

Program Complot  
(Version 2018-1)

by

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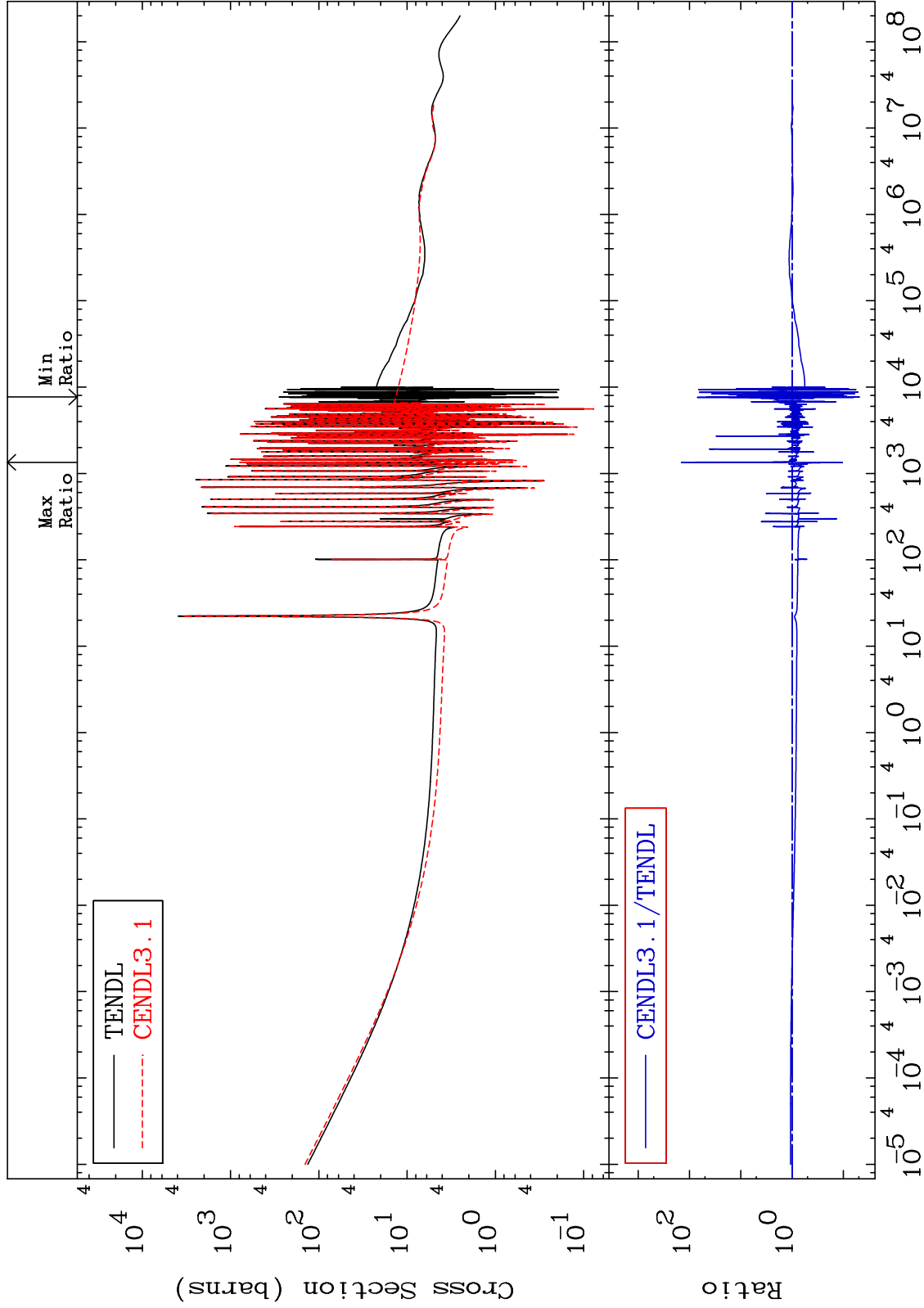
Press Mouse Button to Start

MAT 6443

Total  
Cross Section

64-Gd-158

-95.22 To 9999. %



1

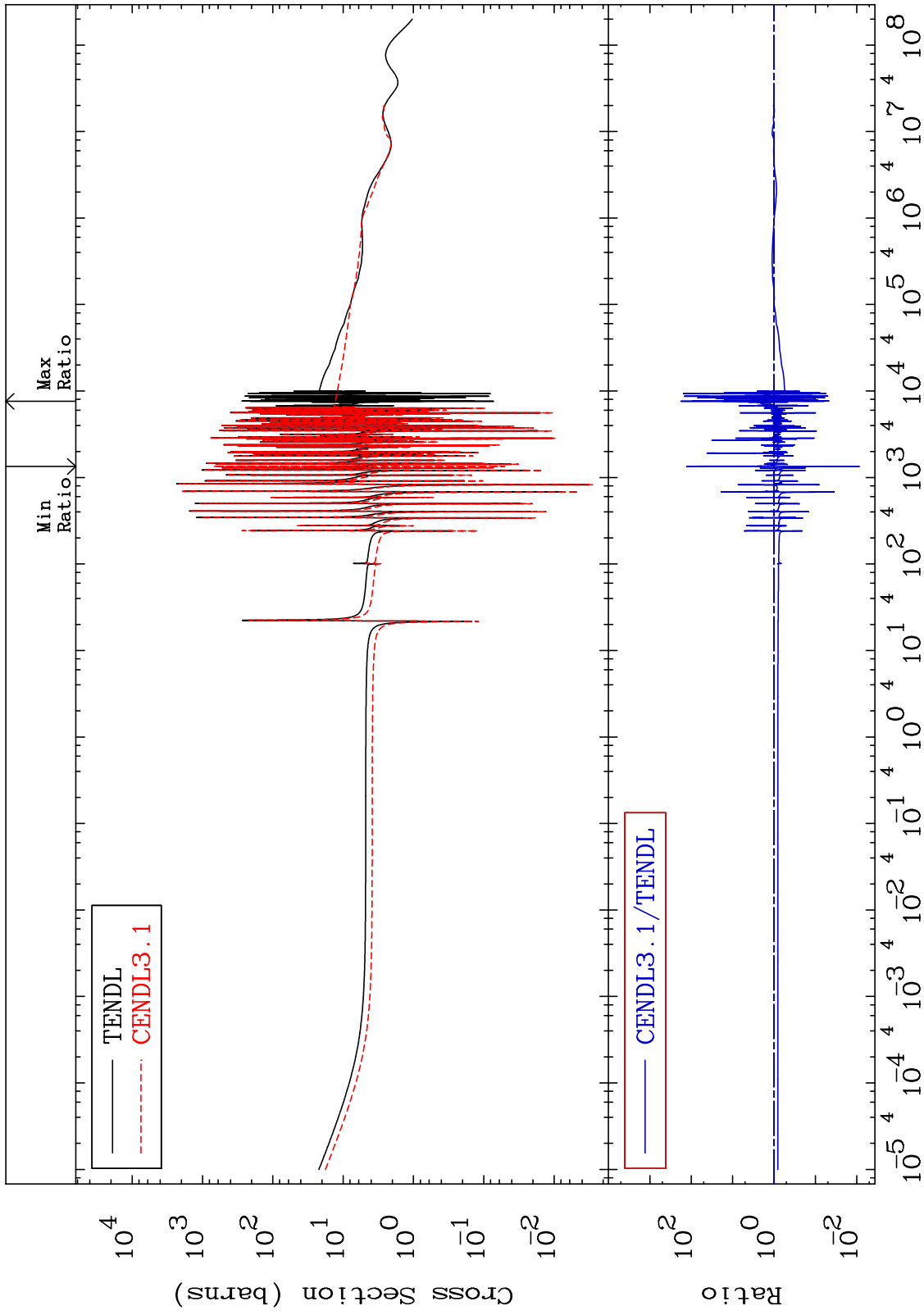
Incident Energy (eV)

64-Gd-158

MAT 6443

Elastic  
Cross Section

64-Gd-158  
-99.15 To 9999. %

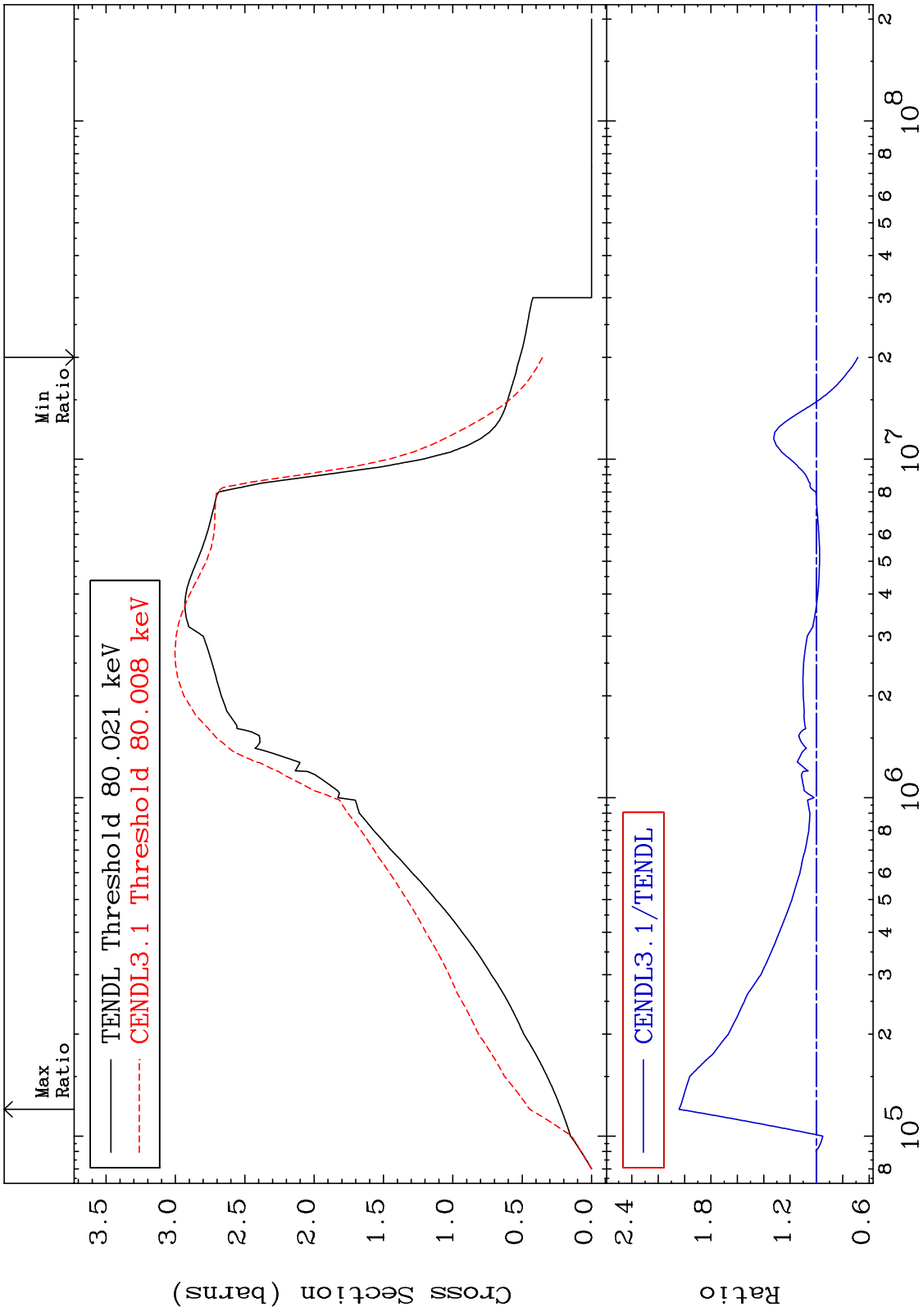


2

Incident Energy (eV)

64-Gd-158

MAT 6443 Inelastic Cross Section 64-Gd-158 -31.41 To 104.2 %



64-Gd-158

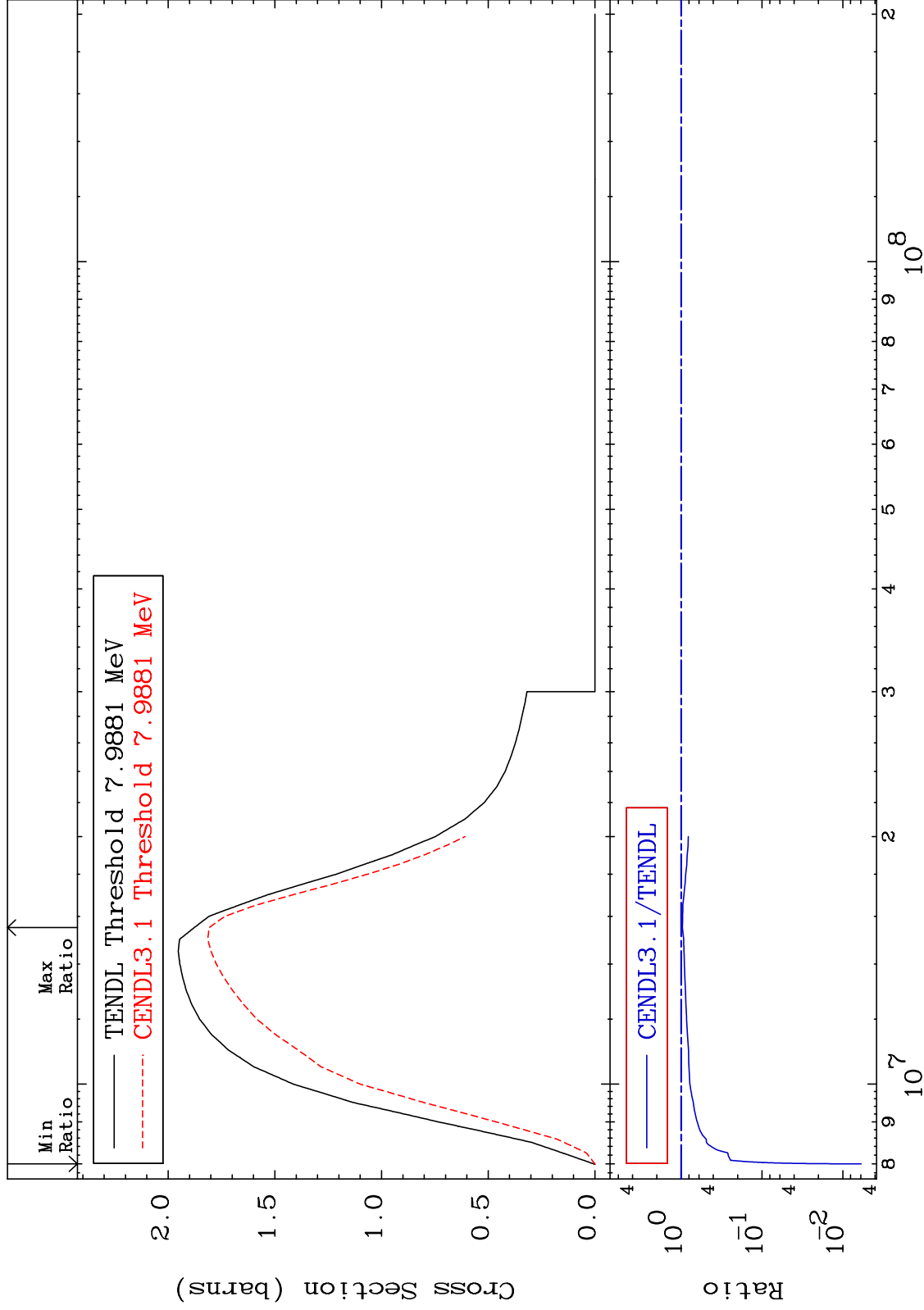
MAT 6443

(n,2n)

64-Gd-158

-99.41 To -3.716%

Cross Section

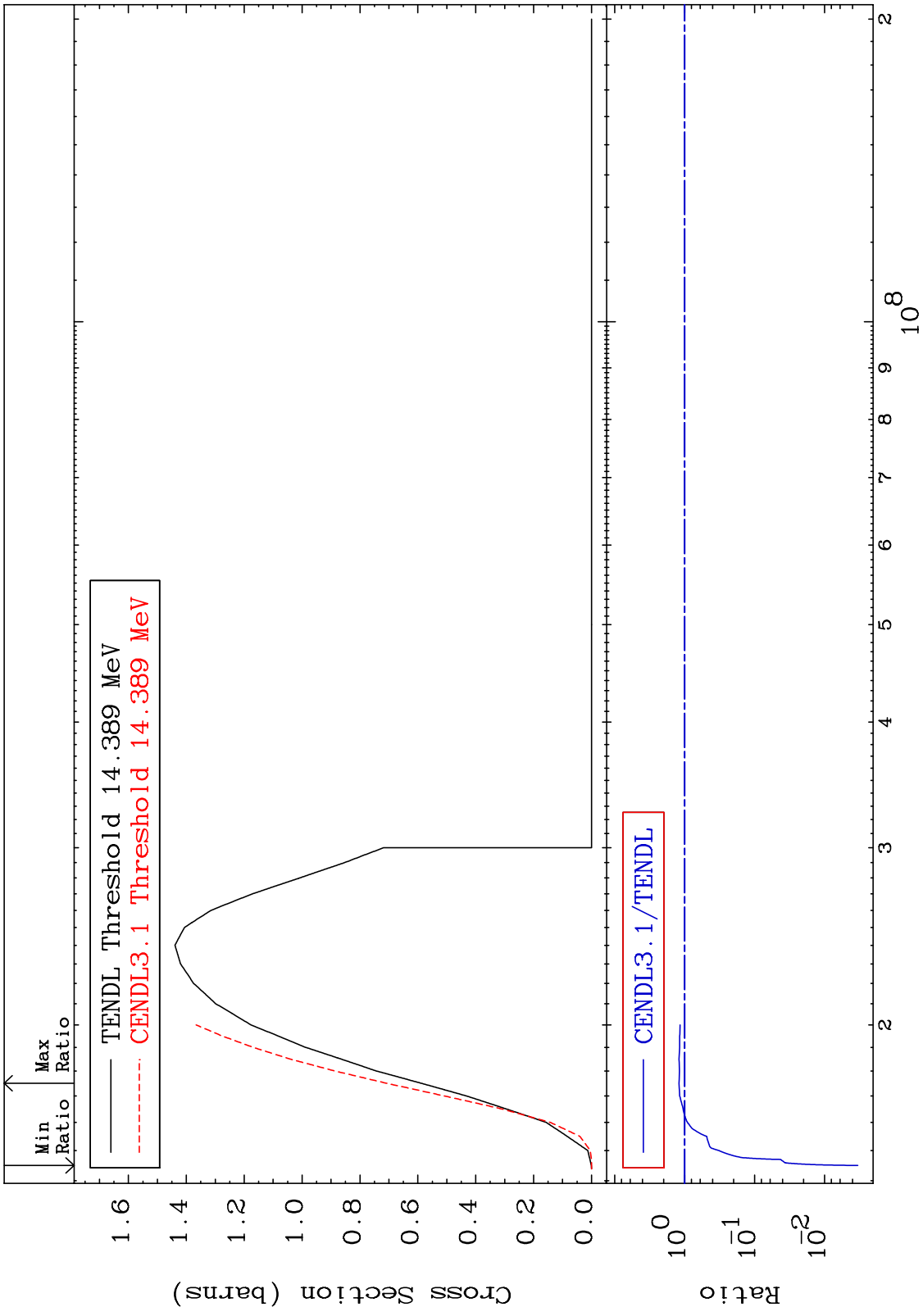


4

Incident Energy (eV)

64-Gd-158

MAT 6443 (n,3n) Cross Section 64-Gd-158 -99.66 To 20.44 %



MAT 6443

(n, n')  $\alpha$

64-Gd-158

-24.89 To 38.31 %

Cross Section

Max Ratio

Min Ratio

TENDL Threshold 663.49 keV  
CENDL3.1 Threshold 11.000 MeV

Cross Section (milli-barns)

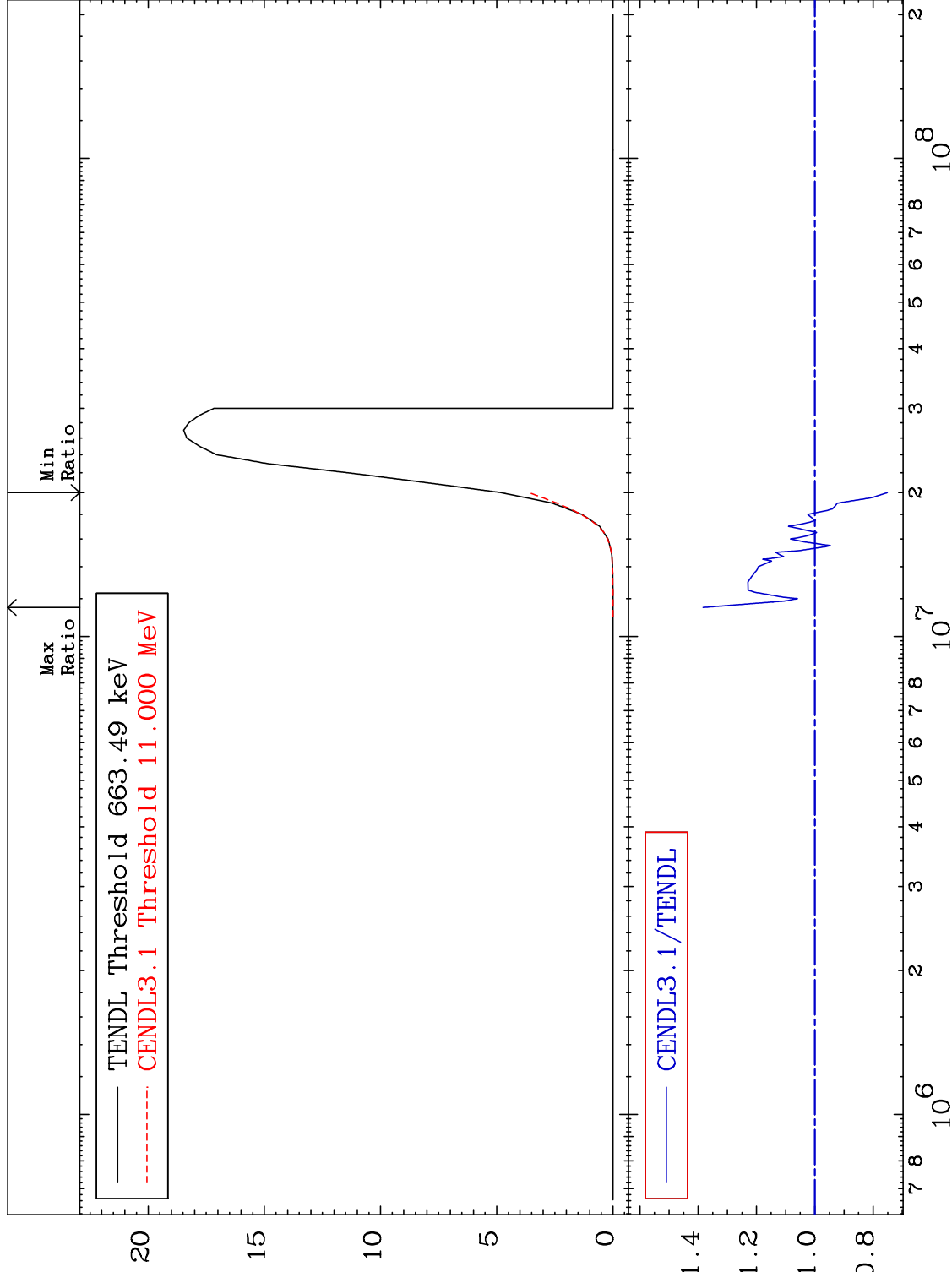
CENDL3.1/TENDL

Ratio

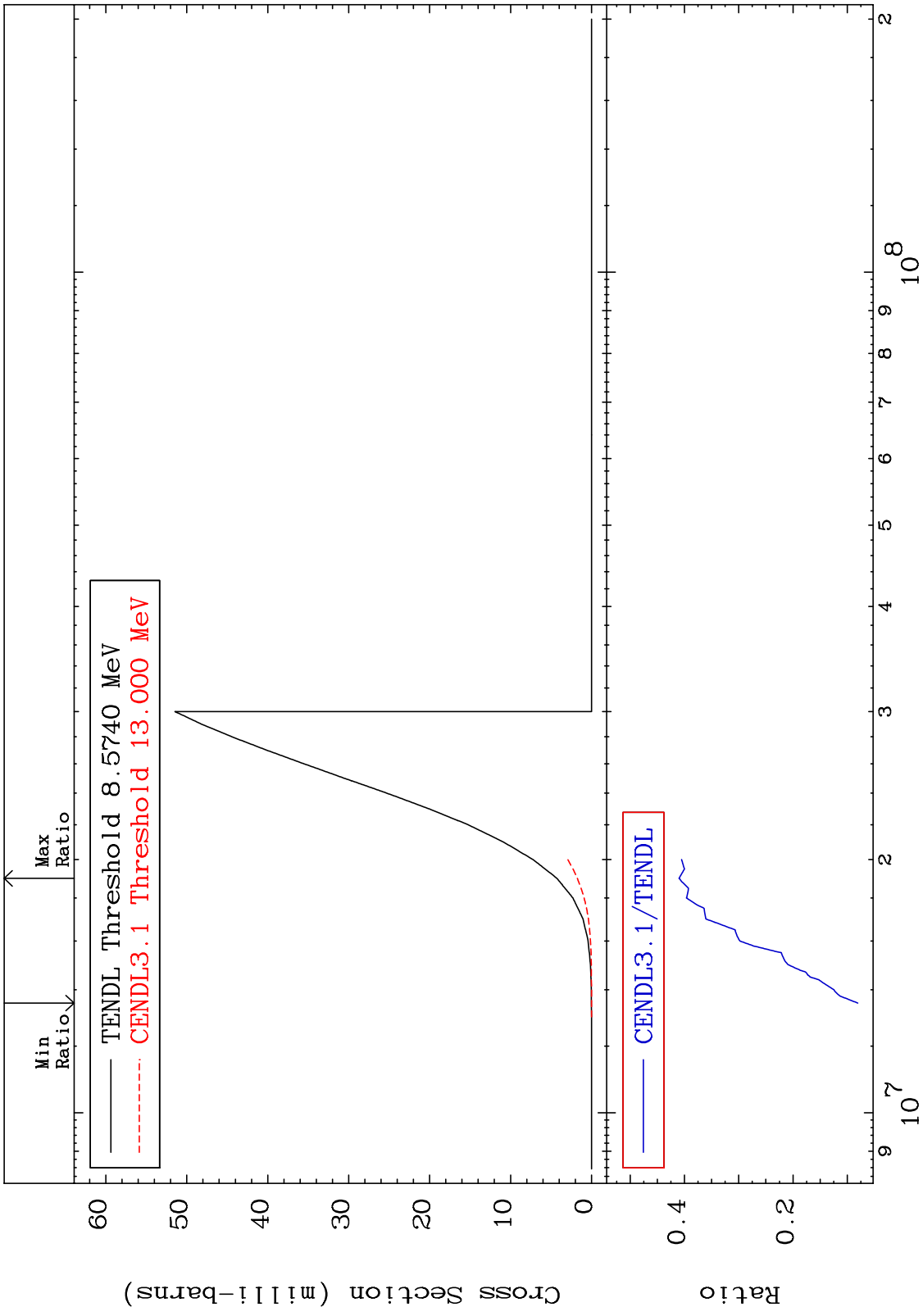
6

Incident Energy (eV)

