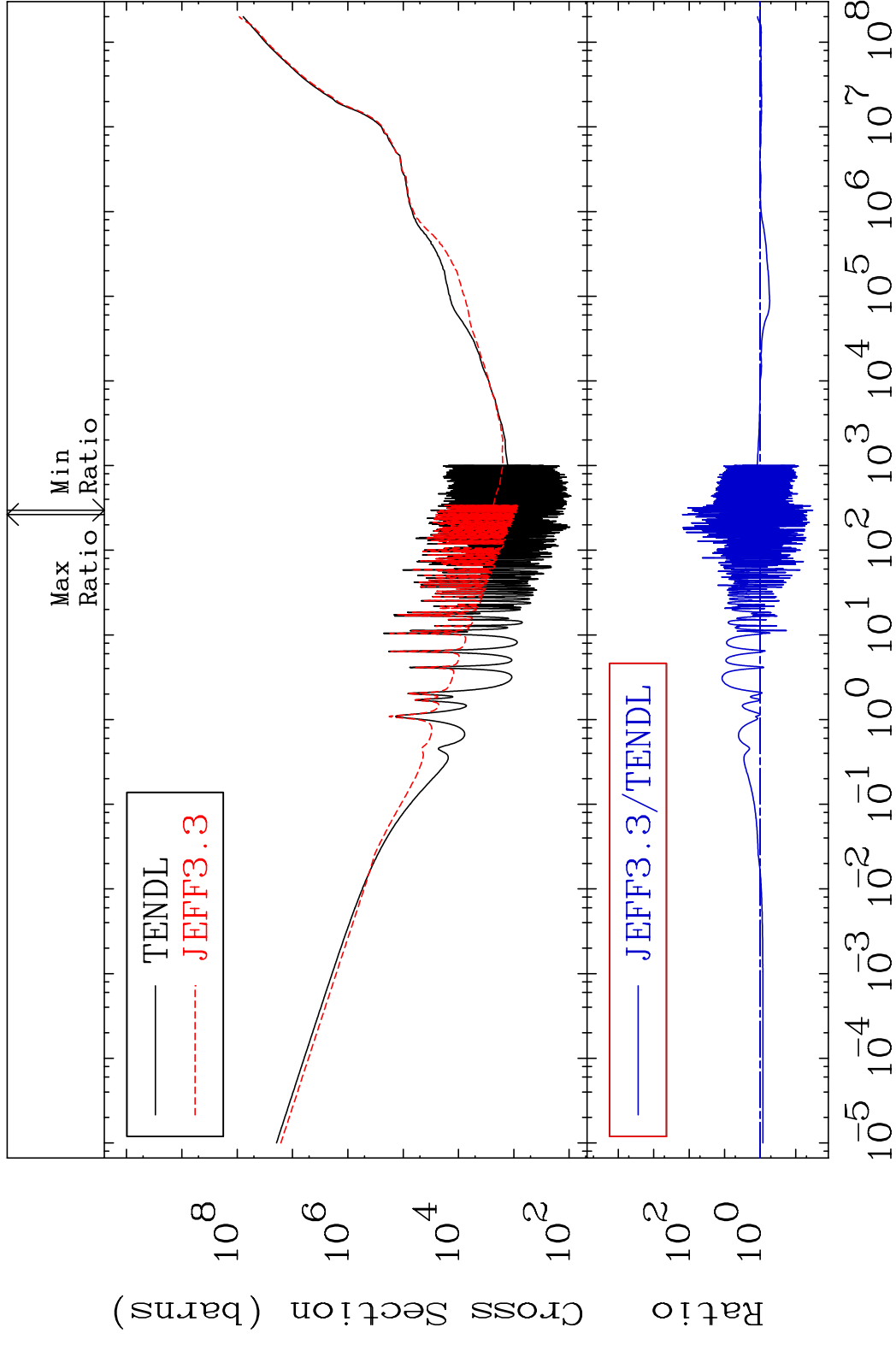


75

Incident Energy (eV)

62-Sm-151

MAT 6246 Total kinematic kerma (high limit) 62-Sm-151  
 Cross Section -96.66 To 9999. %