64-Gd-158



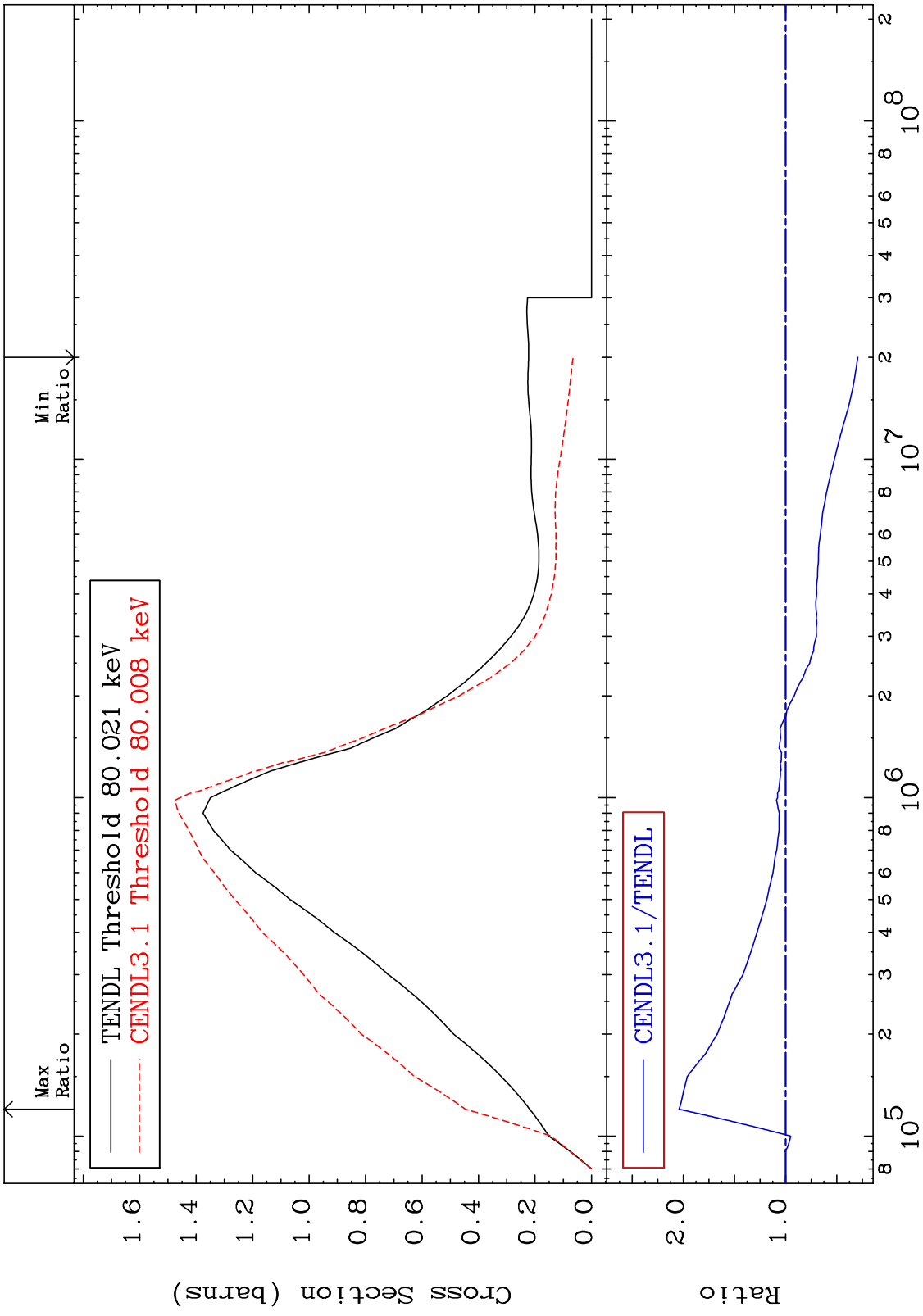
MAT 6443  $(n, n')$  p  $^{64}\text{Gd}-158$   
 Cross Section  $-91.95$  To  $-59.00\%$



$^{64}\text{Gd}-158$   
 Incident Energy (eV)

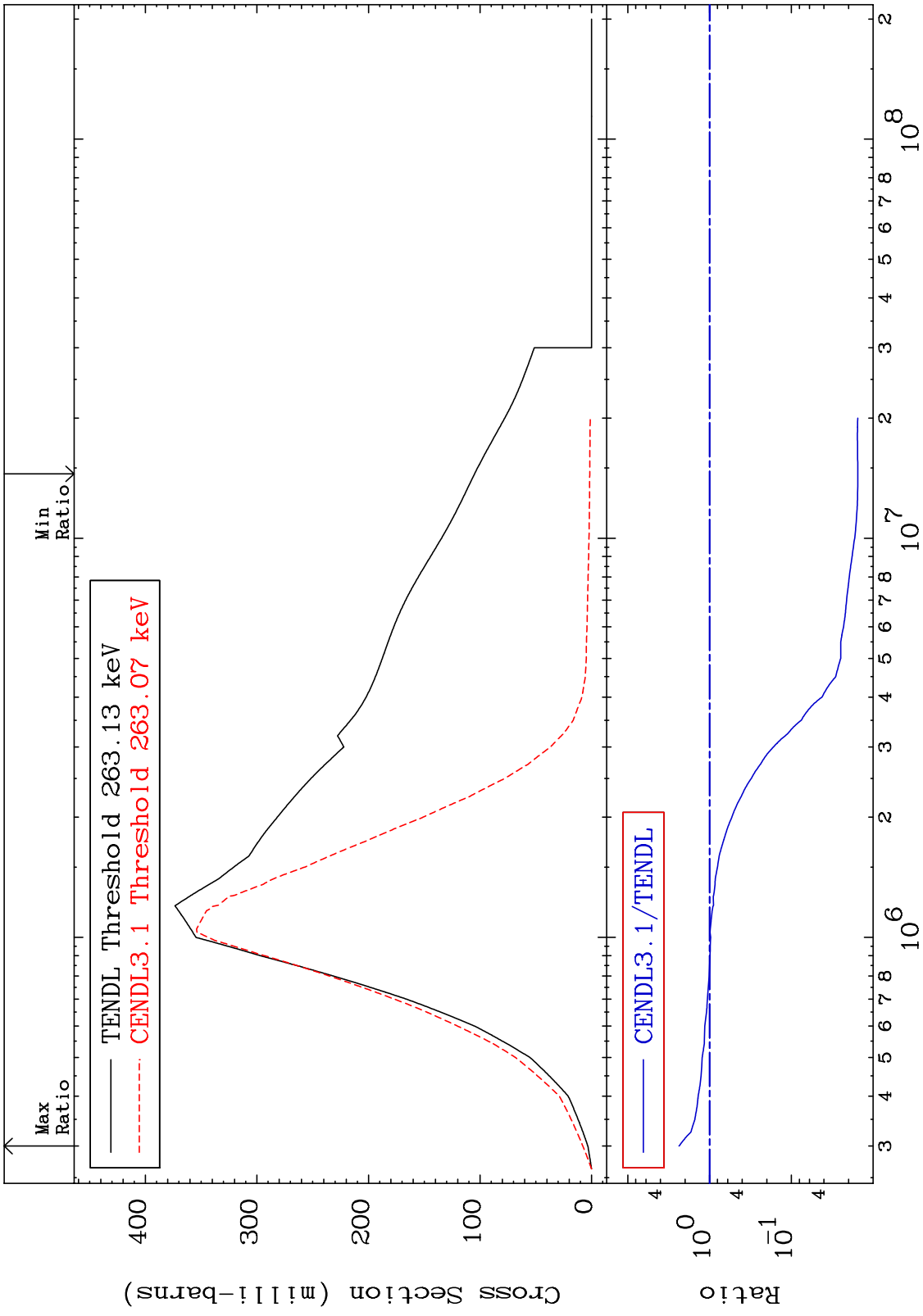


MAT 6443      MT= 51 (n,n') Level Cross Section      64-Gd-158  
 -70.62 To 104.2 %

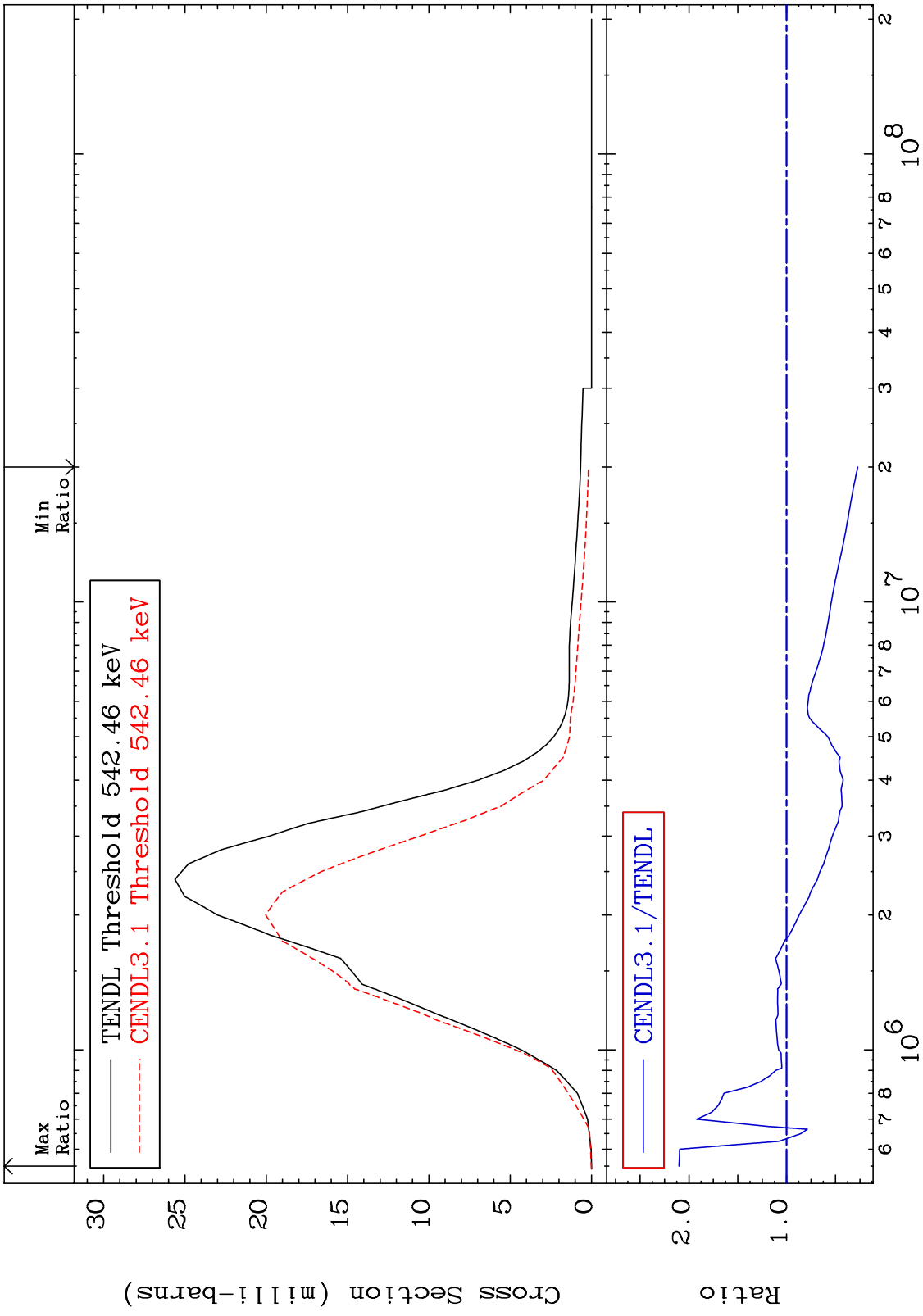


8      Incident Energy (eV)      64-Gd-158

MAT 6443      MT= 52 (n,n') Level Cross Section      64-Gd-158  
 -98.46 To 136.6 %

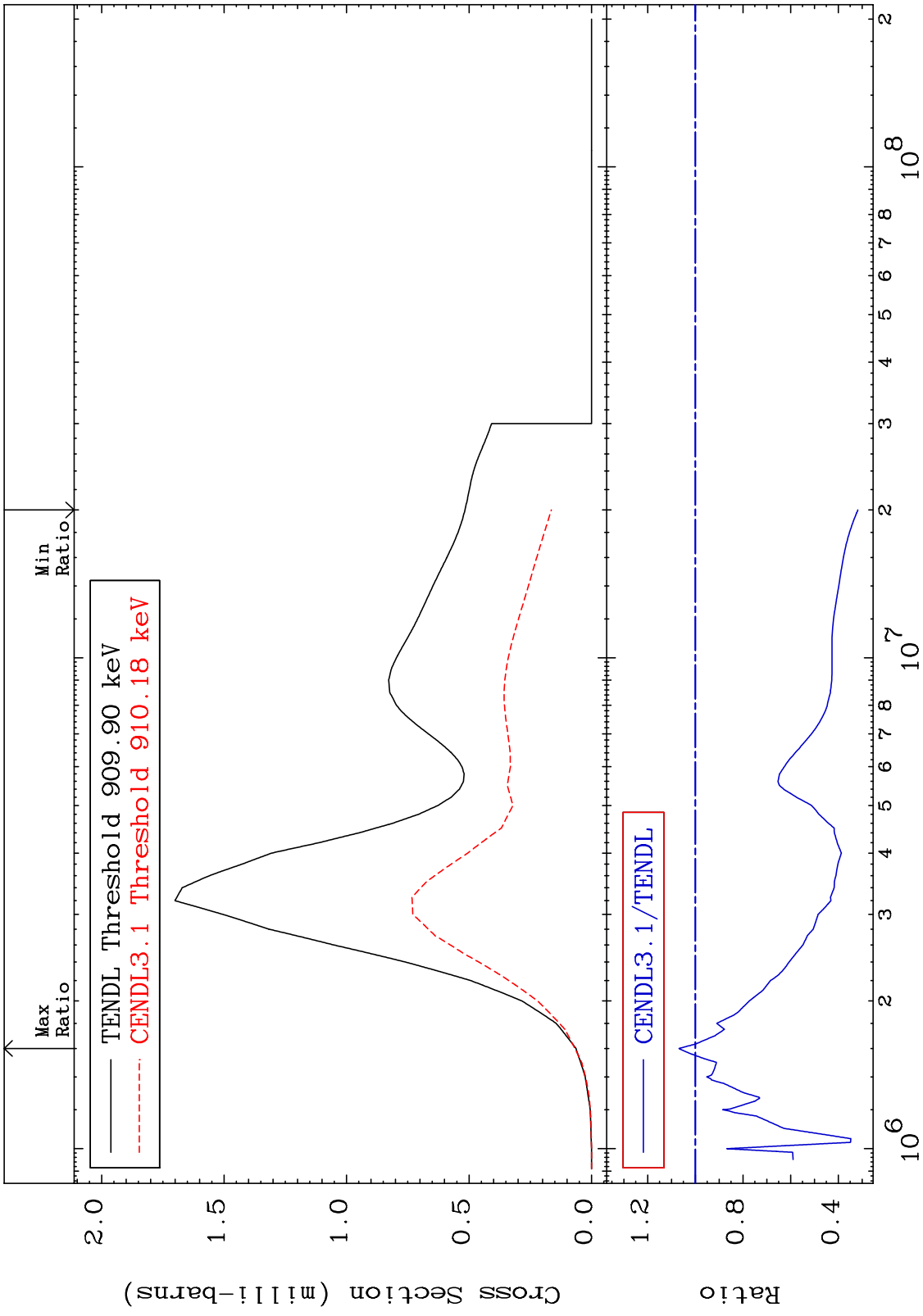


MAT 6443 MT= 53 (n,n') Level Cross Section 64-Gd-158  
 -72.90 To 110.1 %



10 6 7 8 10<sup>6</sup> 2 3 4 5 6 7 8 10<sup>8</sup> 64-Gd-158

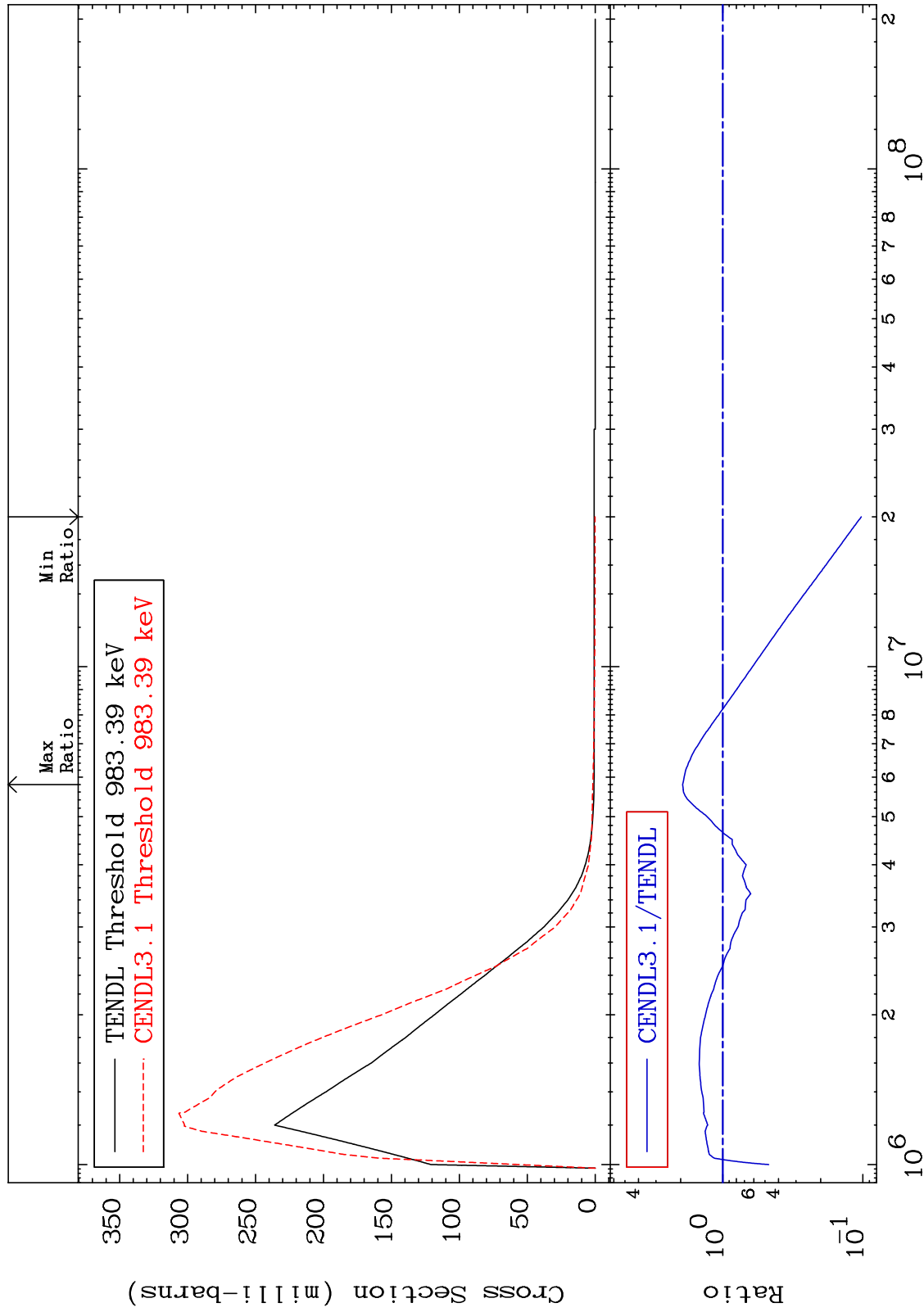
MAT 6443 MT= 54 (n,n') Level Cross Section 64-Gd-158  
 -68.20 To 6.831 %



MAT 6443

MT= 55 (n,n') Level  
Cross Section

64-Gd-158  
-89.75 To 93.35 %



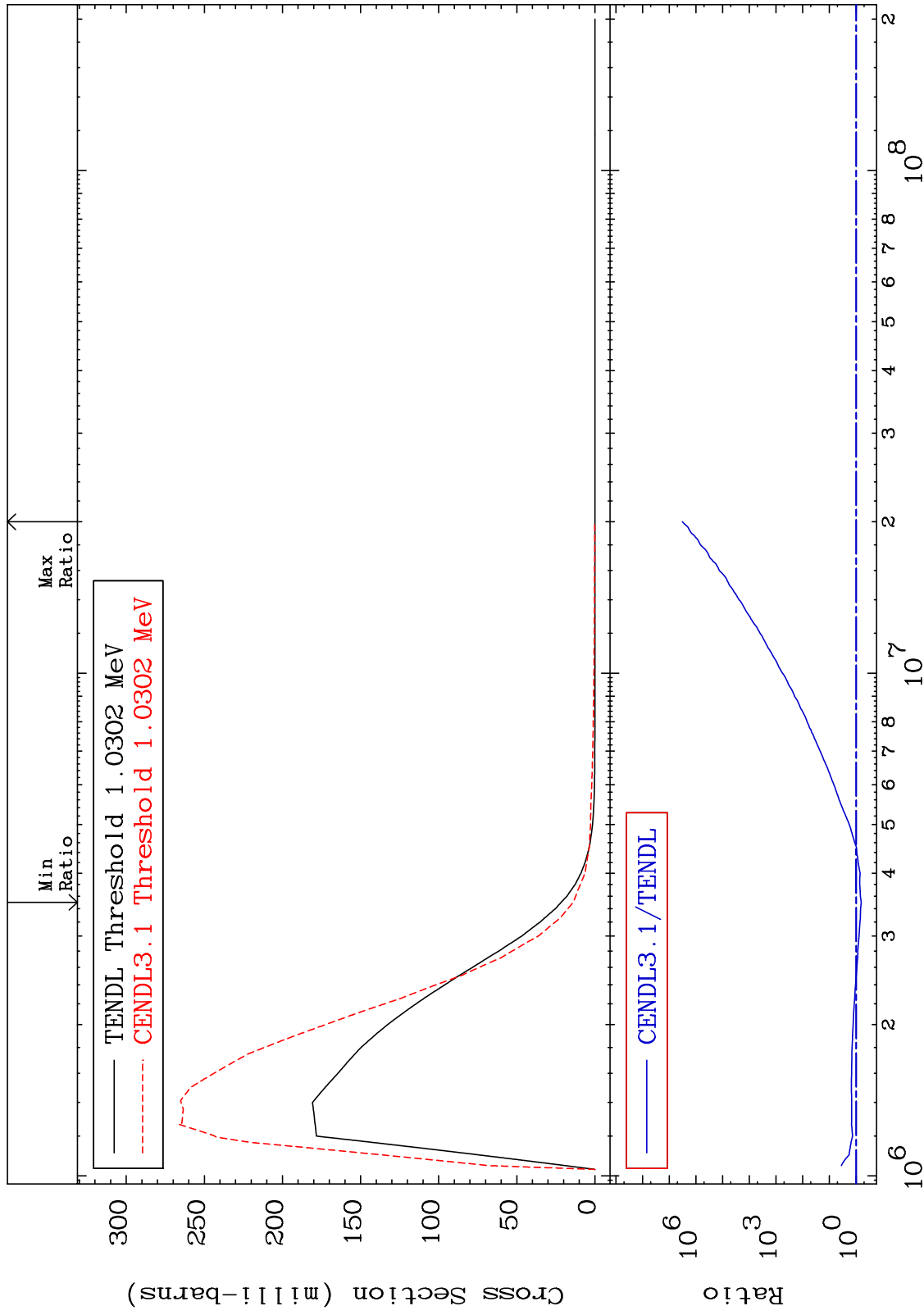
Incident Energy (eV)

64-Gd-158

MAT 6443

MT= 56 (n,n') Level  
Cross Section

64-Gd-158  
-35.98 To 9999. %

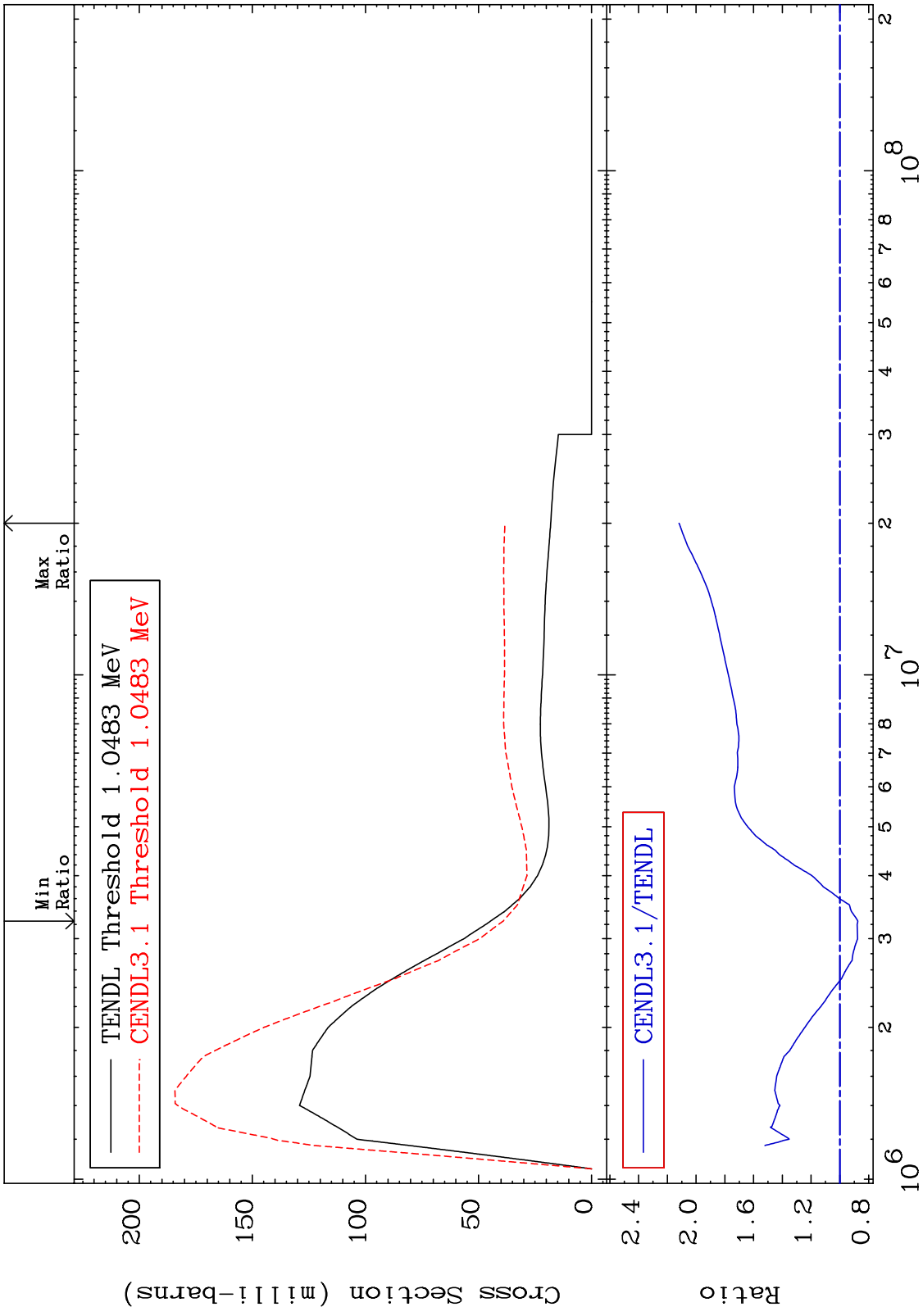


13

Incident Energy (eV)

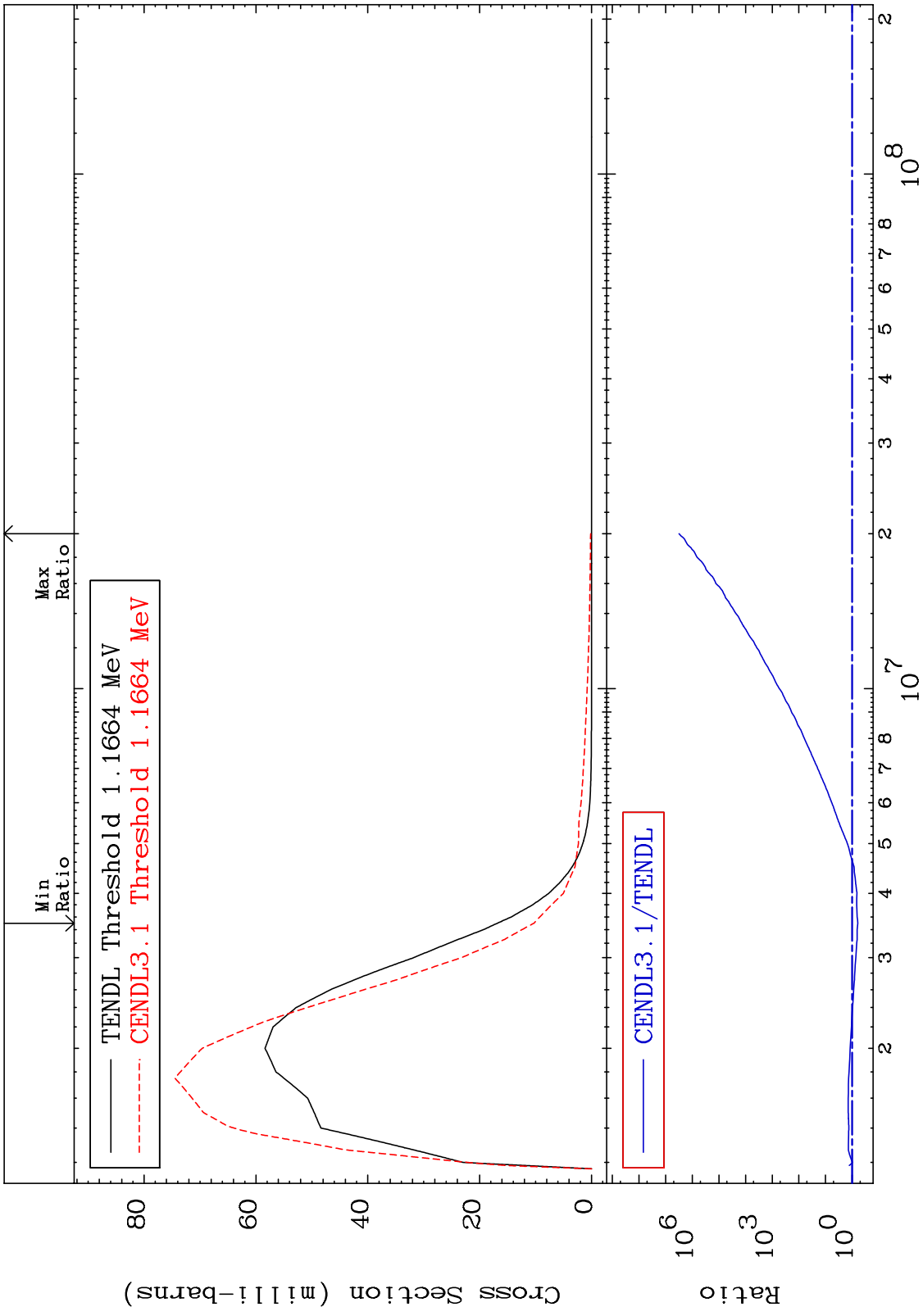
64-Gd-158

MAT 6443 MT= 57 (n,n') Level Cross Section 64-Gd-158 -12.50 To 111.9 %



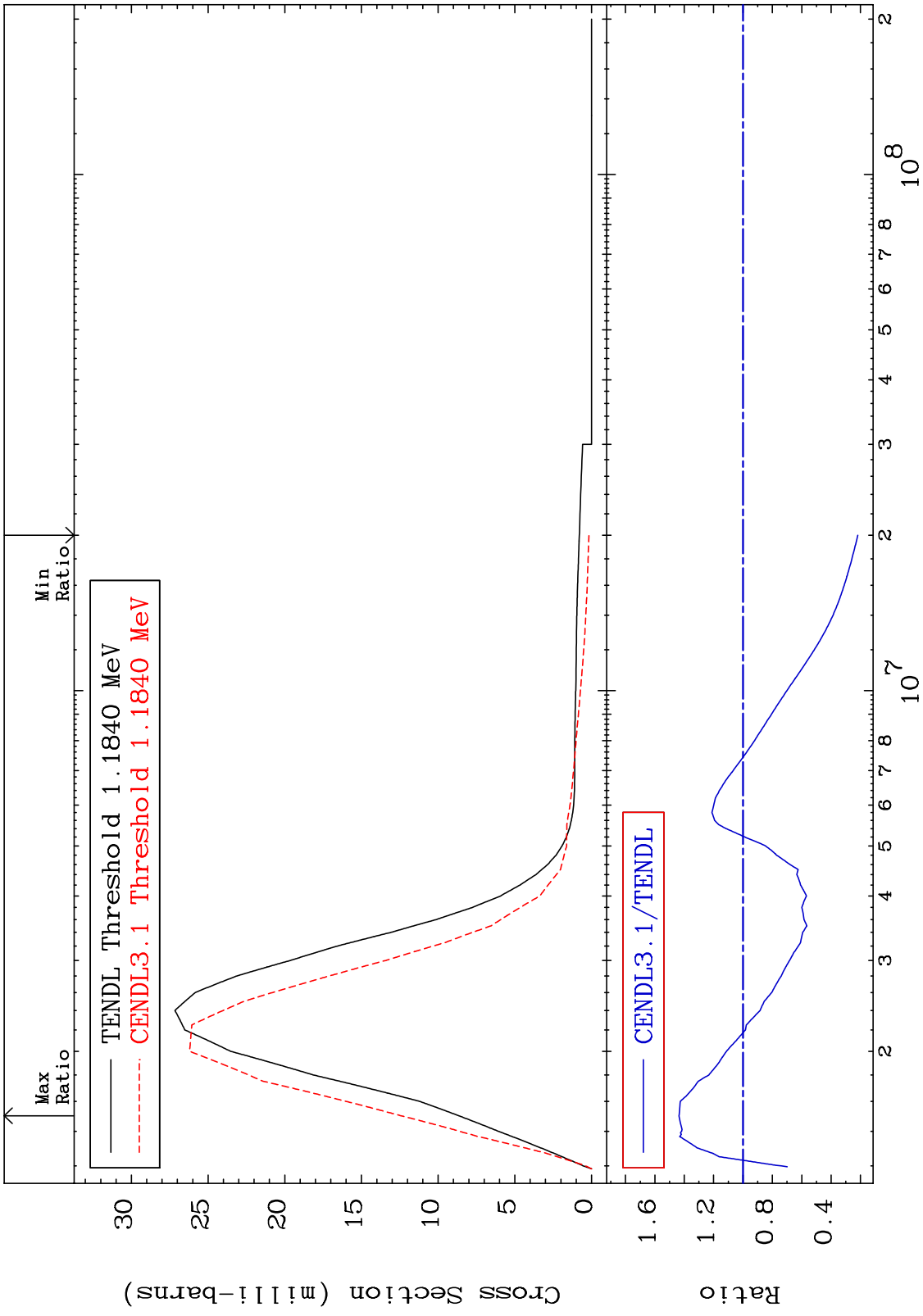
14 64-Gd-158

MAT 6443 MT= 58 (n,n') Level Cross Section 64-Gd-158 -38.85 To 9999. %

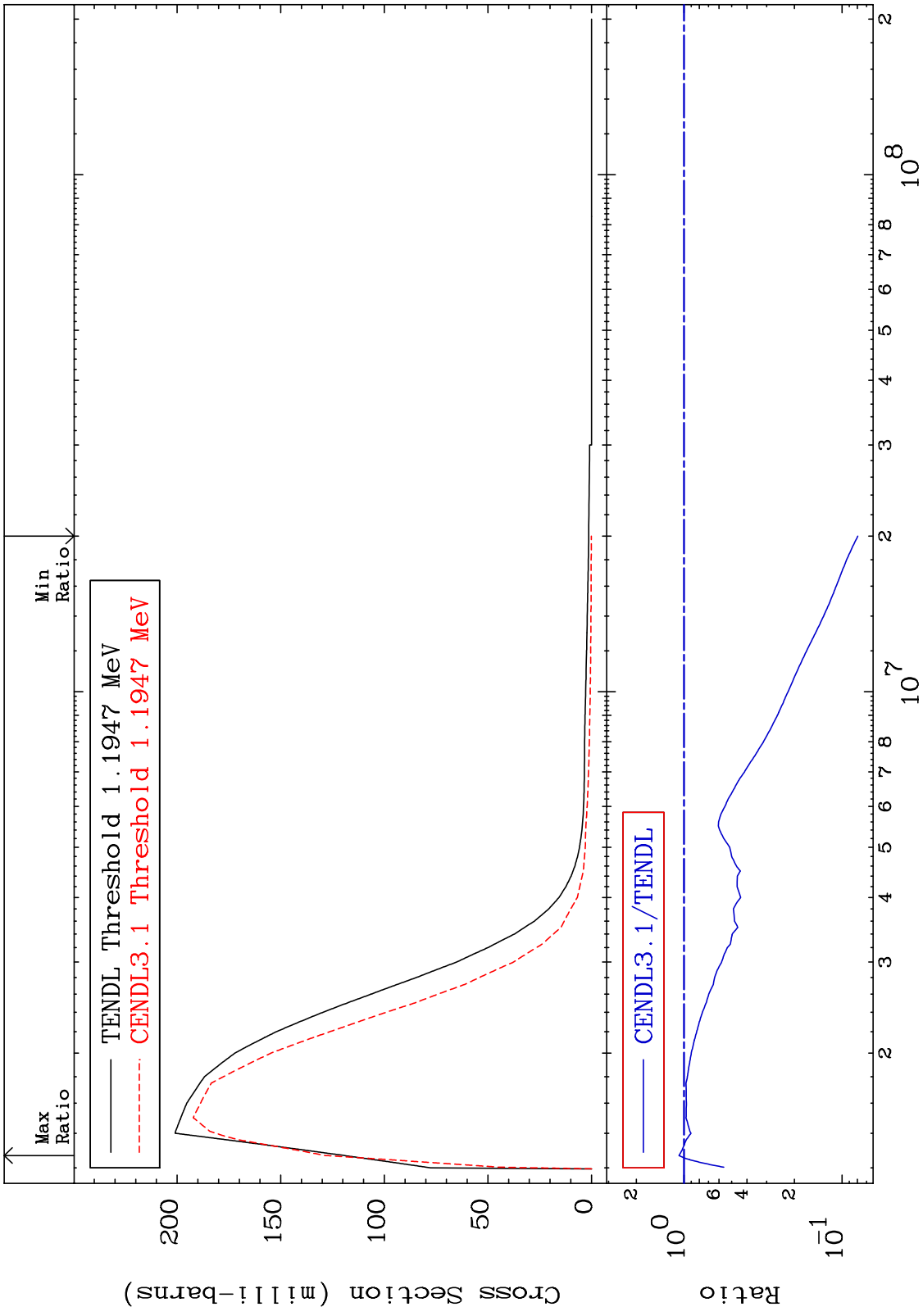




MAT 6443      MT= 59 (n, n') Level      64-Gd-158  
 Cross Section      -78.21 To 43.54 %



MAT 6443 MT= 60 (n,n') Level Cross Section 64-Gd-158 -92.05 To 7.448 %

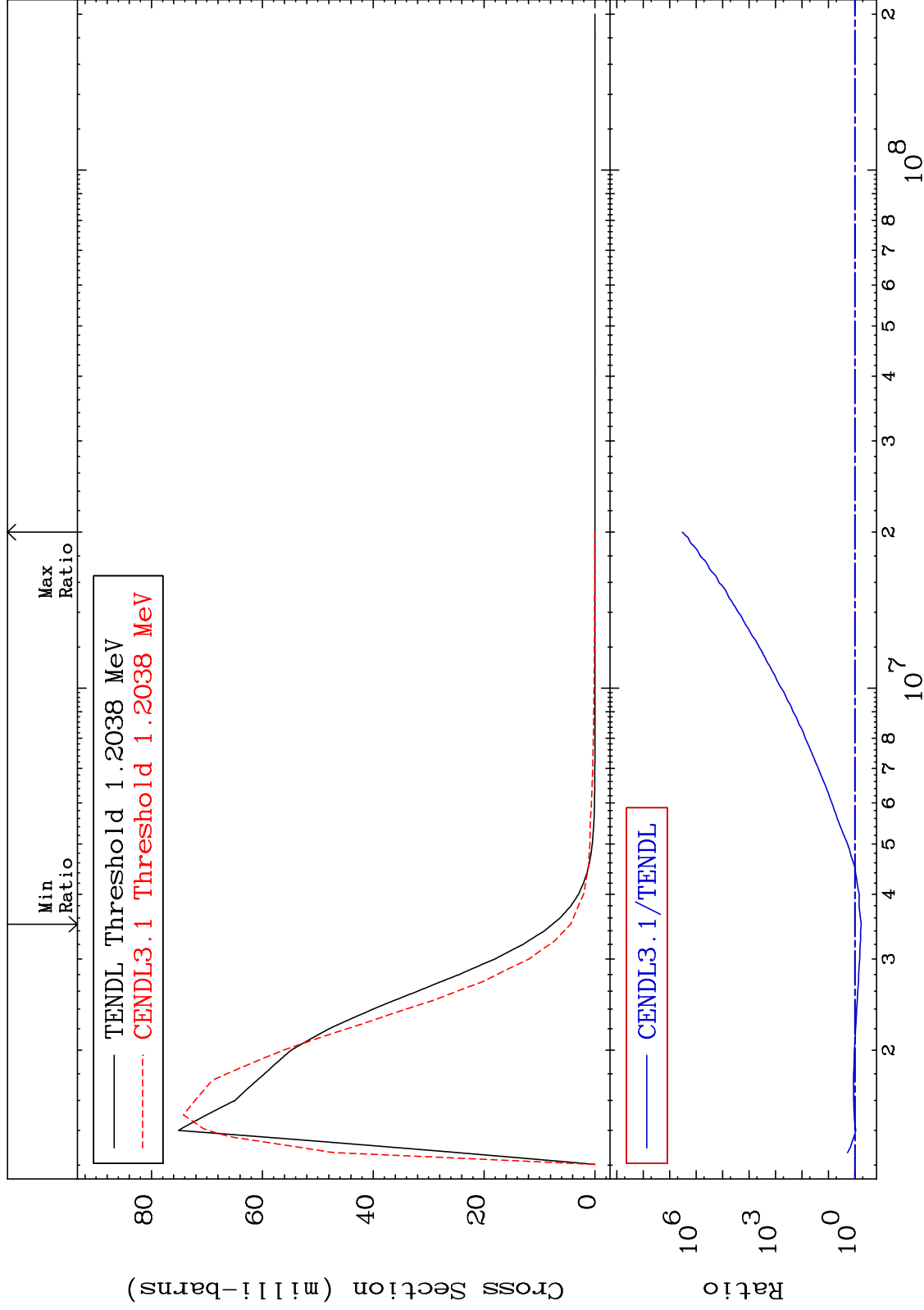


17 64-Gd-158

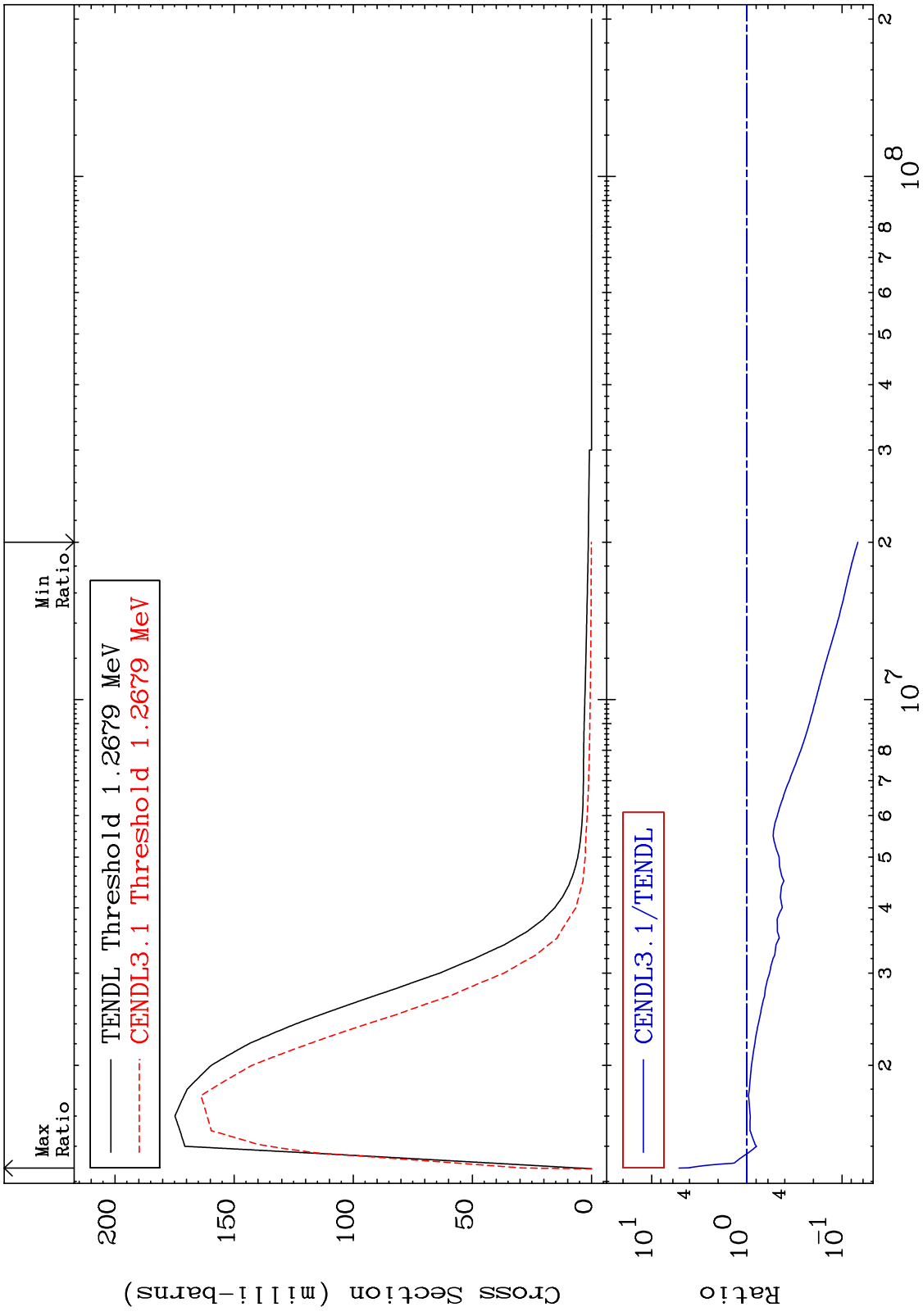
MAT 6443

MT= 61 (n,n') Level  
Cross Section

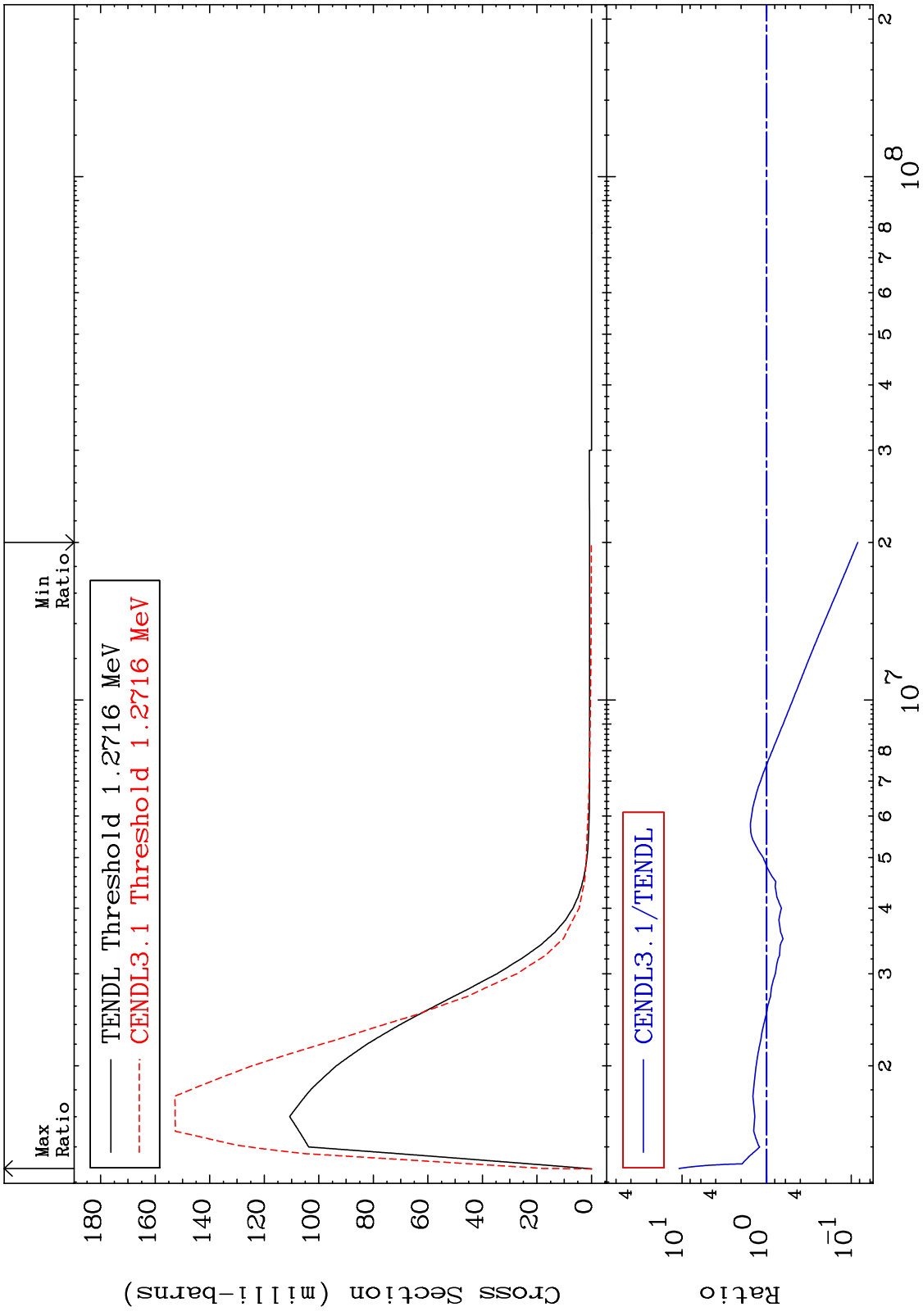
64-Gd-158  
-42.86 To 9999. %



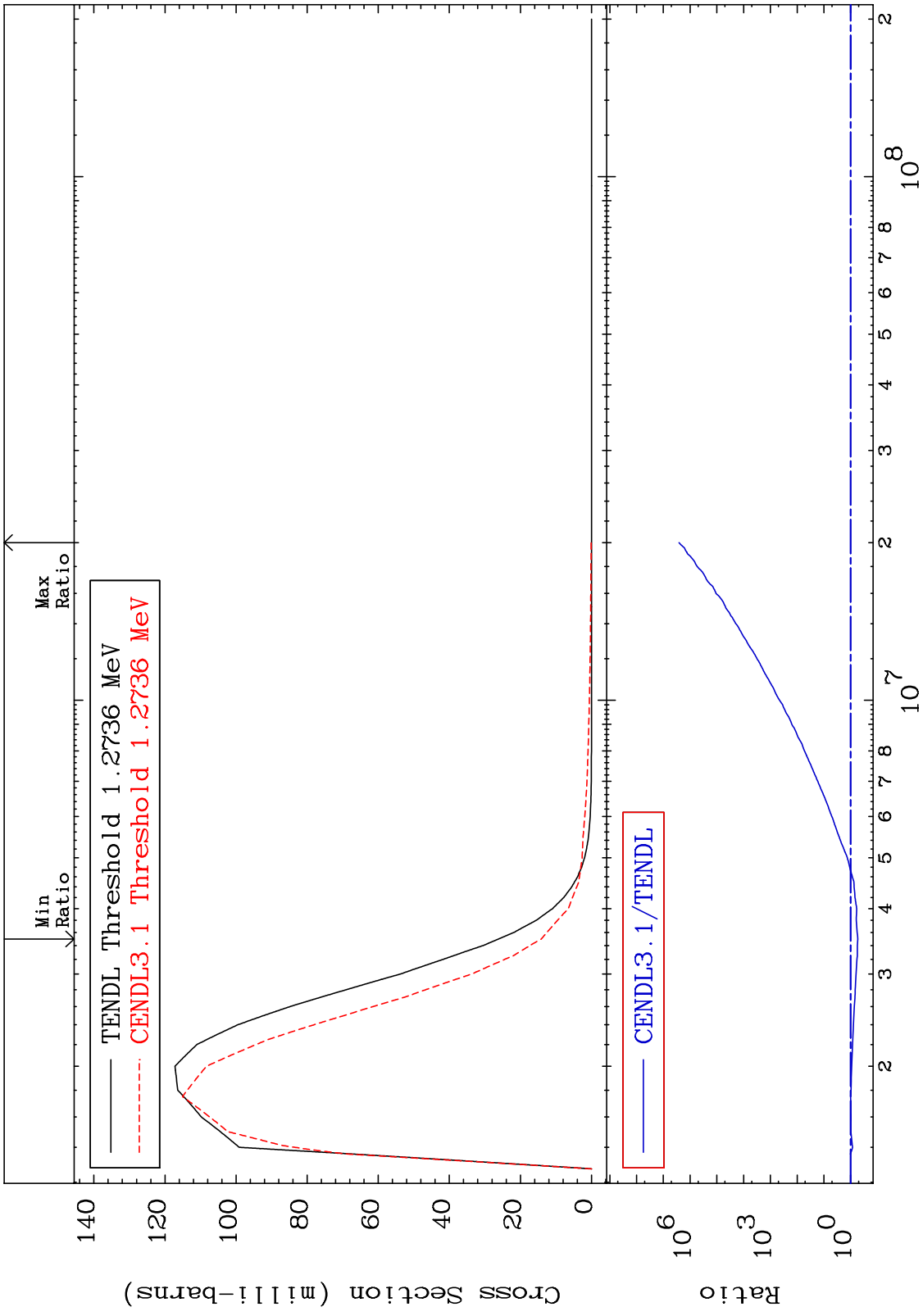
MAT 6443 MT= 62 (n,n') Level Cross Section 64-Gd-158 -93.19 To 416.0 %



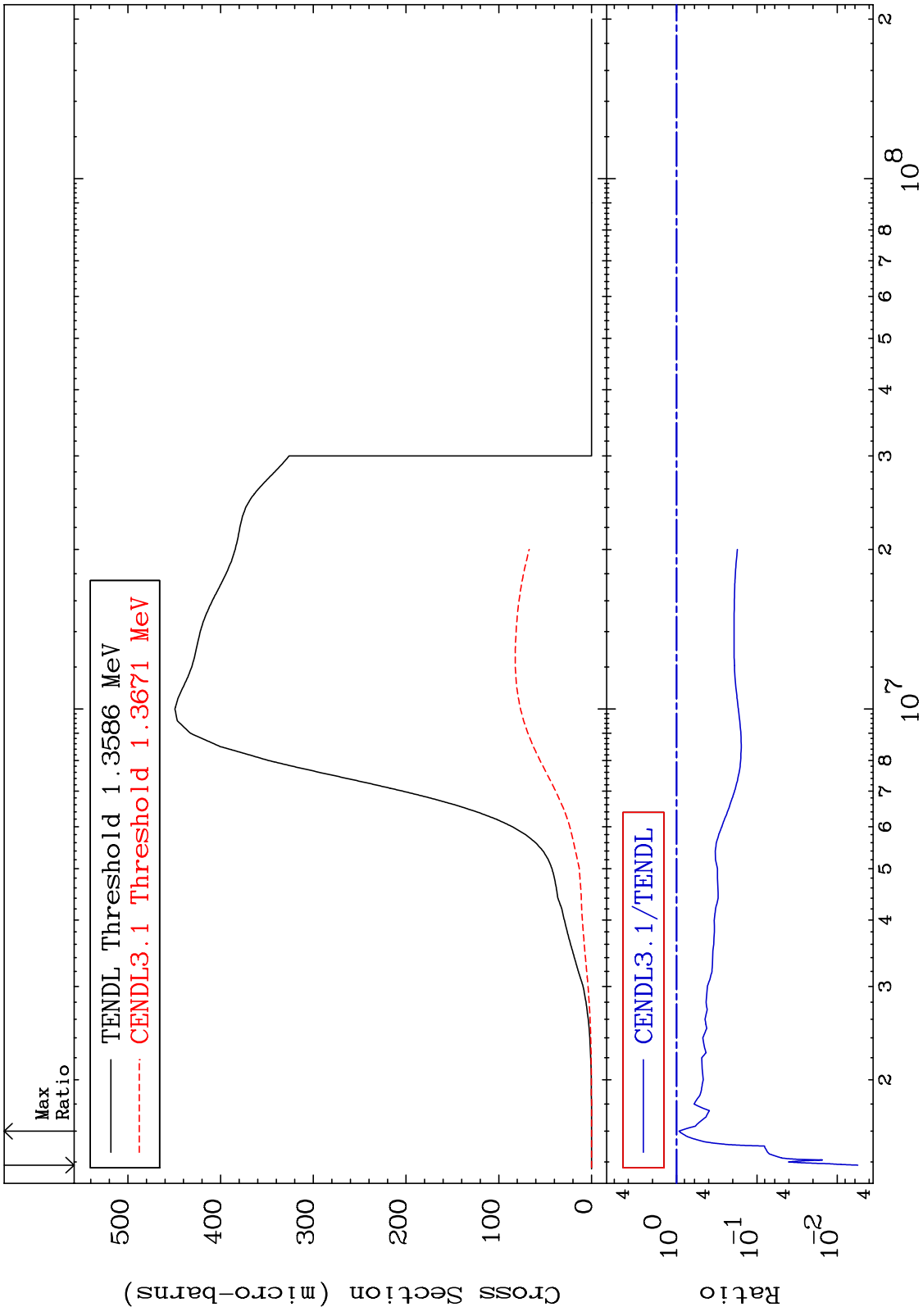
MAT 6443      MT= 63 (n,n') Level Cross Section      64-Gd-158  
 -91.63 To 982.5 %