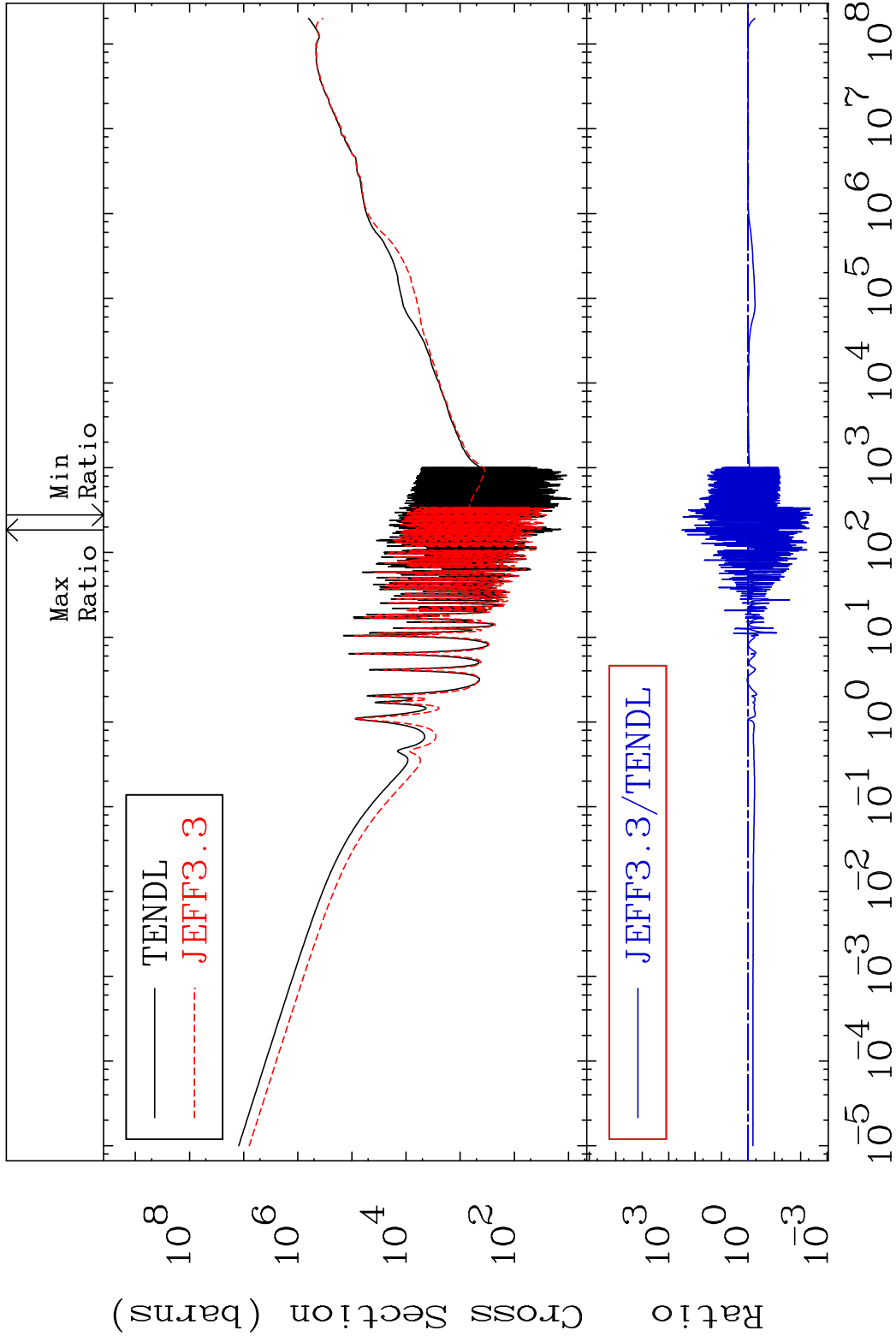


MAT 6246

Dpa total (eV-barns)

62-Sm-151

Cross Section -99.64 To 9999. %



77

Incident Energy (eV)

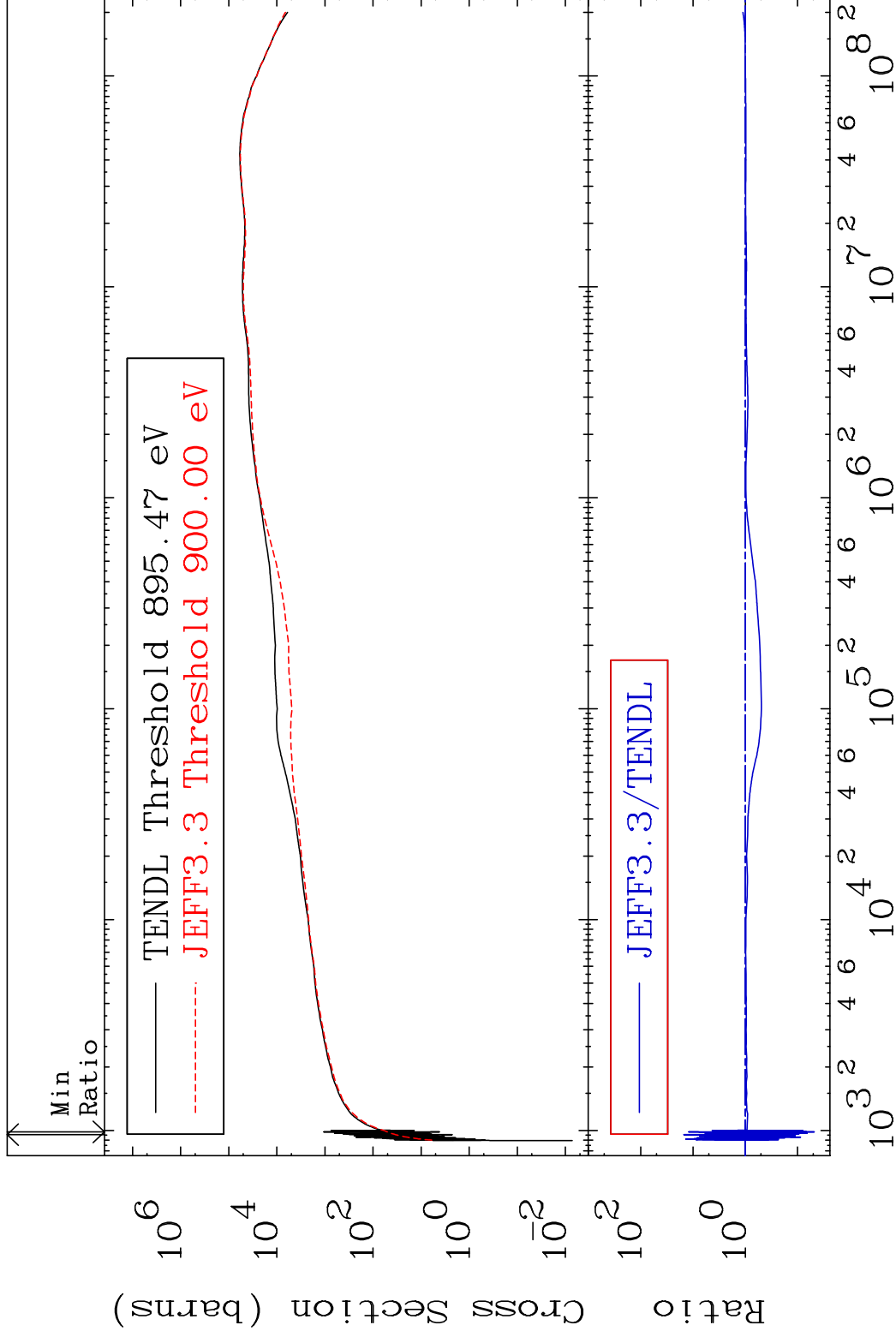
62-Sm-151

MAT 6246

Dpa elastic (mt2)