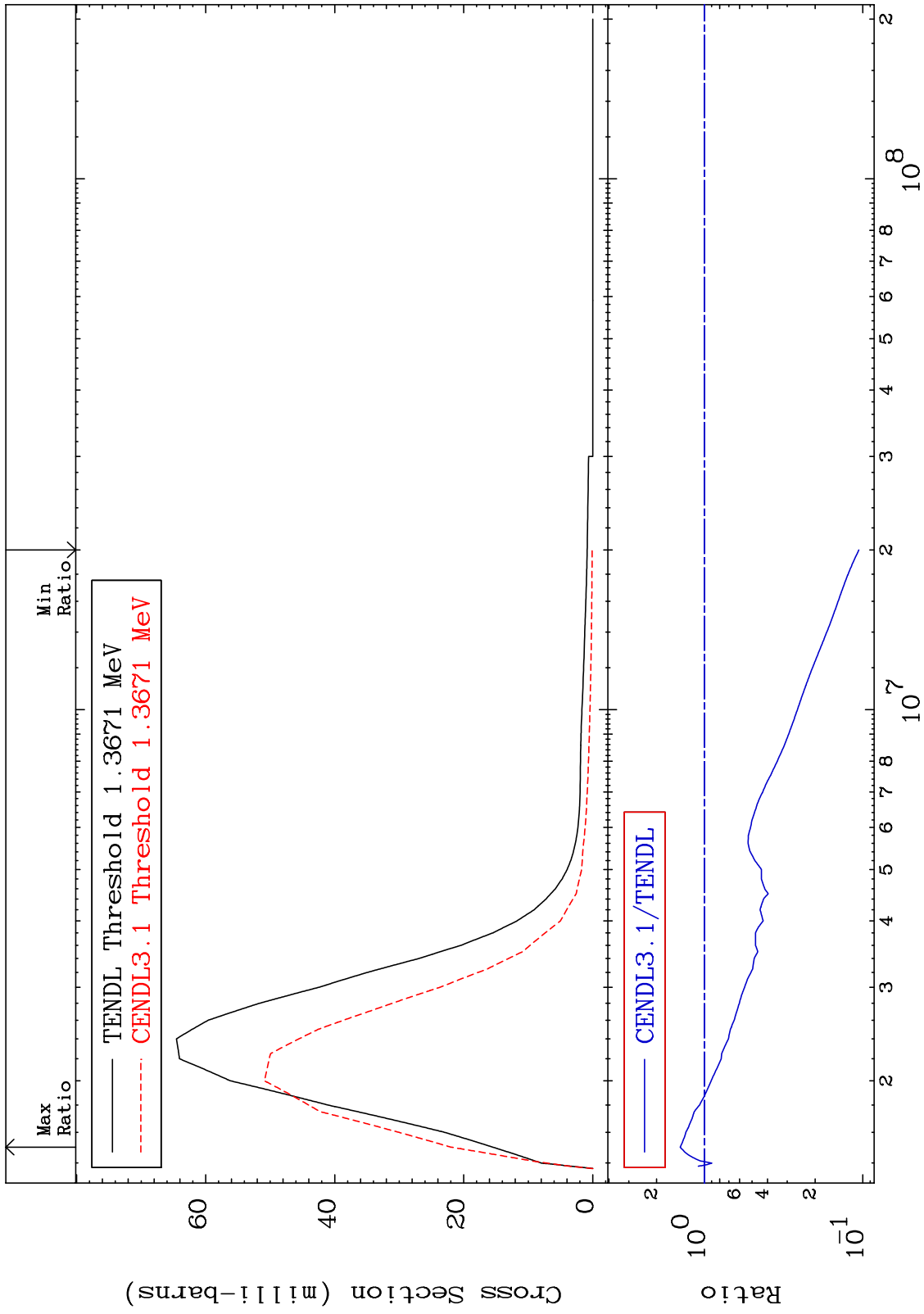
MAT 6443 MT= 64 (n,n') Level Cross Section 64-Gd-158 -46.09 To 9999. %



MAT 6443 MT= 65 (n,n') Level Cross Section 64-Gd-158 -99.45 To -6.636%



MAT 6443 MT= 66 (n,n') Level Cross Section 64-Gd-158  
 -89.40 To 42.01 %

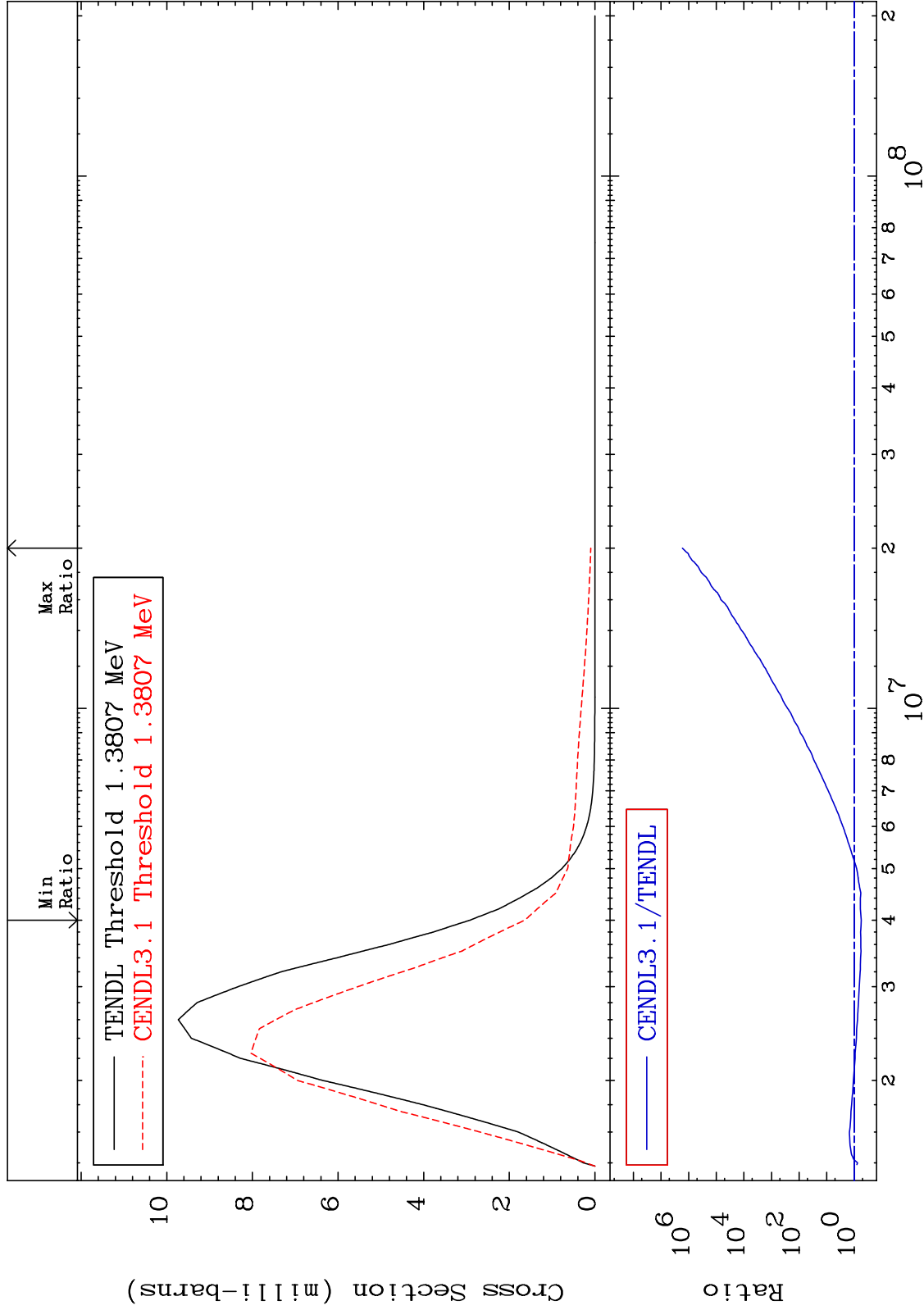




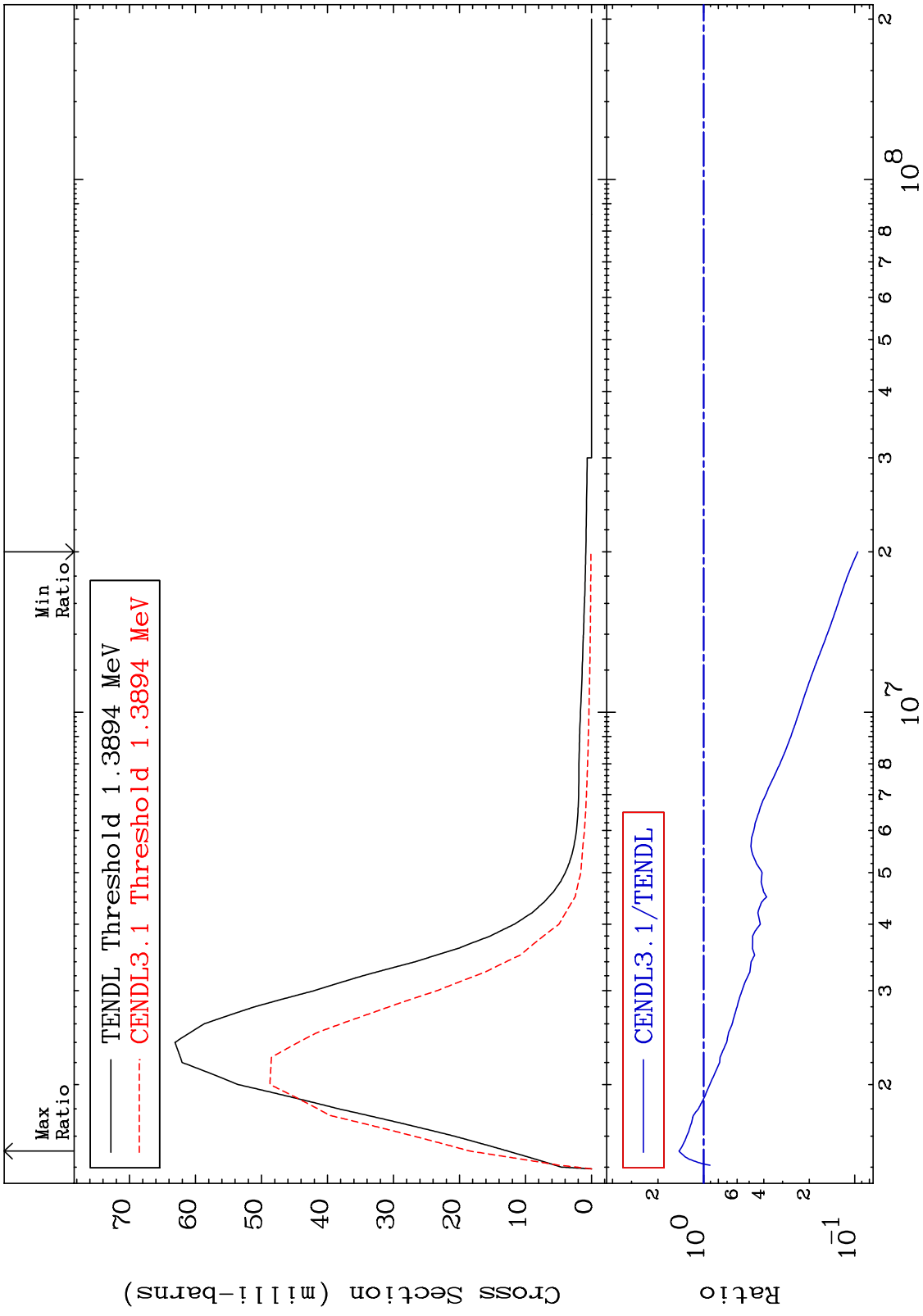
MAT 6443

MT= 67 (n,n') Level  
Cross Section

64-Gd-158  
-43.97 To 9999. %



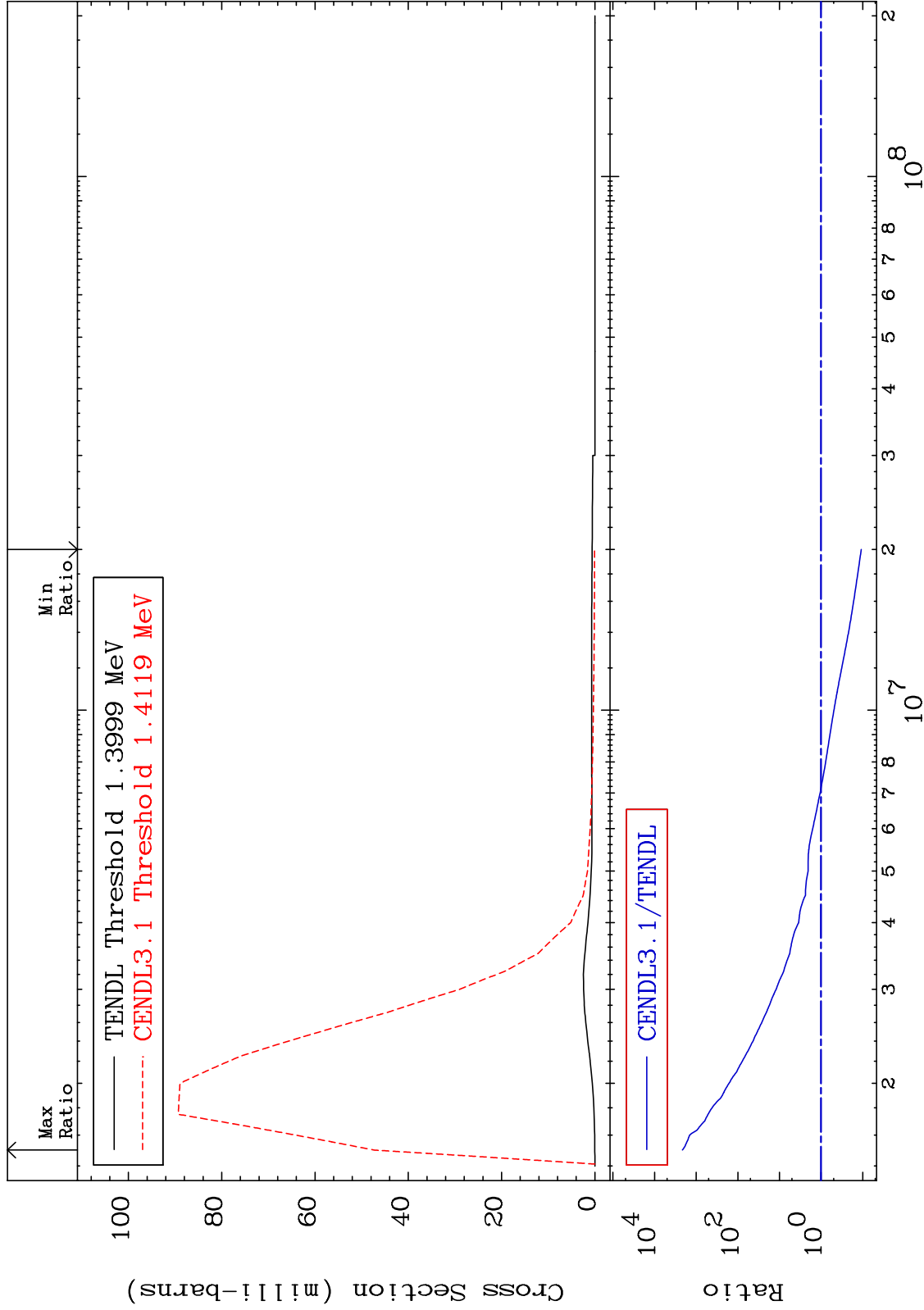
MAT 6443      MT= 68 (n,n') Level      64-Gd-158  
 Cross Section      -90.45 To 45.34 %

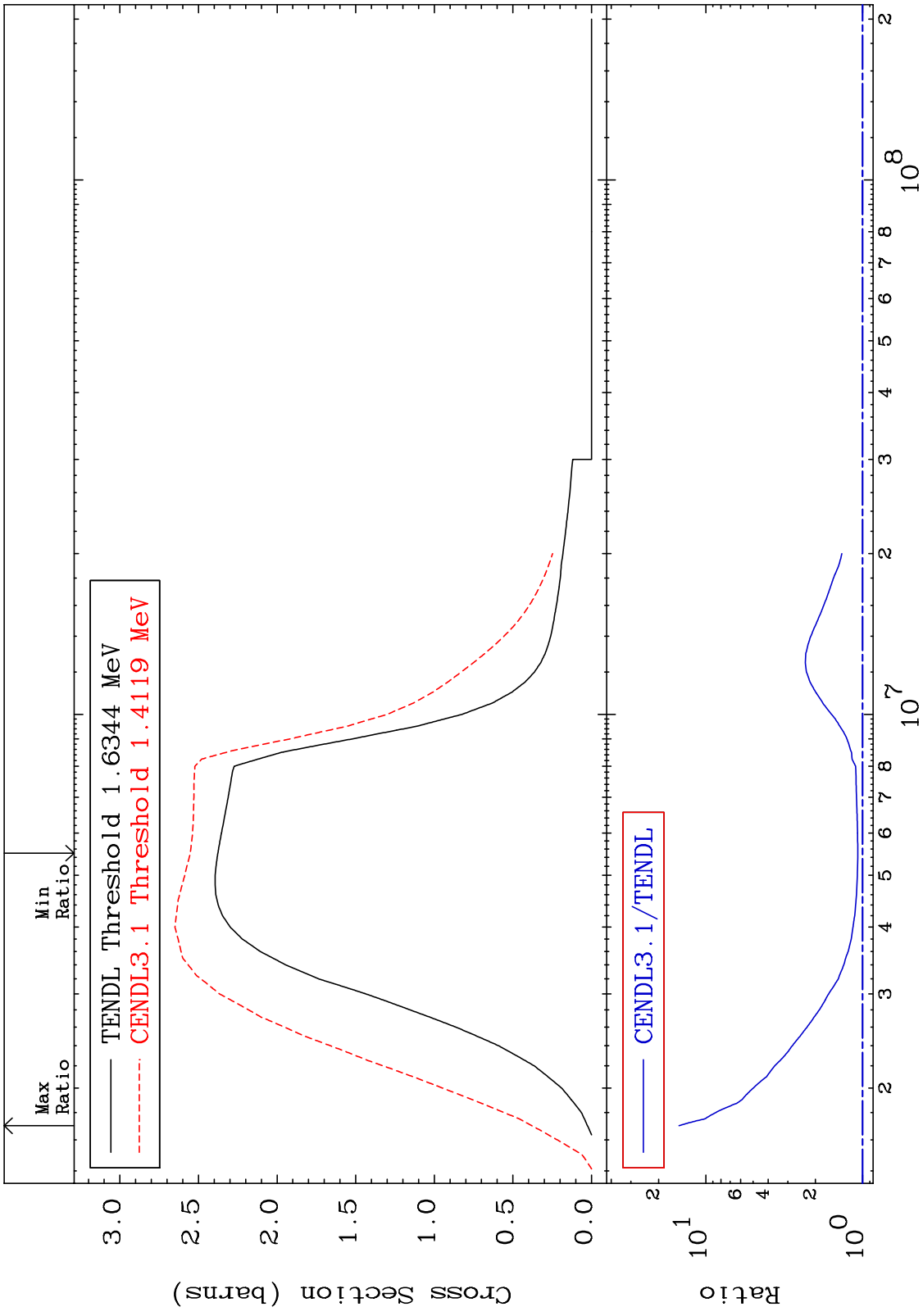


MAT 6443

MT= 69 (n,n') Level  
Cross Section

64-Gd-158  
-89.16 To 9999. %



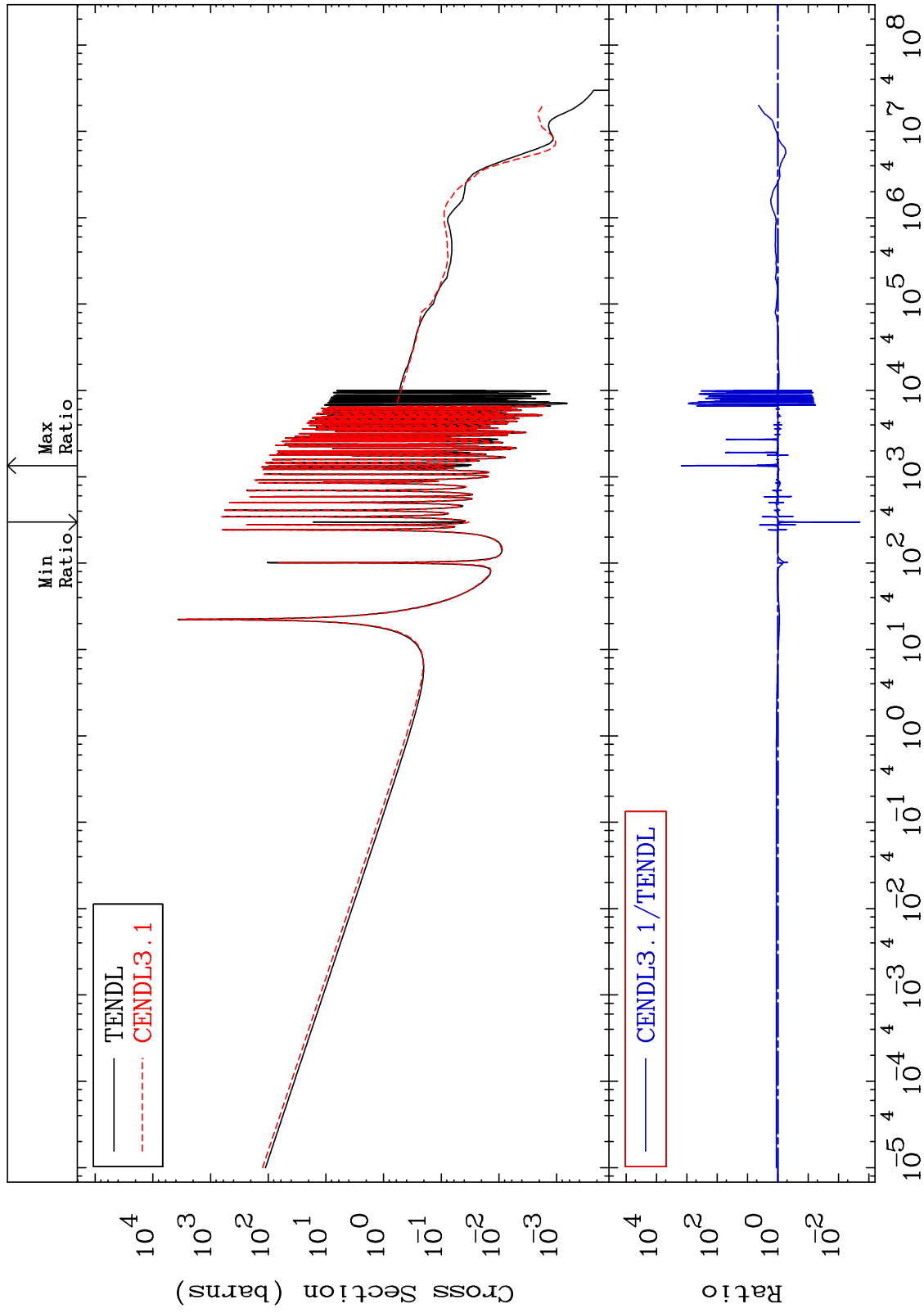


MAT 6443

(n,  $\gamma$ )

64-Gd-158

-99.80 To 9999. %



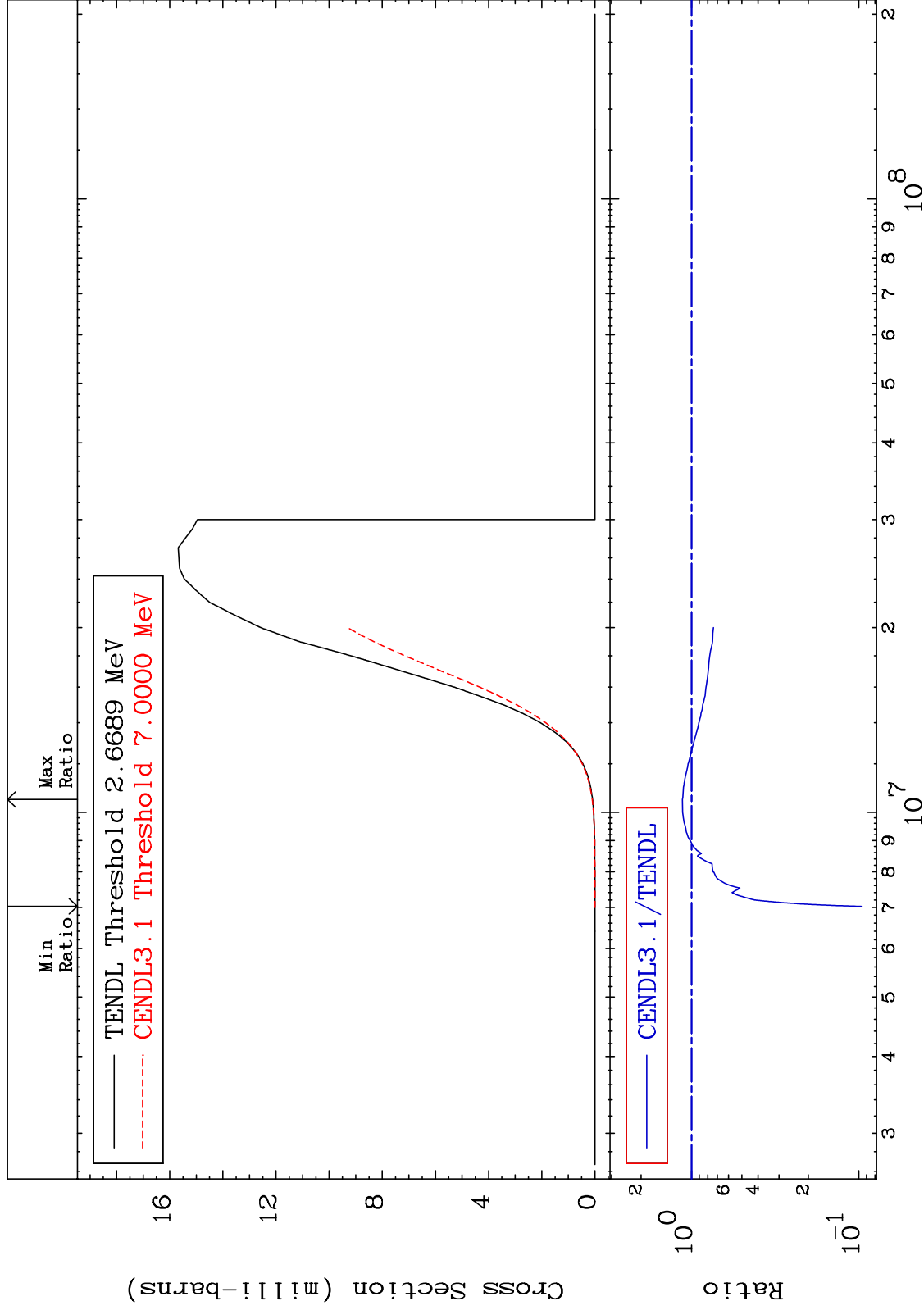
MAT 6443

(n,p)