62-Sm-151

Cross Section -95.18 To 1410. %

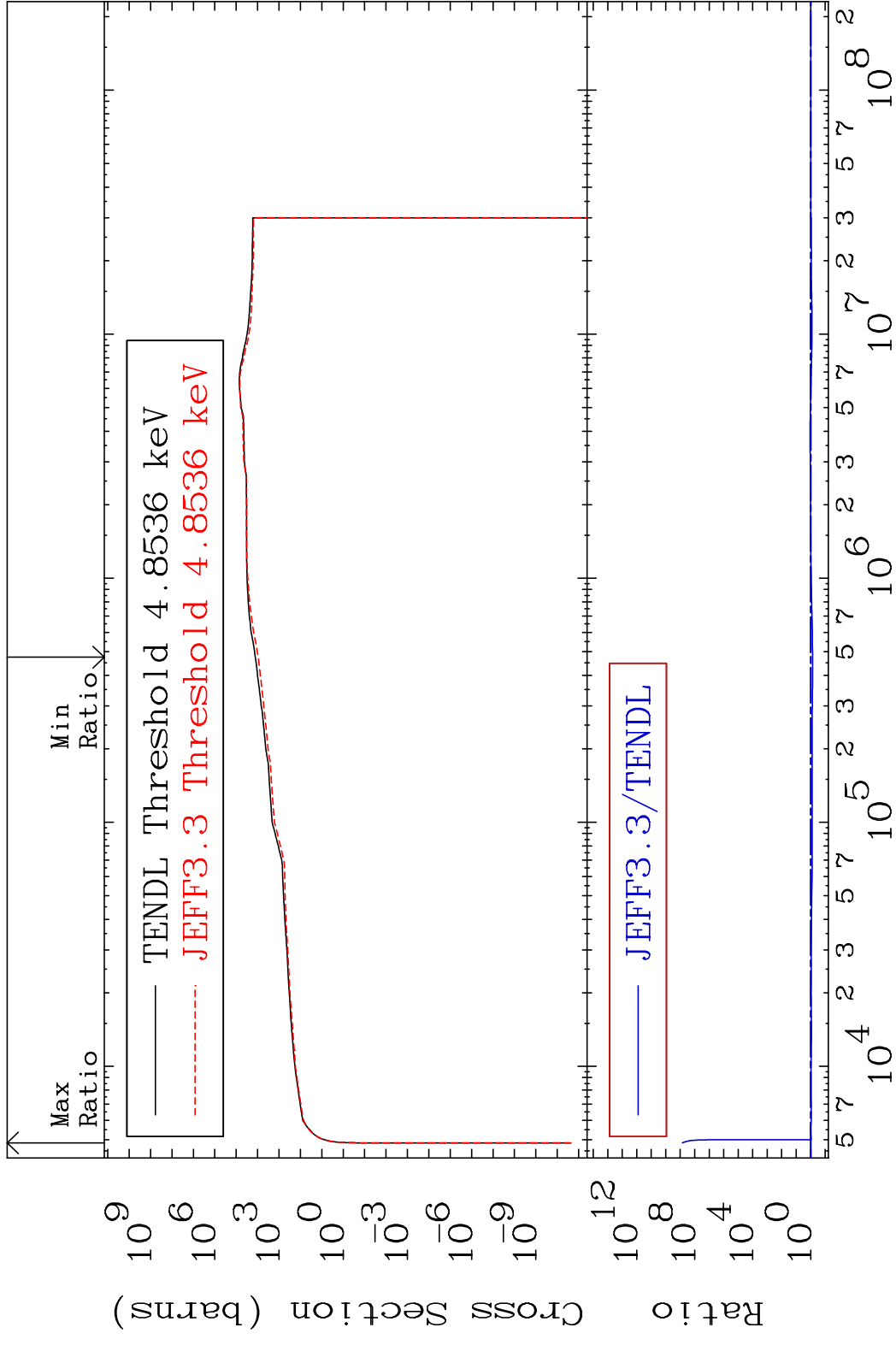


78

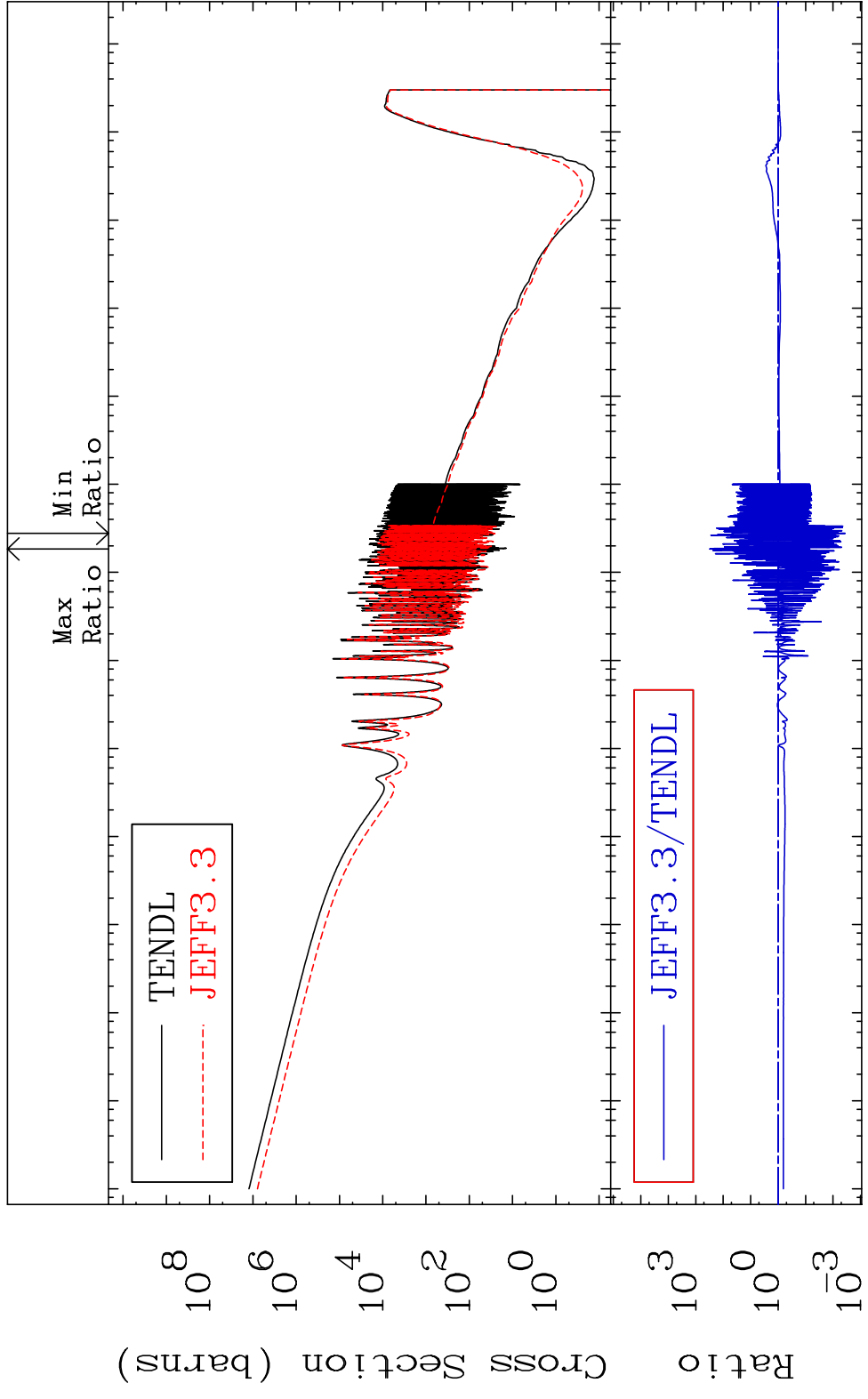
Incident Energy (eV)

62-Sm-151

MAT 6246 Dpa inelastic (mt51-91) 62-Sm-151  
 Cross Section -25.78 To 9999. %



MAT 6246 Dpa disappearance (mt102 -120) 62-Sm-151  
 Cross Section -99.64 To 9999. %



80 Incident Energy (eV) 62-Sm-151