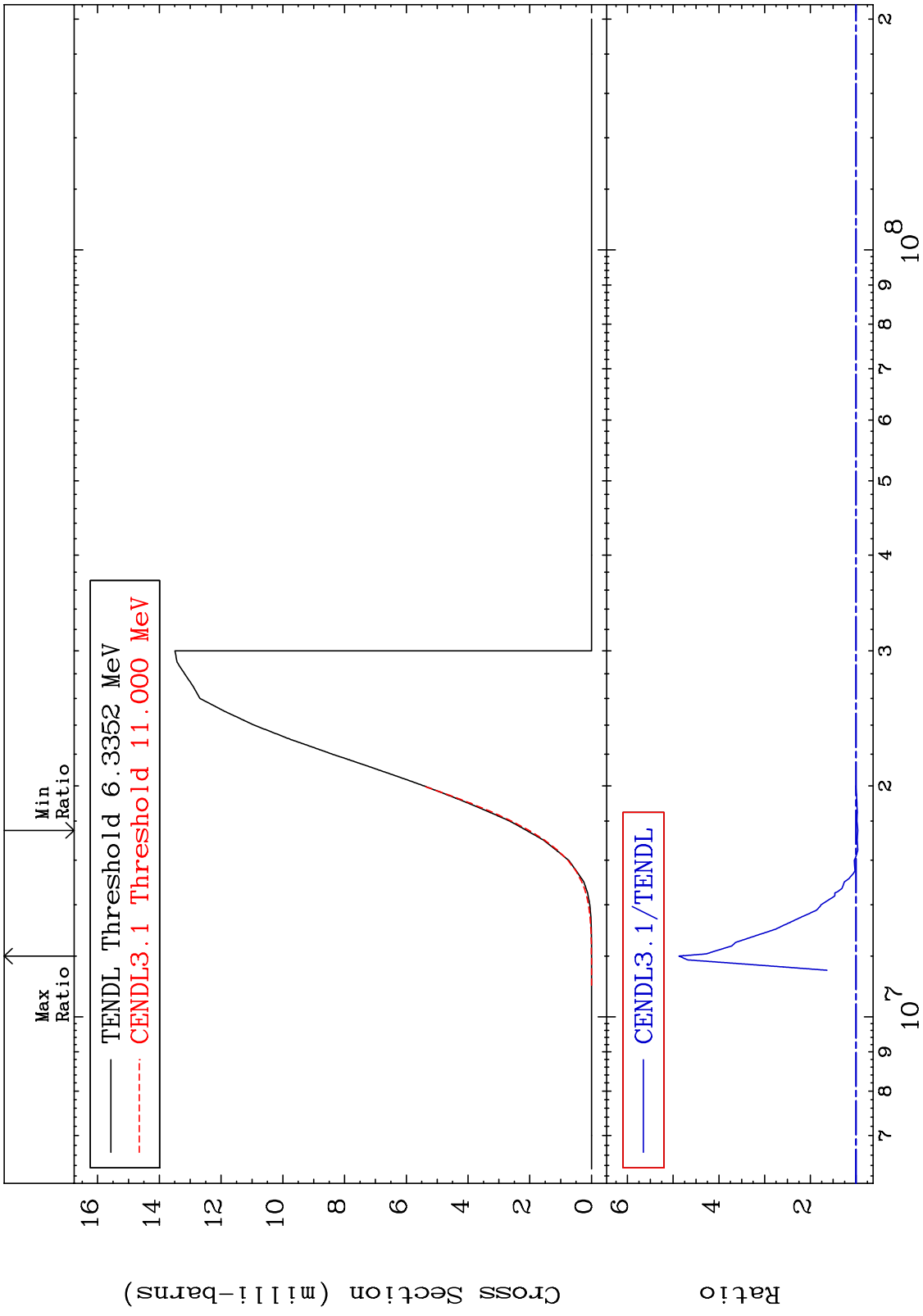
64-Gd-158

Cross Section

-90.34 To 13.21 %

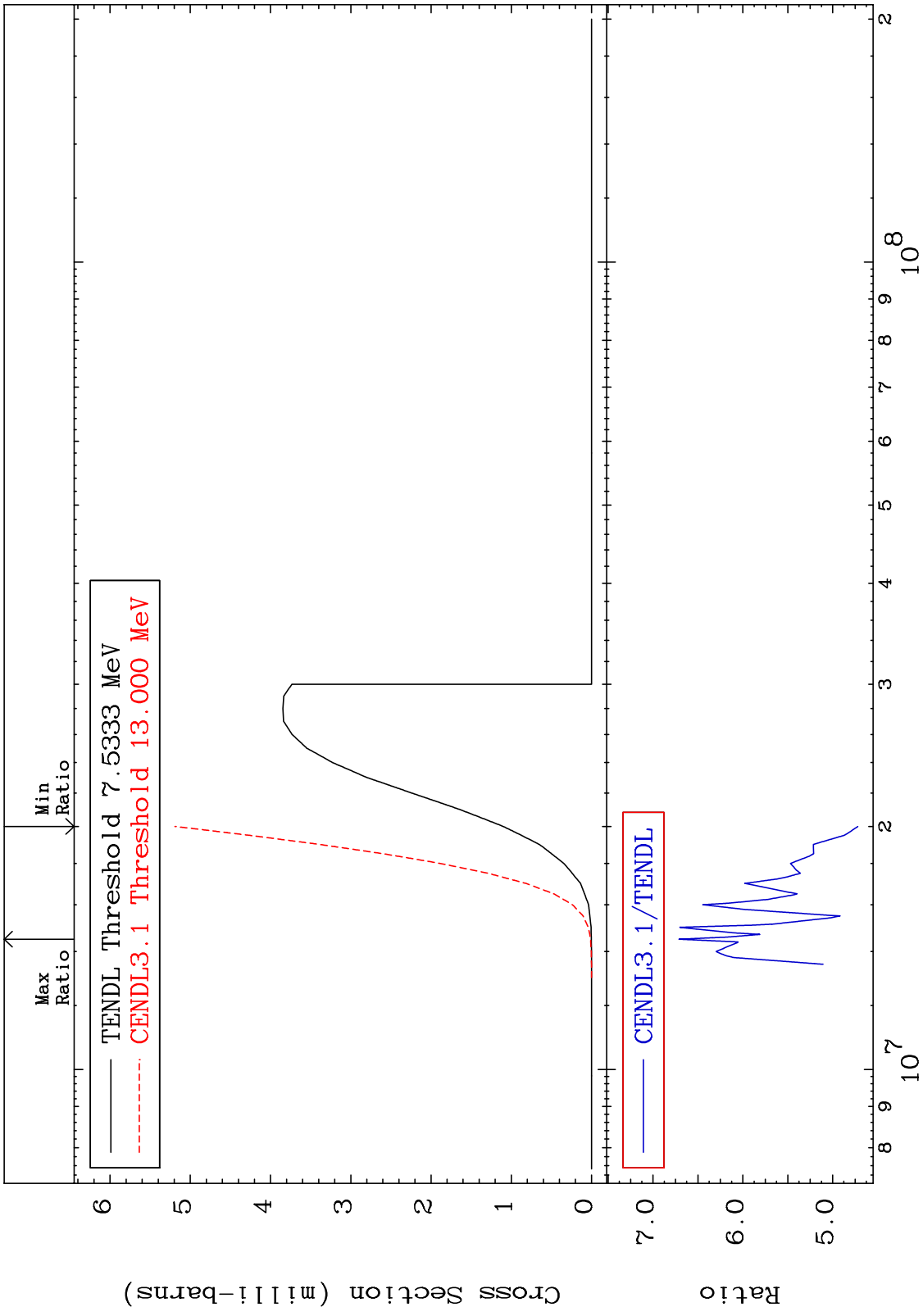


MAT 6443 (n,d) Cross Section 64-Gd-158 -3.932 To 387.2 %



30 64-Gd-158

MAT 6443 (n,t) Cross Section 64-Gd-158 372.0 To 571.0 %



31 64-Gd-158



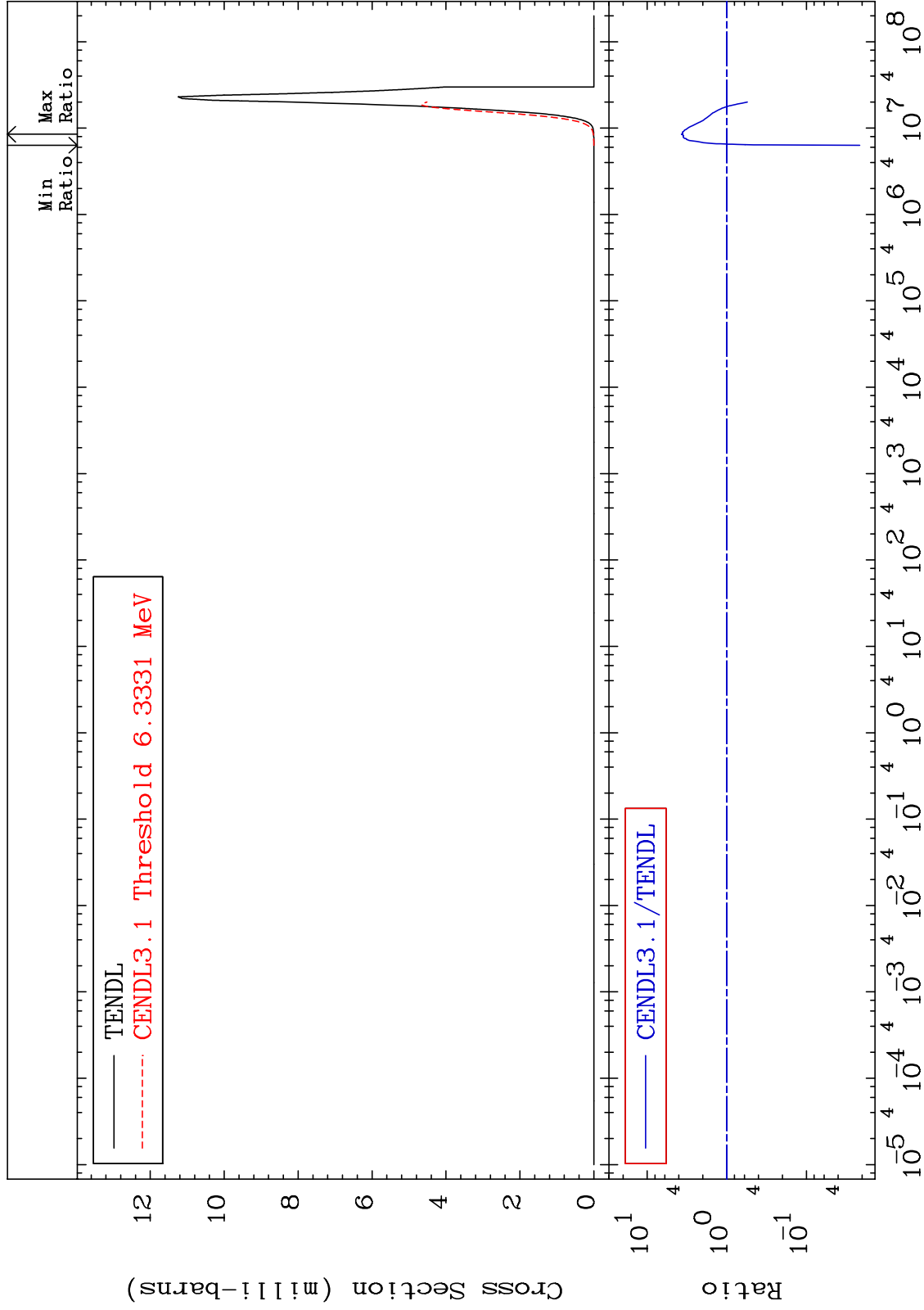
MAT 6443

(n,  $\alpha$ )

64-Gd-158

Cross Section

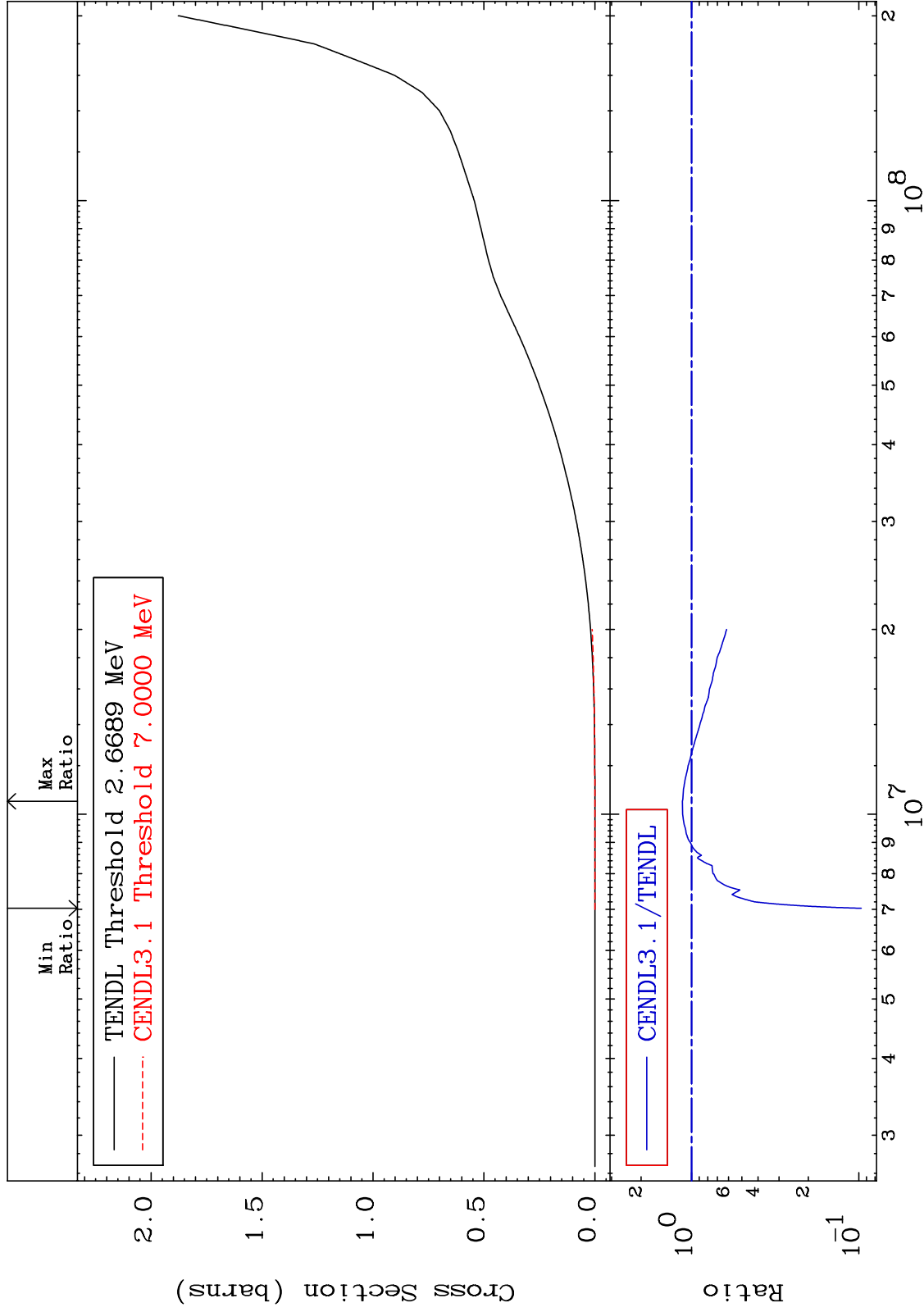
-97.86 To 273.3 %



MAT 6443

Hydrogen Production  
Cross Section

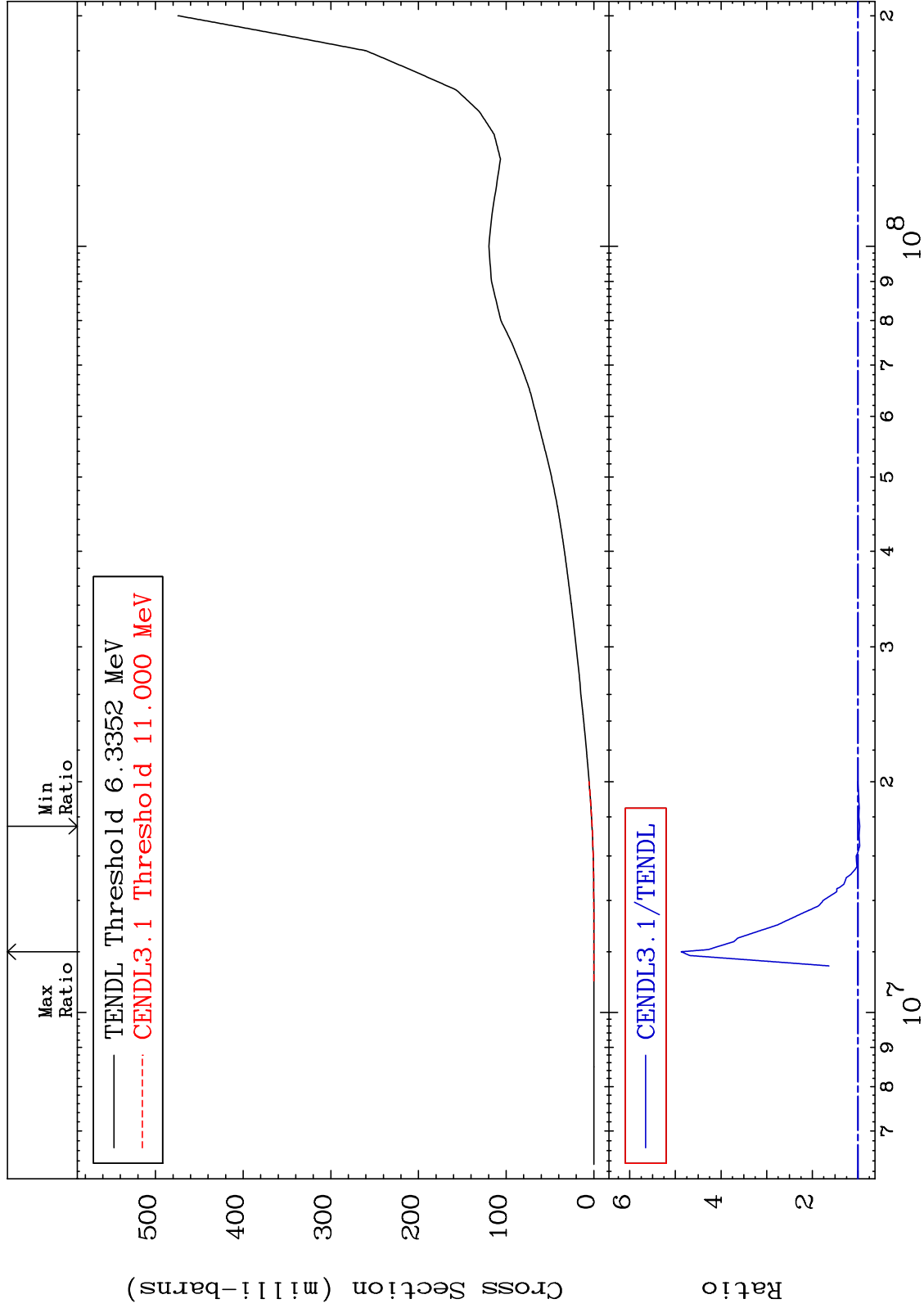
64-Gd-158  
-90.34 To 13.21 %



MAT 6443

Deuterium Production  
Cross Section

64-Gd-158  
-3.932 To 387.2 %

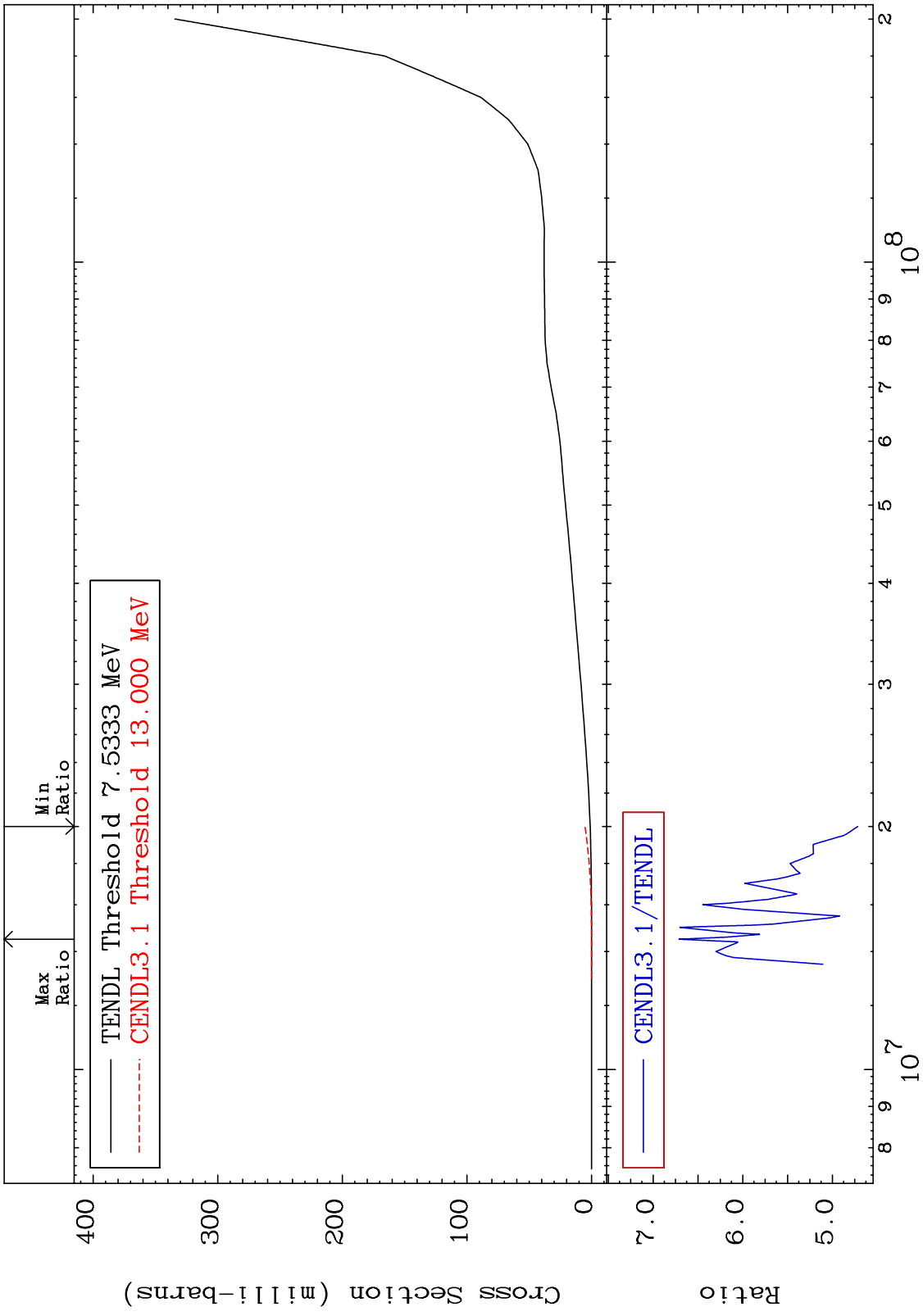


34

Incident Energy (eV)

64-Gd-158

MAT 6443 Tritium Production Cross Section 64-Gd-158 371.5 To 571.0 %

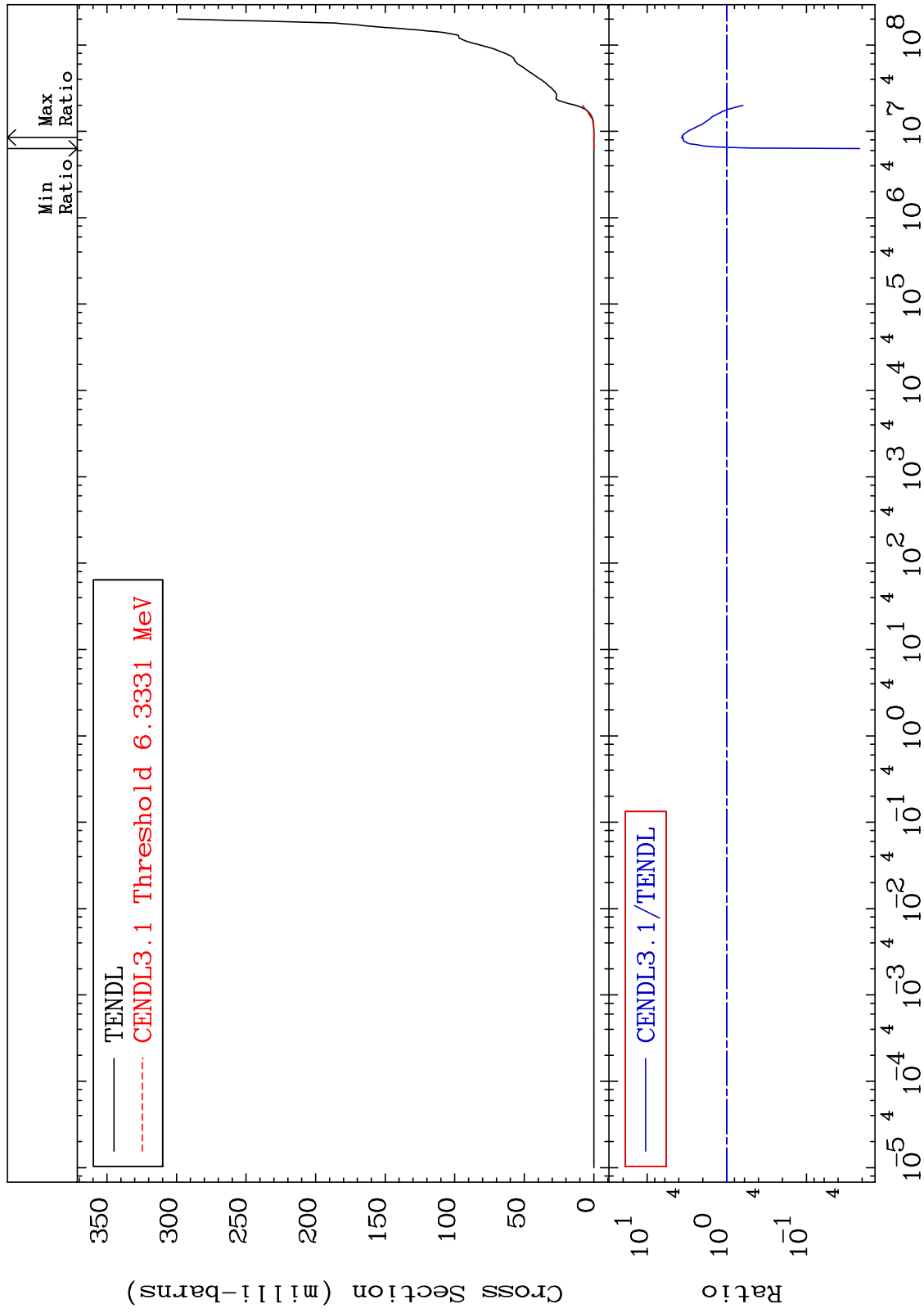


35 64-Gd-158 Incident Energy (eV)

MAT 6443

He-4 Production  
Cross Section

64-Gd-158  
-97.86 To 273.2 %

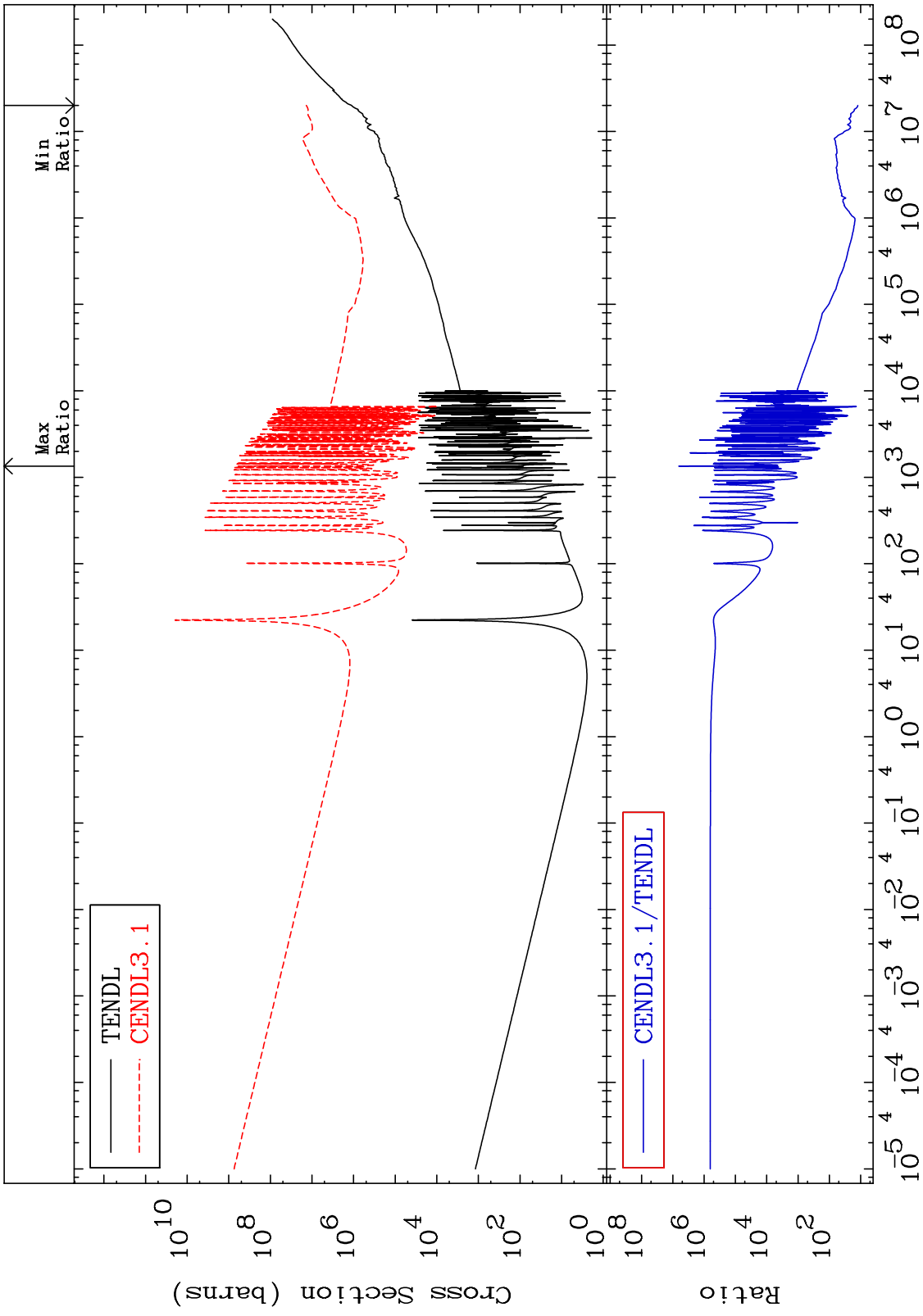


36

Incident Energy (eV)

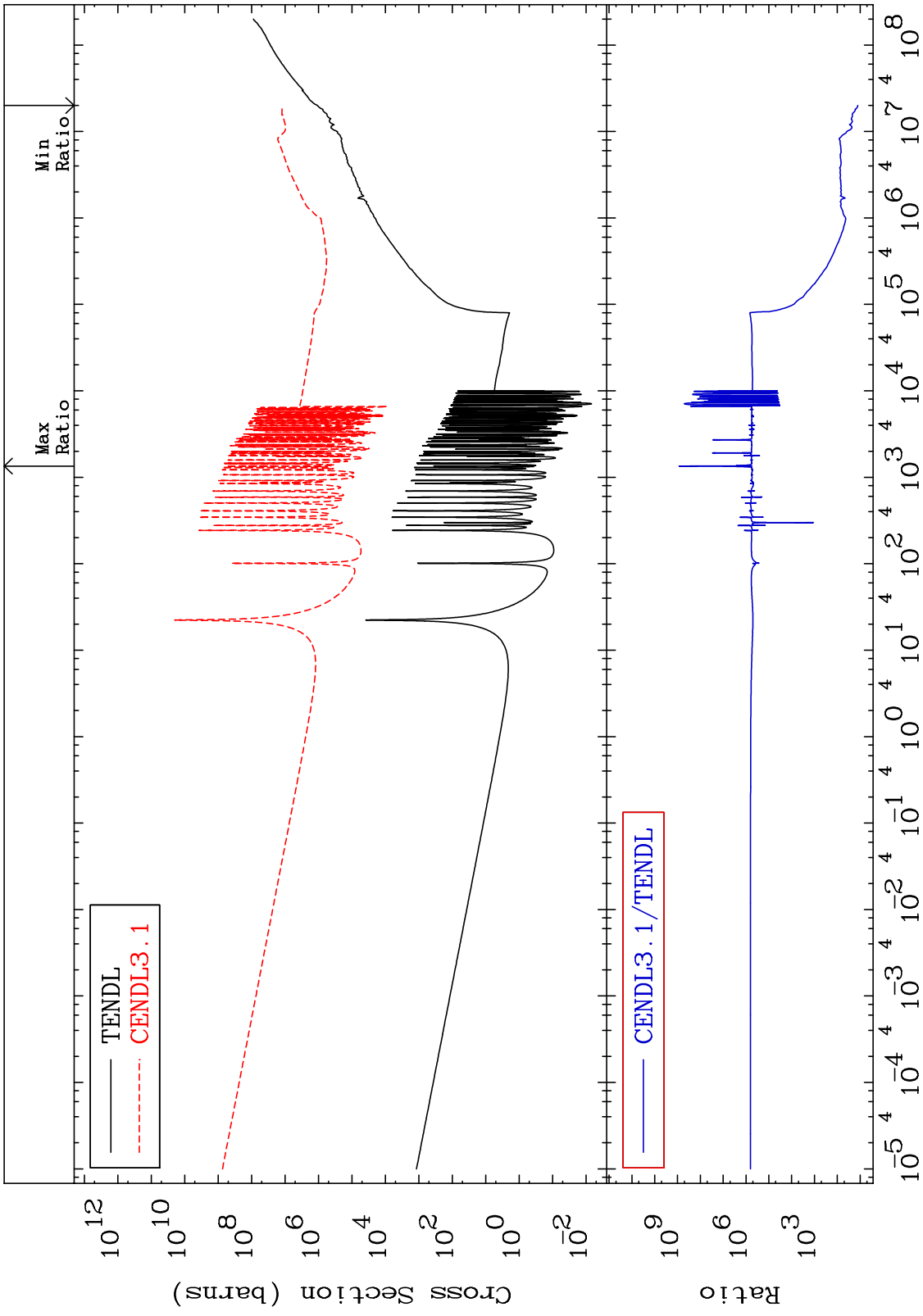
64-Gd-158

MAT 6443      Kerma total (eV-barns)  
 Cross Section      64-Gd-158  
 1128. To 9999. %



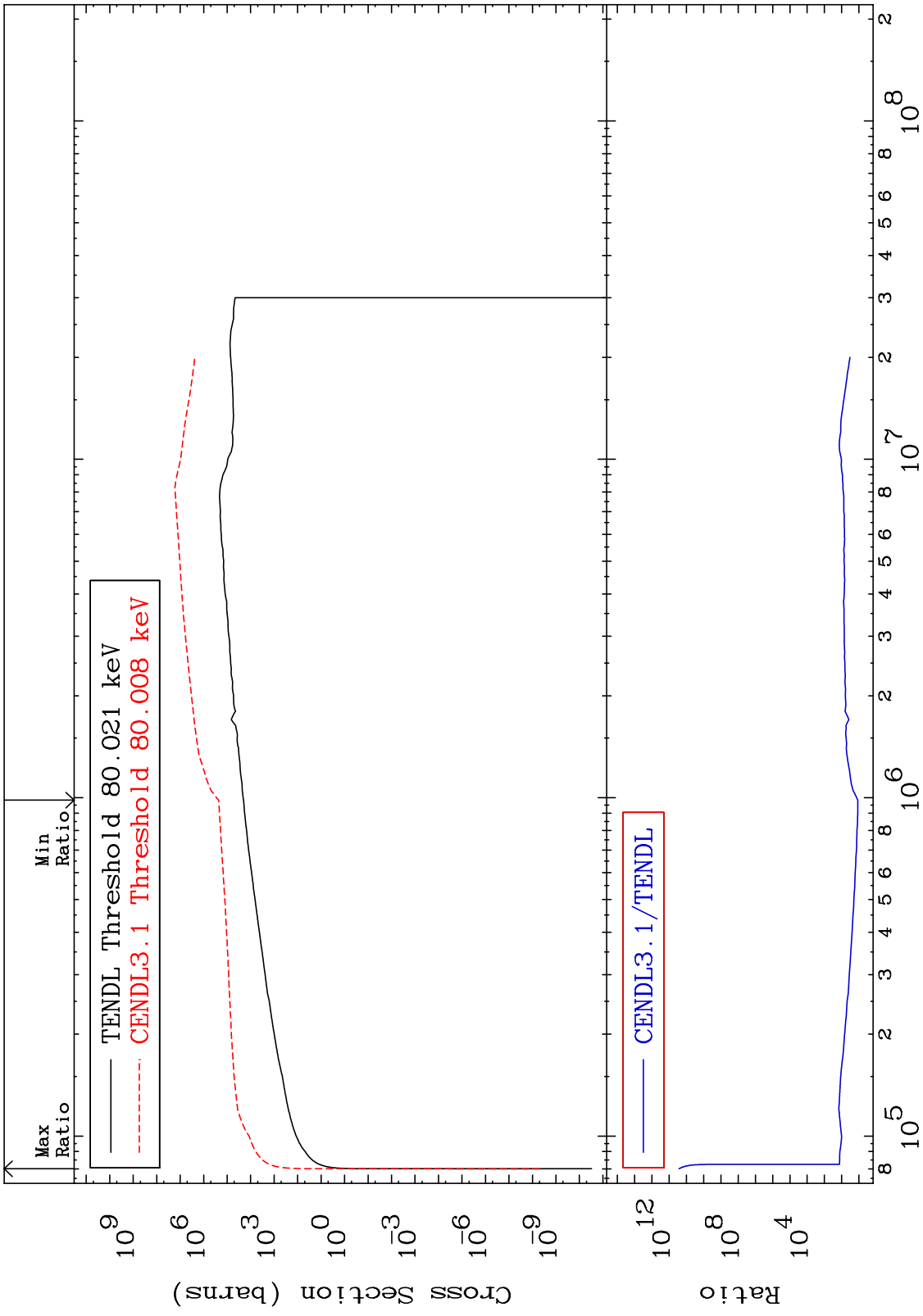


MAT 6443      Kerma non-elastic (all but mt2)      64-Gd-158  
 Cross Section      1161. To 9999. %





MAT 6443 Kerma inelastic (mt51-91) 64-Gd-158  
 Cross Section 1055. To 9999. %

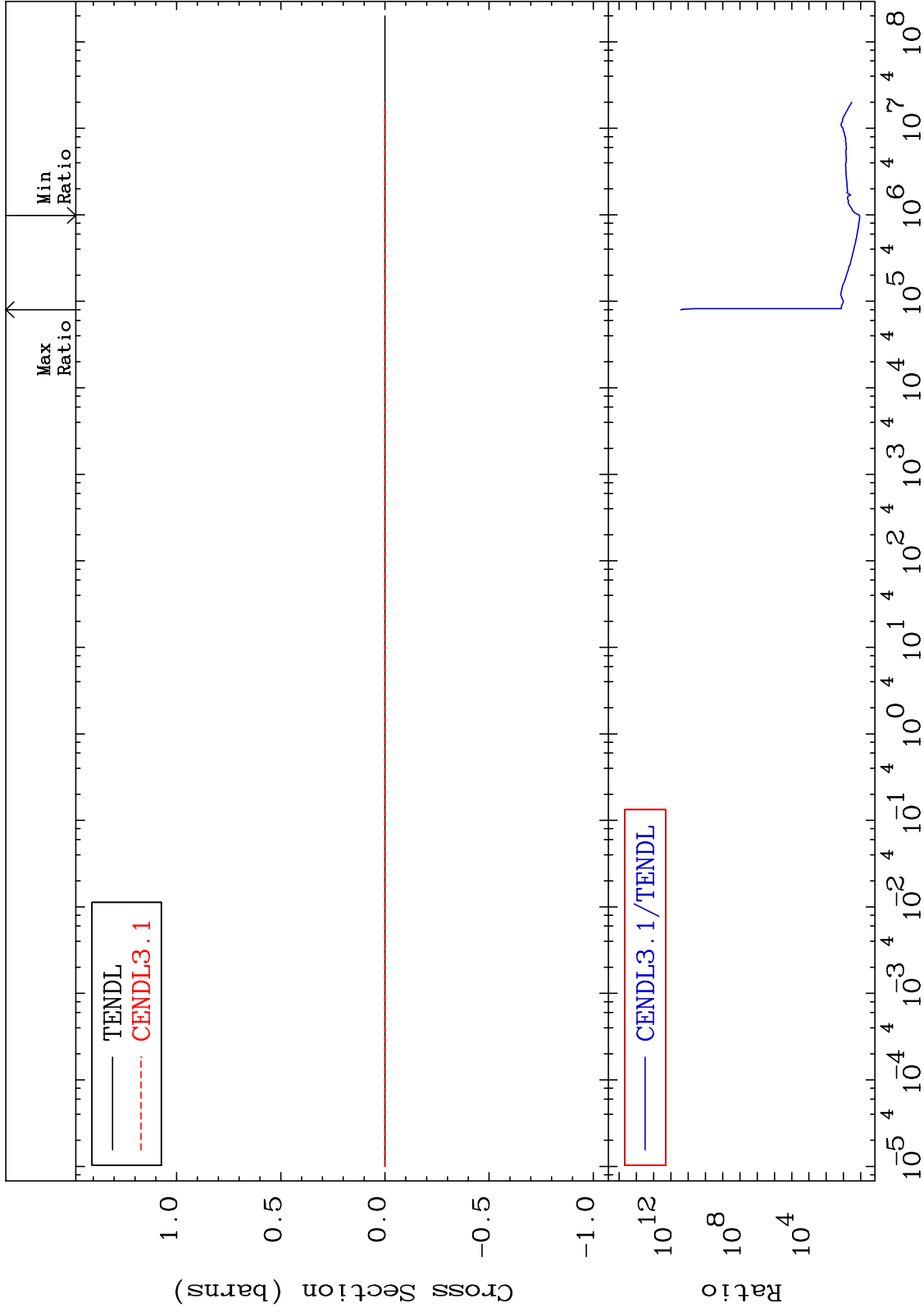


40 Incident Energy (eV) 64-Gd-158

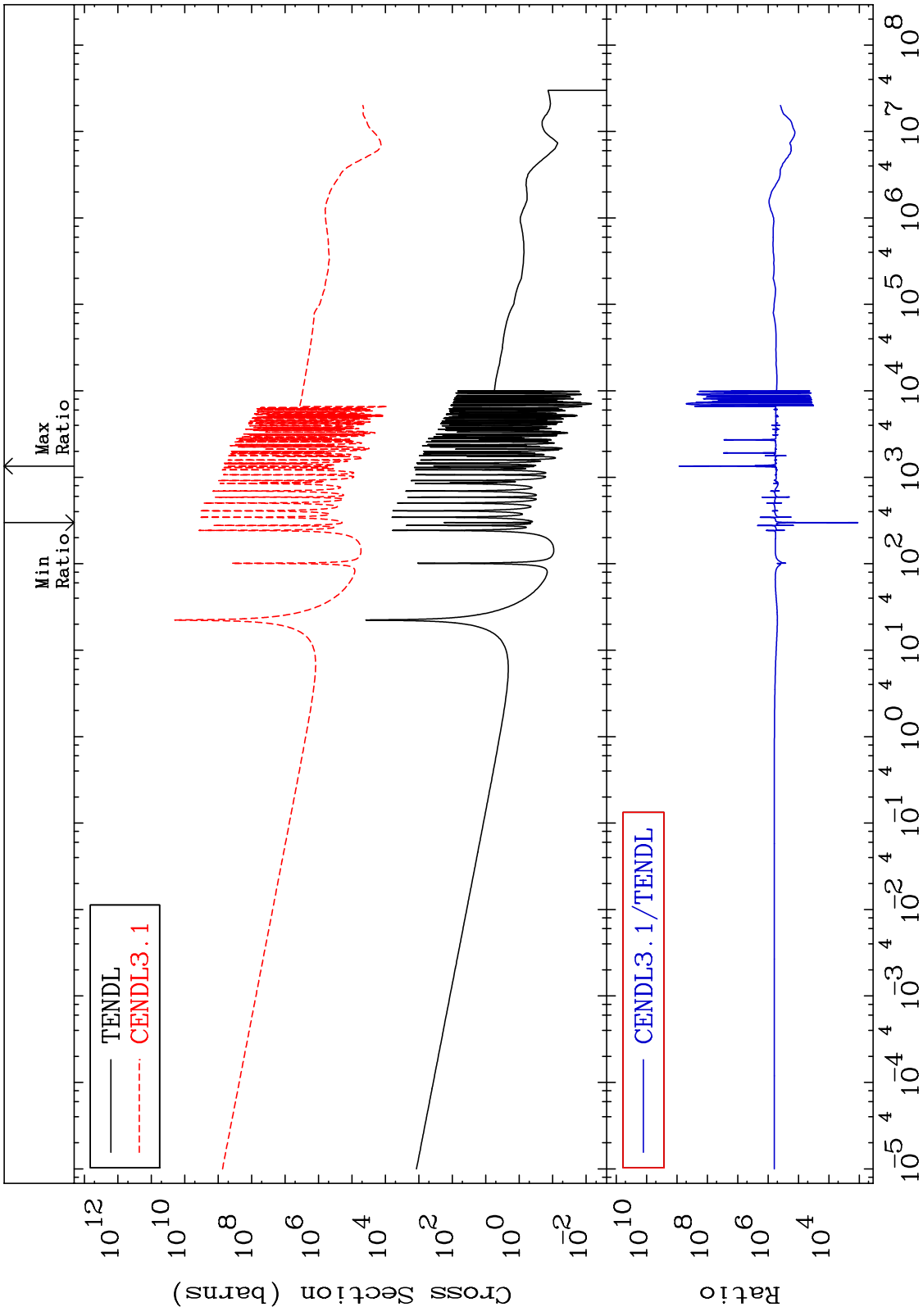
MAT 6443

Kerma fission (mt18 or mt19-20-21-38)  
Cross Section

64-Gd-158  
1055. To 9999. %



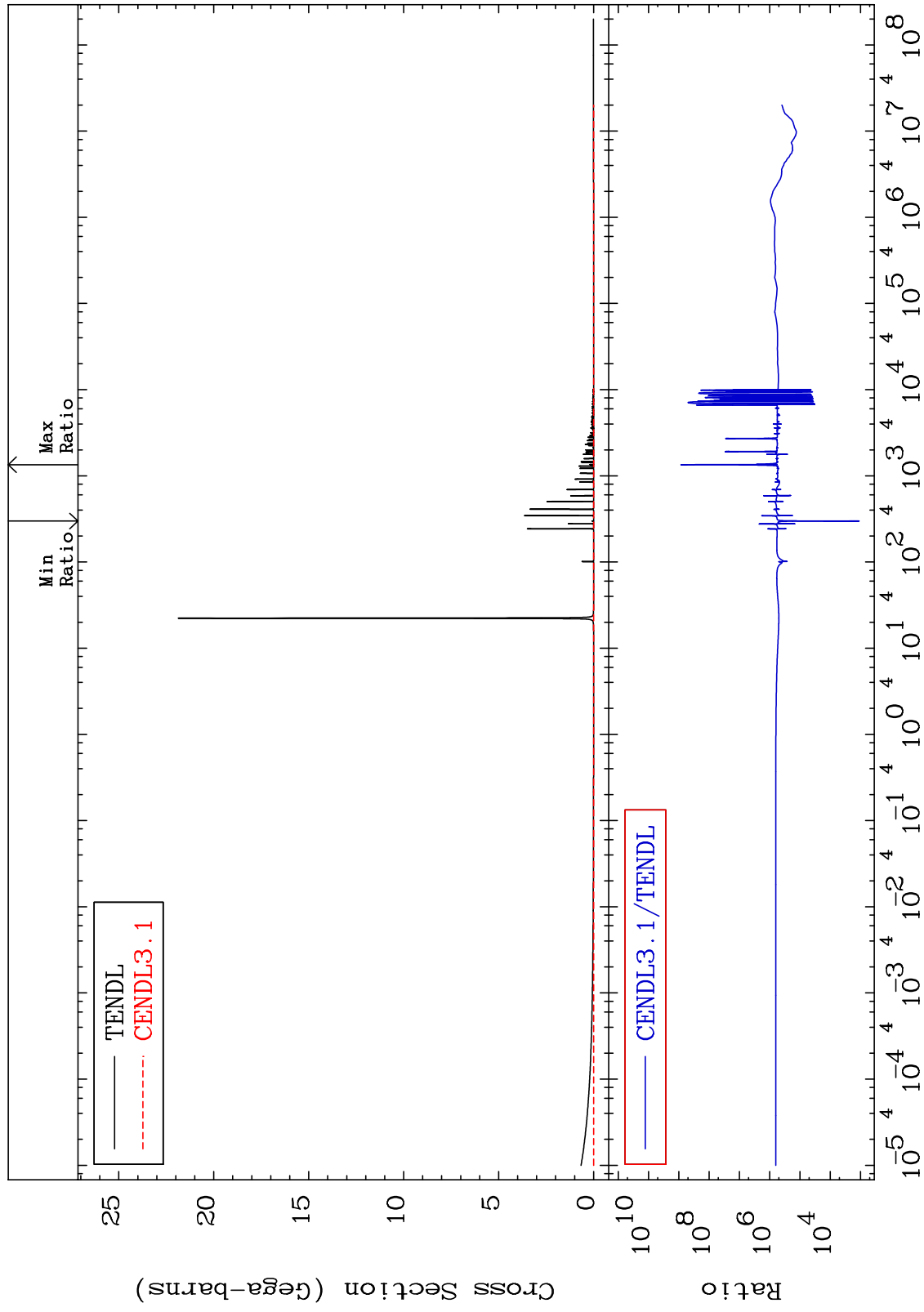
MAT 6443 Kerma capture (mt102) 64-Gd-158 9999. To 9999. %



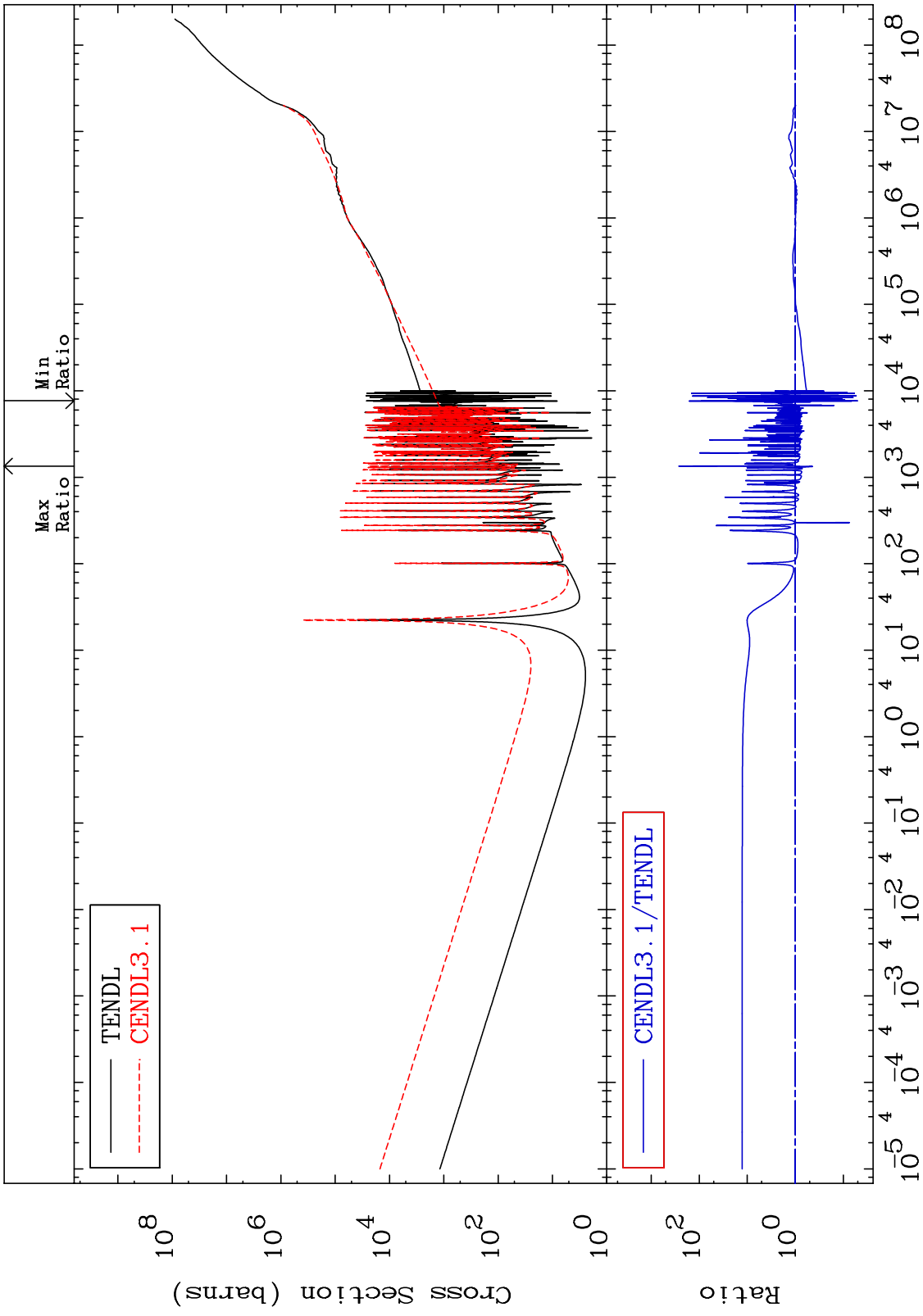
MAT 6443

Total photon (eV-barns)  
Cross Section

64-Gd-158  
9999. To 9999. %



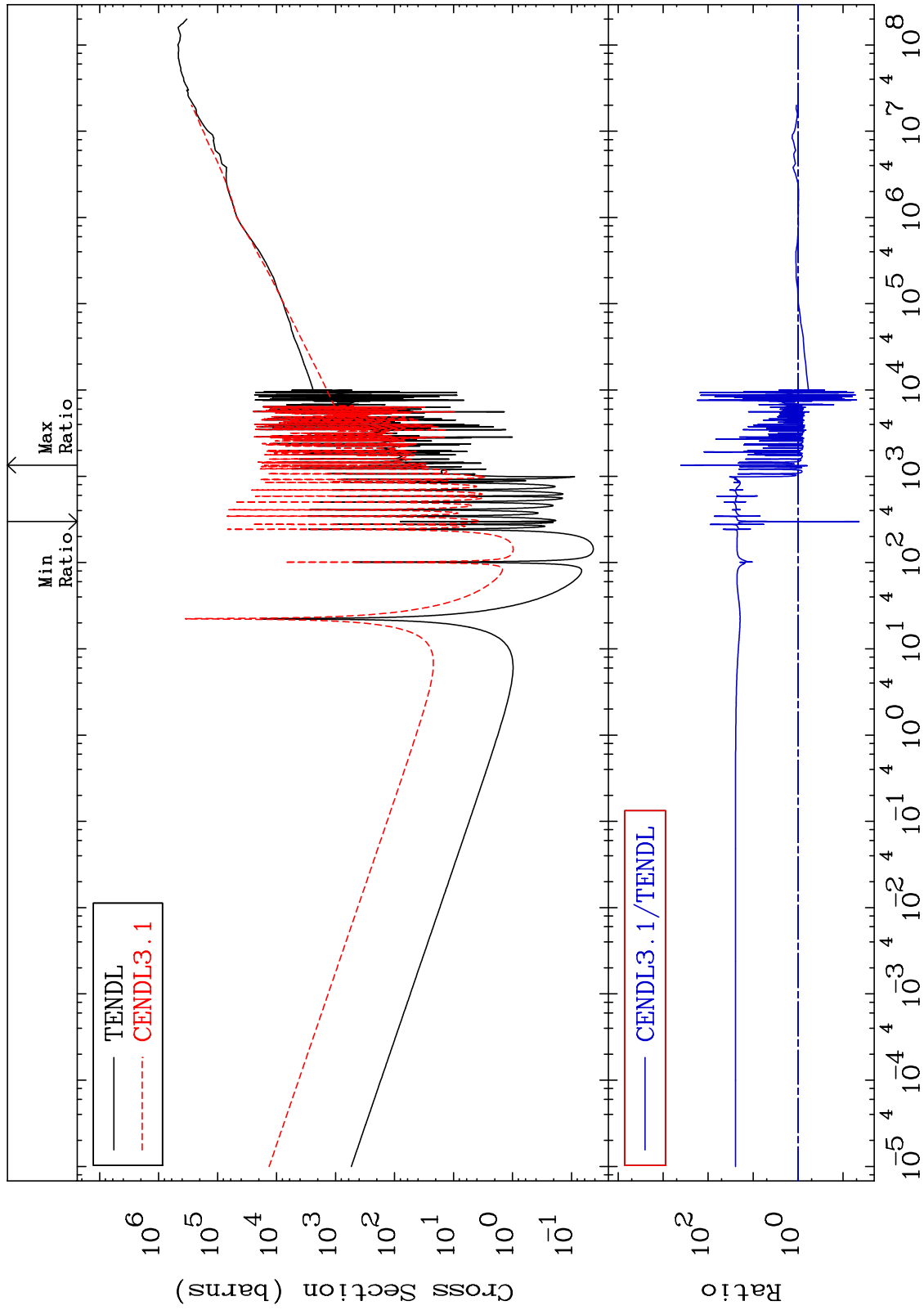
MAT 6443      Total kinematic kerma (high limit)      64-Gd-158  
 Cross Section      -95.02 To 9999. %



MAT 6443

Dpa total (eV-barns)  
Cross Section

64-Gd-158  
-95.57 To 9999. %



45

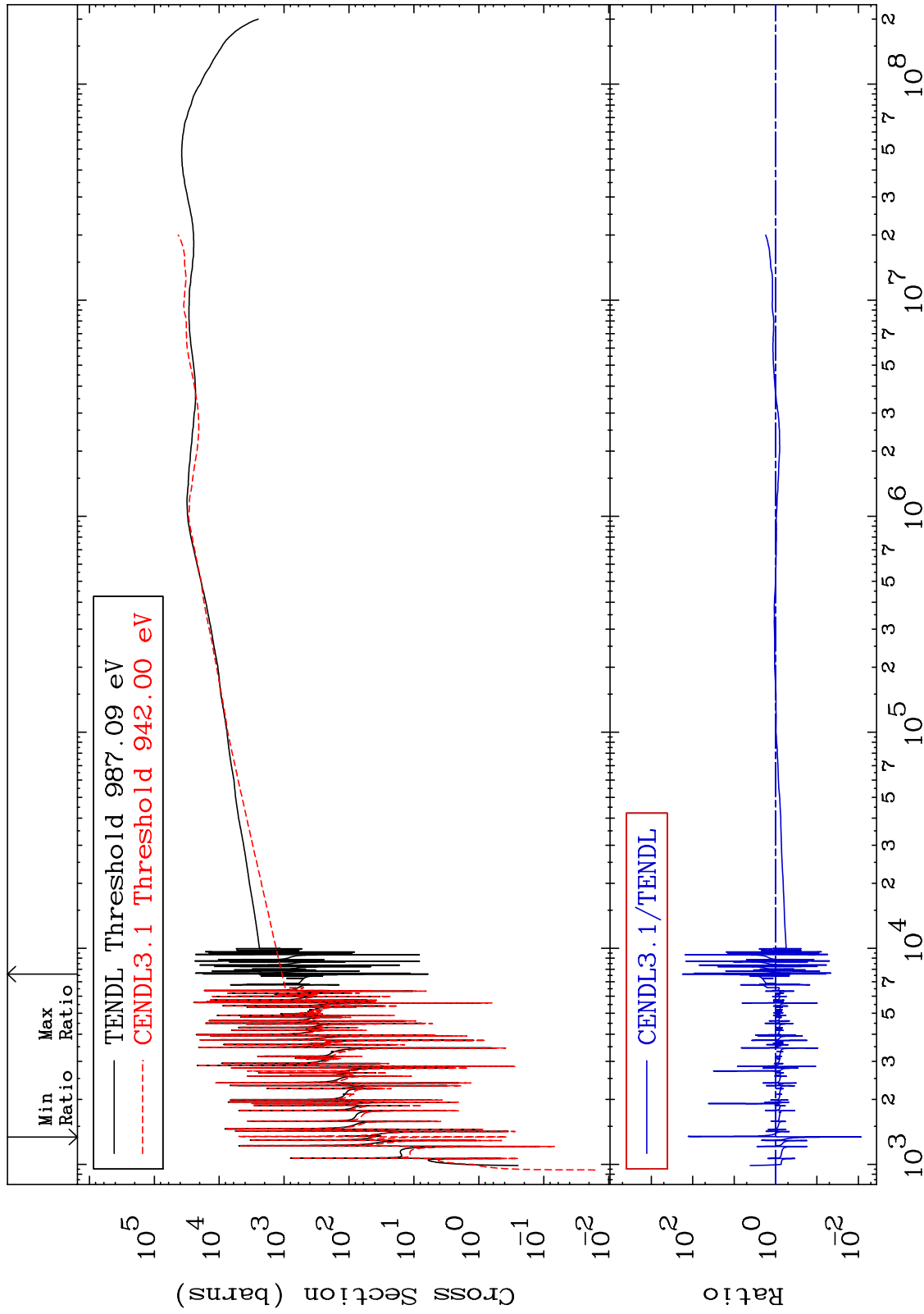
Incident Energy (eV)

64-Gd-158

MAT 6443

Dpa elastic (mt2)  
Cross Section

64-Gd-158  
-99.15 To 9999. %

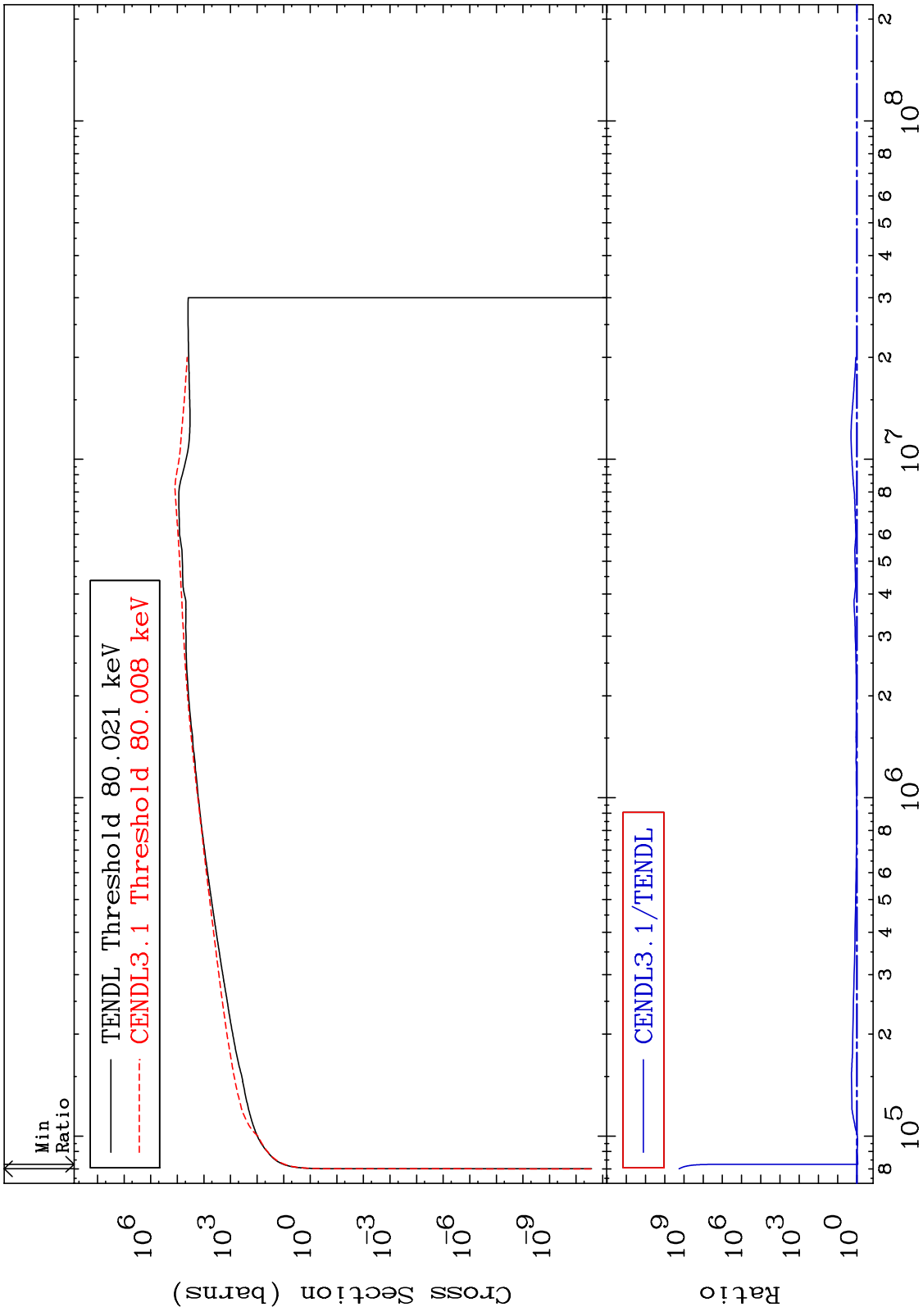


46

64-Gd-158

64-Gd-158

MAT 6443      Dpa inelastic (mt51-91)      64-Gd-158  
 Cross Section      -9.941 To 9999. %

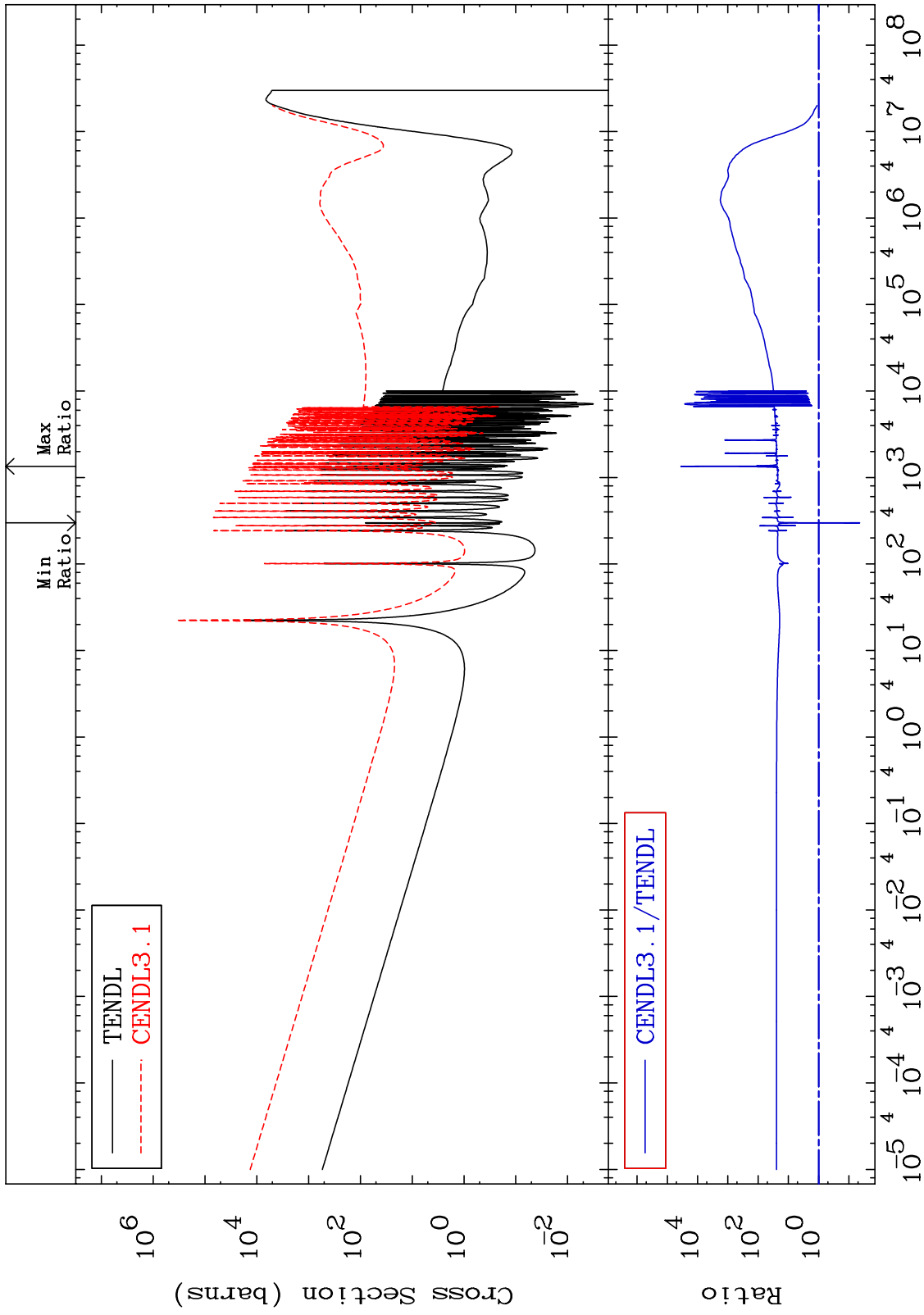




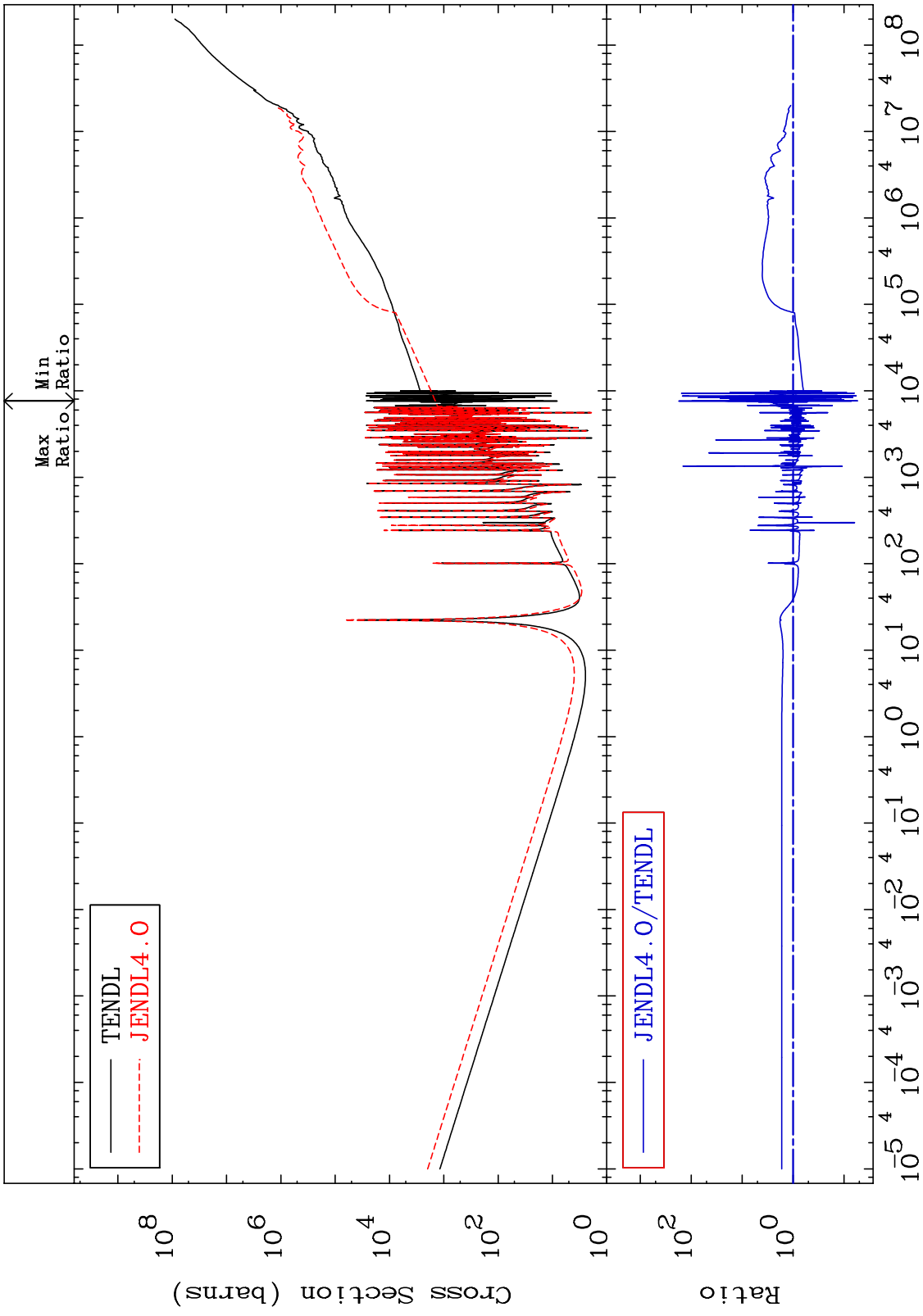
MAT 6443

Dpa disappearance (mt102 -120)  
Cross Section

64-Gd-158  
-95.57 To 9999. %



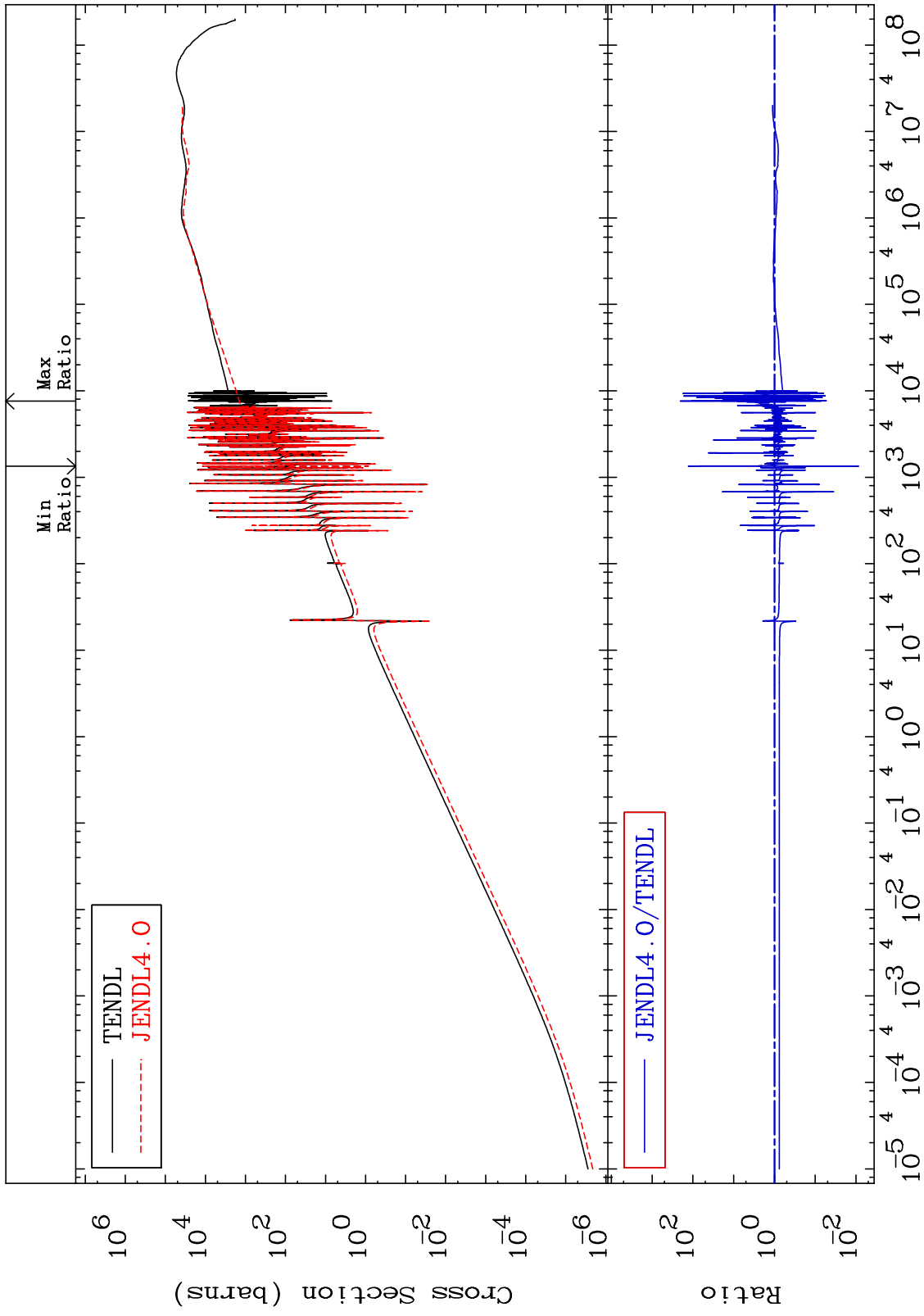
MAT 6443      Kerma total (eV-barns)  
 Cross Section      64-Gd-158  
 -94.63 To 9999. %



49      Incident Energy (eV)      64-Gd-158

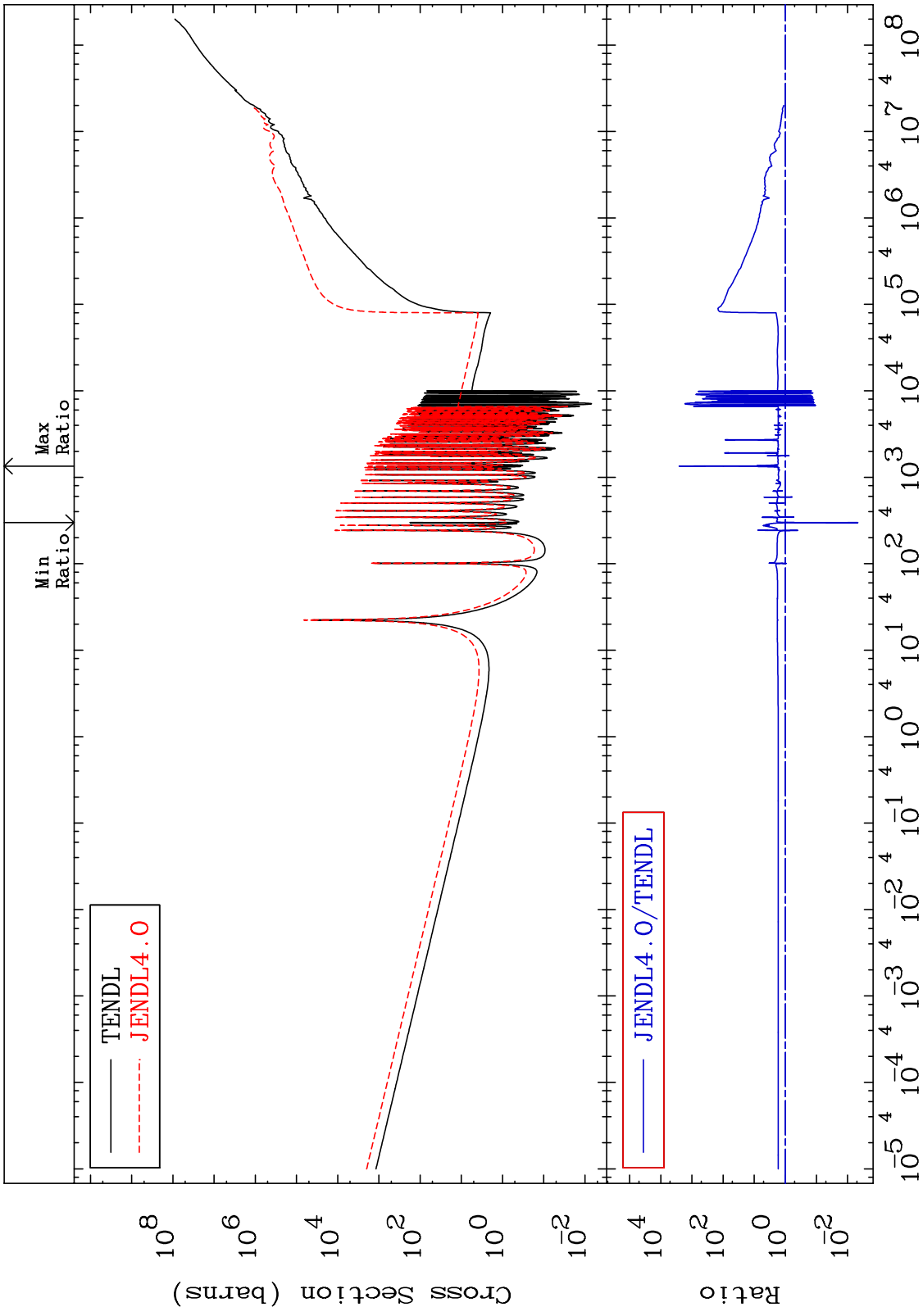
MAT 6443 64-Gd-158 -99.15 To 9999. %

Kerma elastic Cross Section



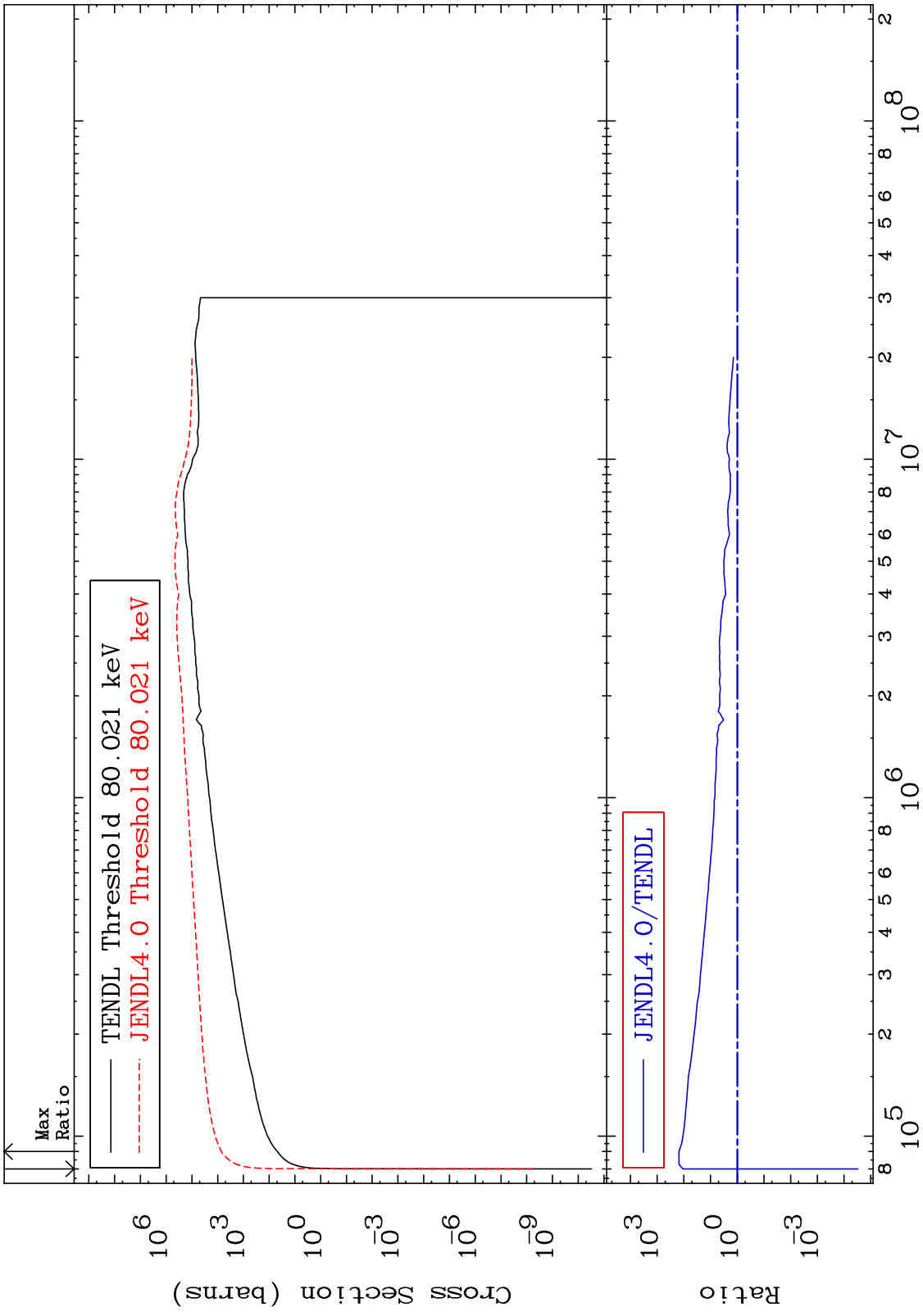
64-Gd-158 50

MAT 6443      Kerma non-elastic (all but mt2)      64-Gd-158  
 -99.53 To 9999. %  
 Cross Section



51      Incident Energy (eV)      64-Gd-158

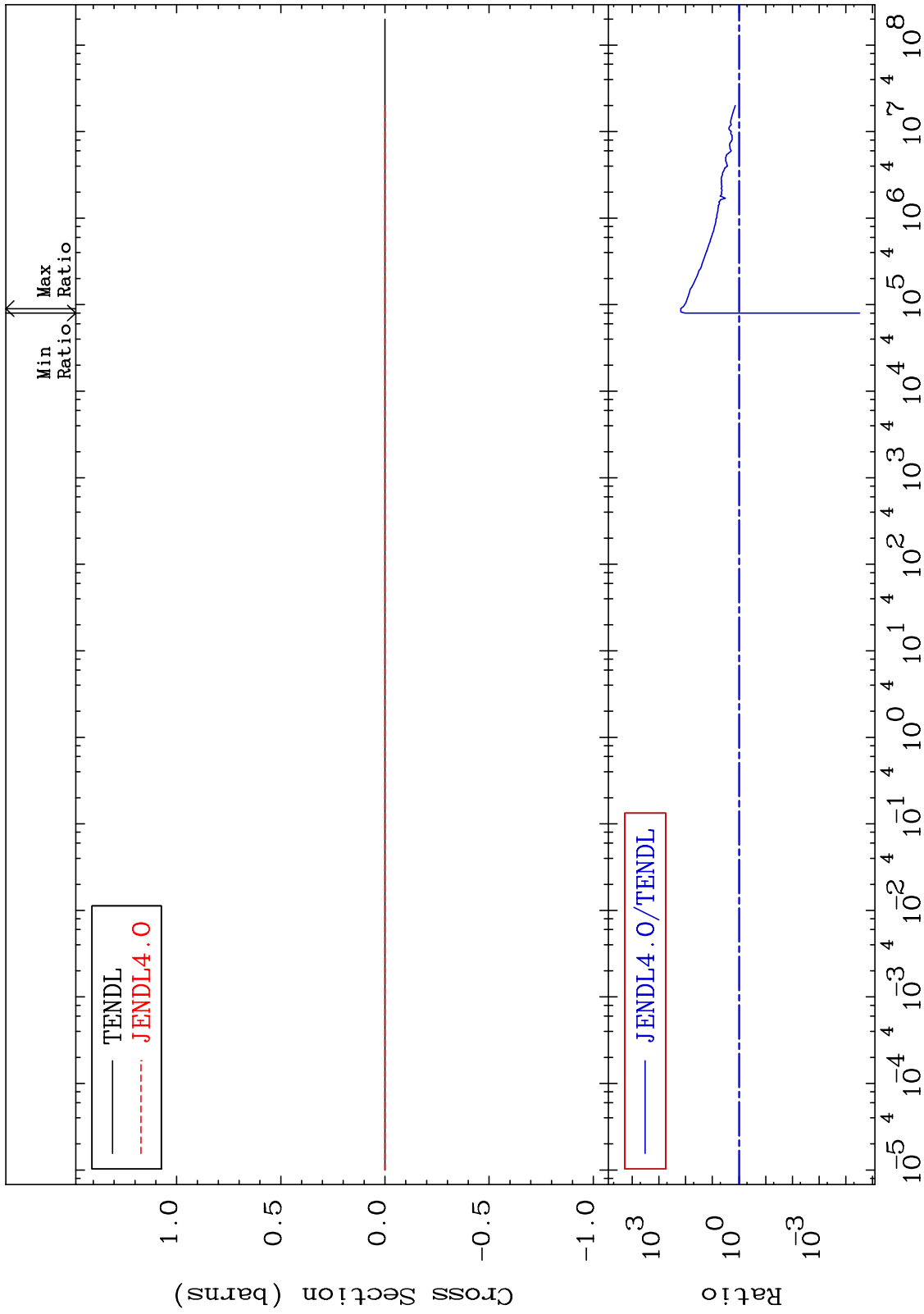
MAT 6443 Kerma inelastic (mt51-91) 64-Gd-158  
 Cross Section -100.0 To 9999. %



MAT 6443

Kerma fission (mt18 or mt19-20-21-38)  
Cross Section

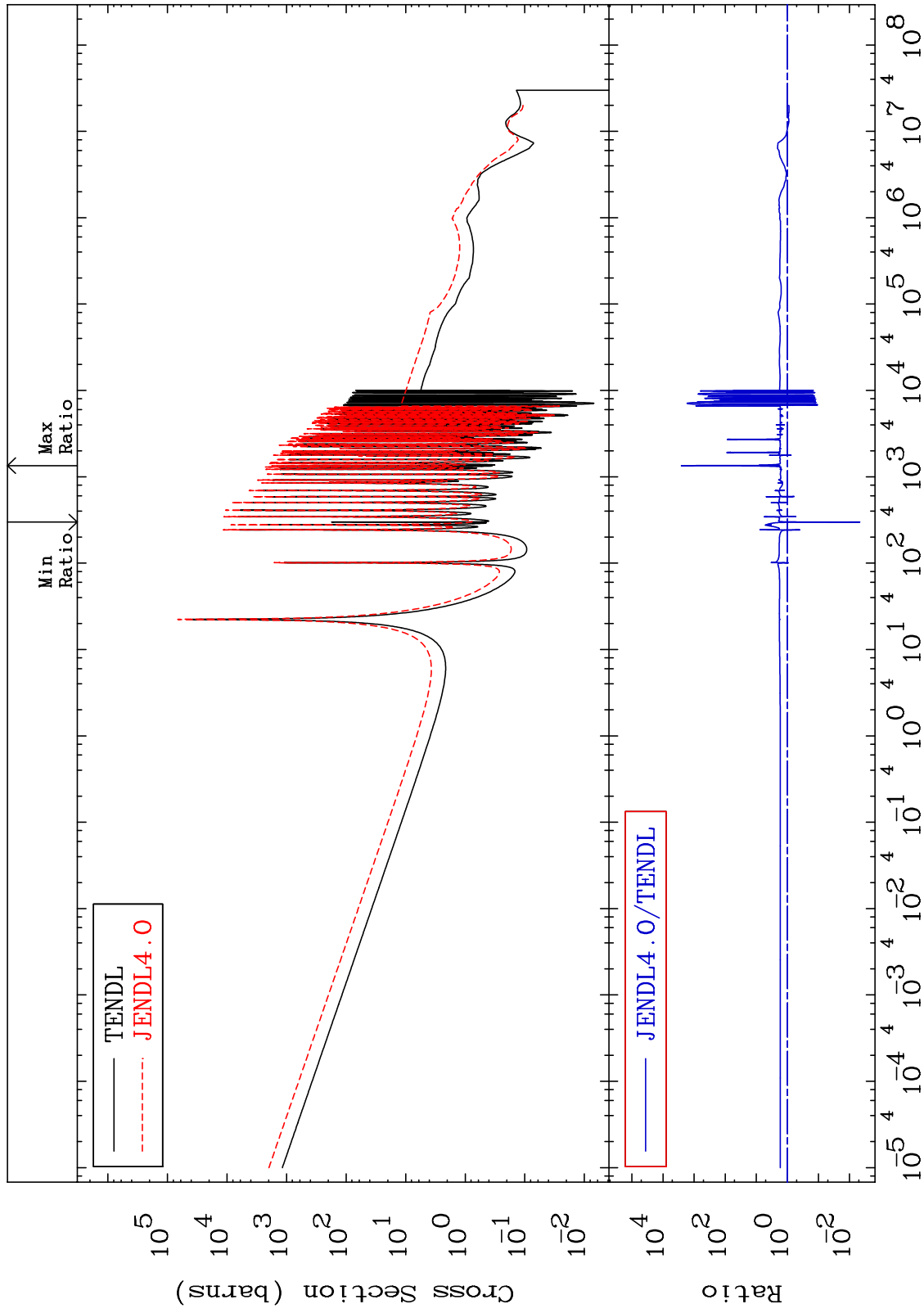
64-Gd-158  
-100.0 To 9999. %



MAT 6443

Kerma capture (mt102)  
Cross Section

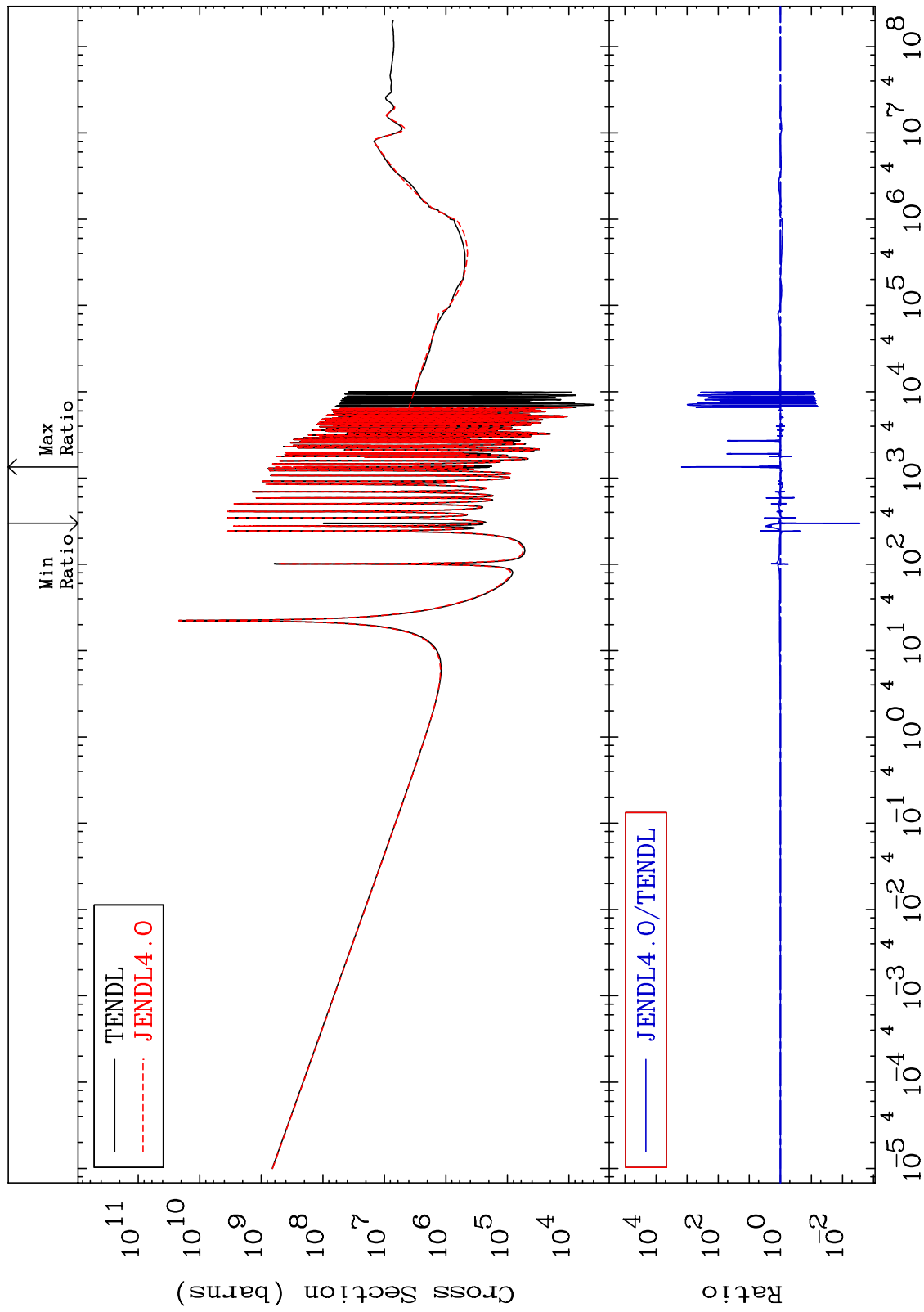
64-Gd-158  
-99.53 To 9999. %



MAT 6443

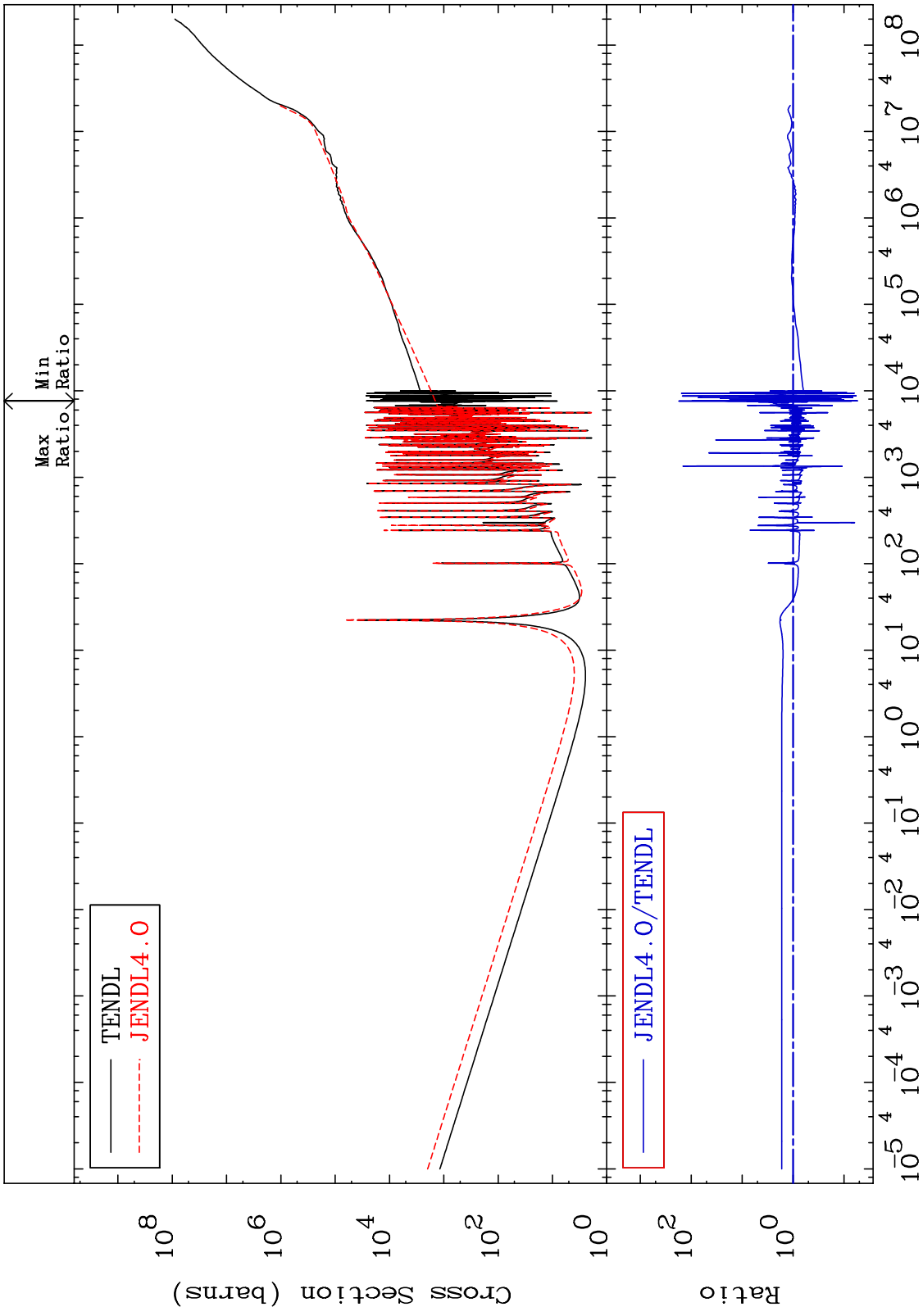
Total photon (eV-barns)  
Cross Section

64-Gd-158  
-99.72 To 9999. %



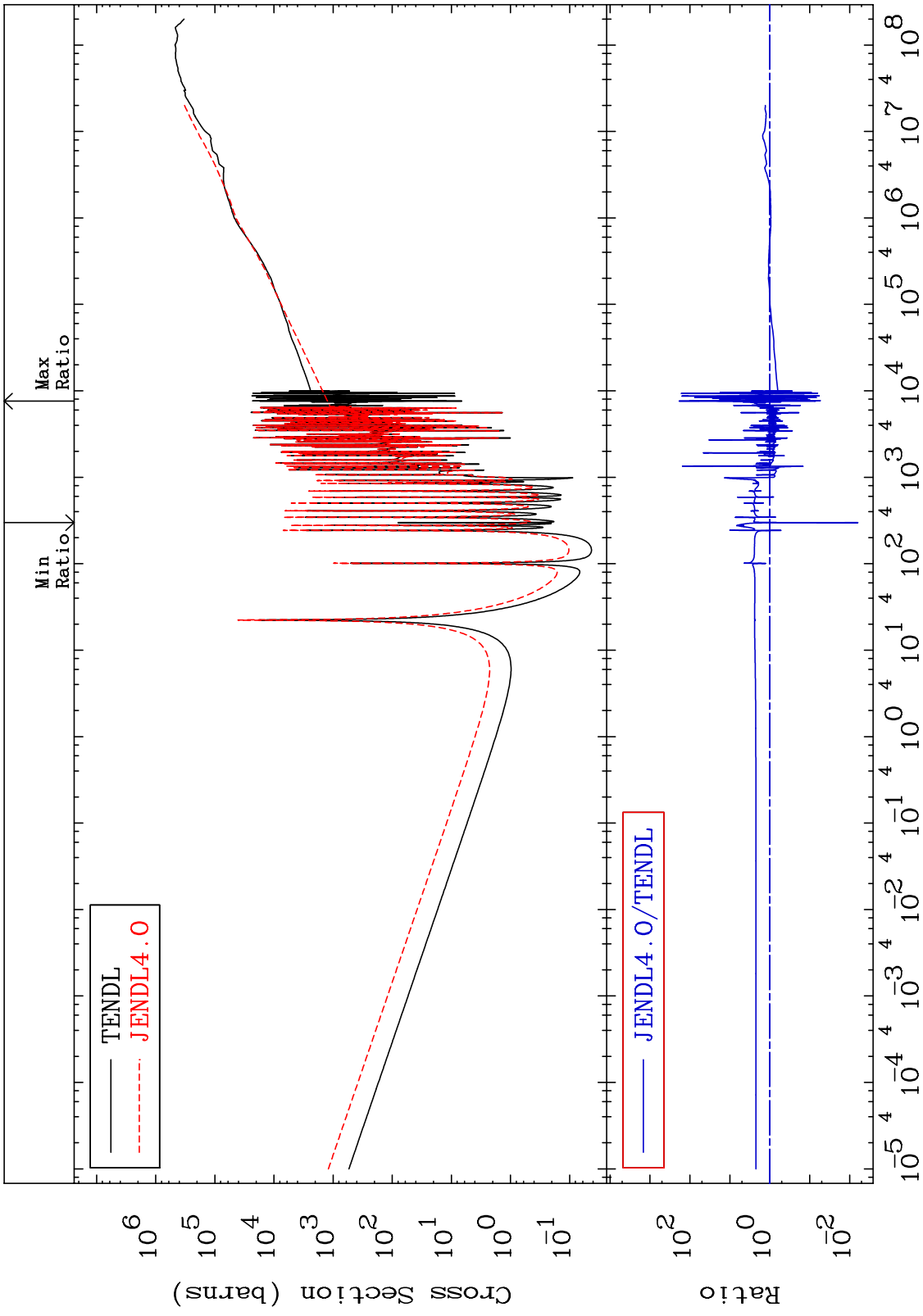


MAT 6443 Total kinematic kerma (high limit) 64-Gd-158  
Cross Section -94.63 To 9999. %

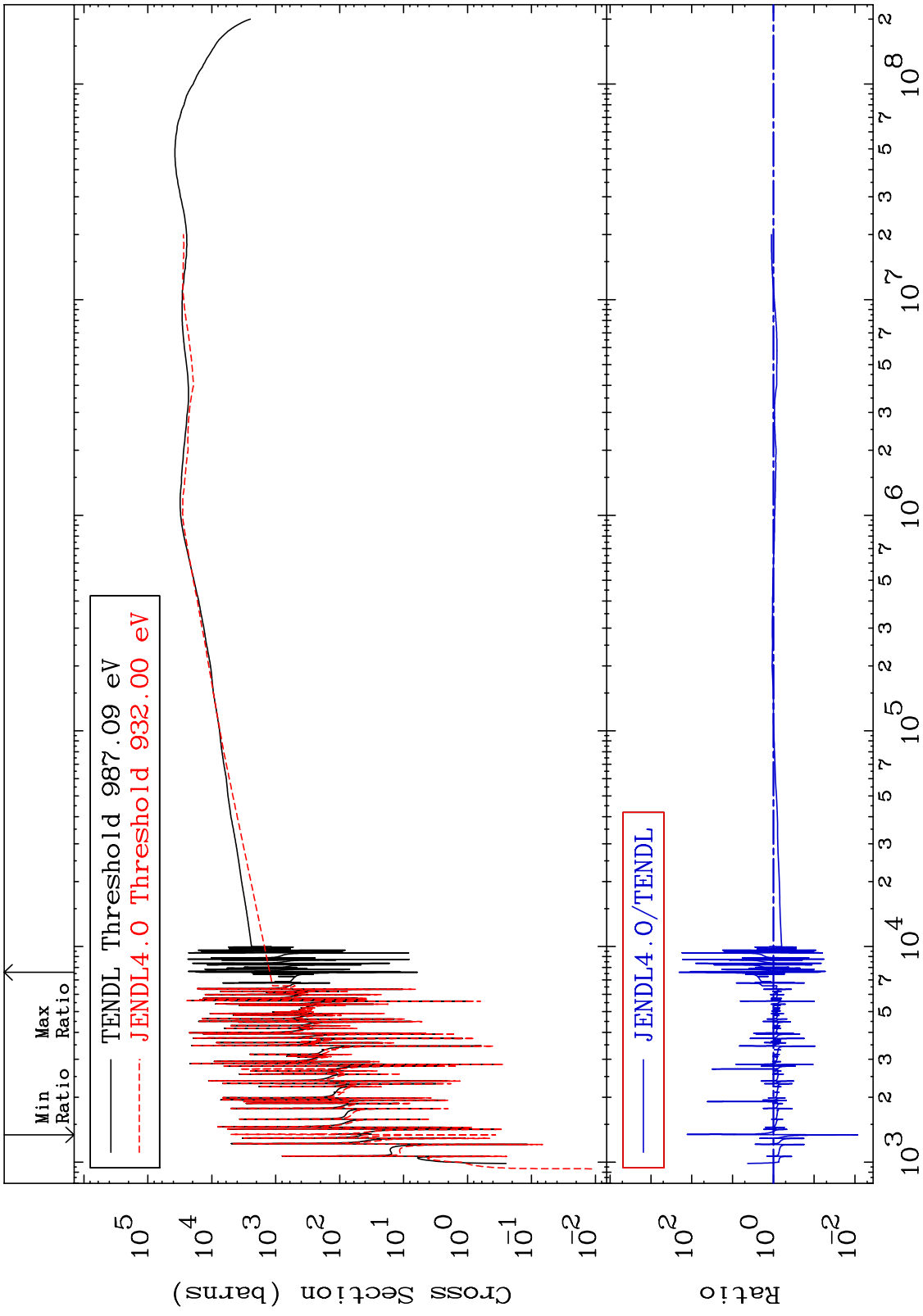


56 Incident Energy (eV) 64-Gd-158

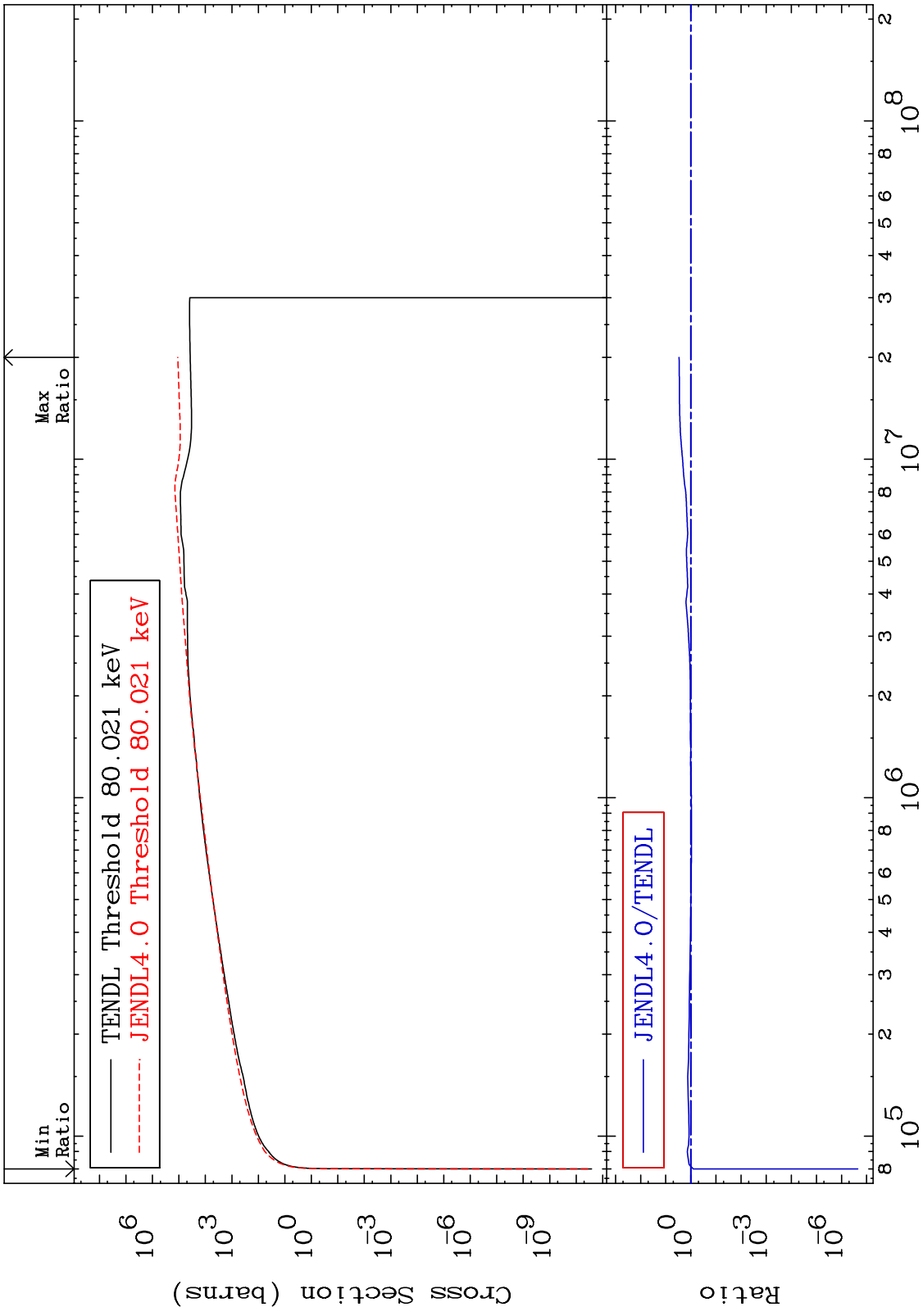
MAT 6443      Dpa total (eV-barns)      64-Gd-158  
 Cross Section      -99.38 To 9999. %



MAT 6443      Dpa elastic (mt2)      64-Gd-158  
Cross Section      -99.15 To 9999. %



MAT 6443      Dpa inelastic (mt51-91)      64-Gd-158  
 Cross Section      -100.0 To 195.1 %



MAT 6443      Dpa disappearance (mt102 -120)      64-Gd-158  
 Cross Section      -99.38 To 9999. %

