

Program Complot  
(Version 2018-1)

by

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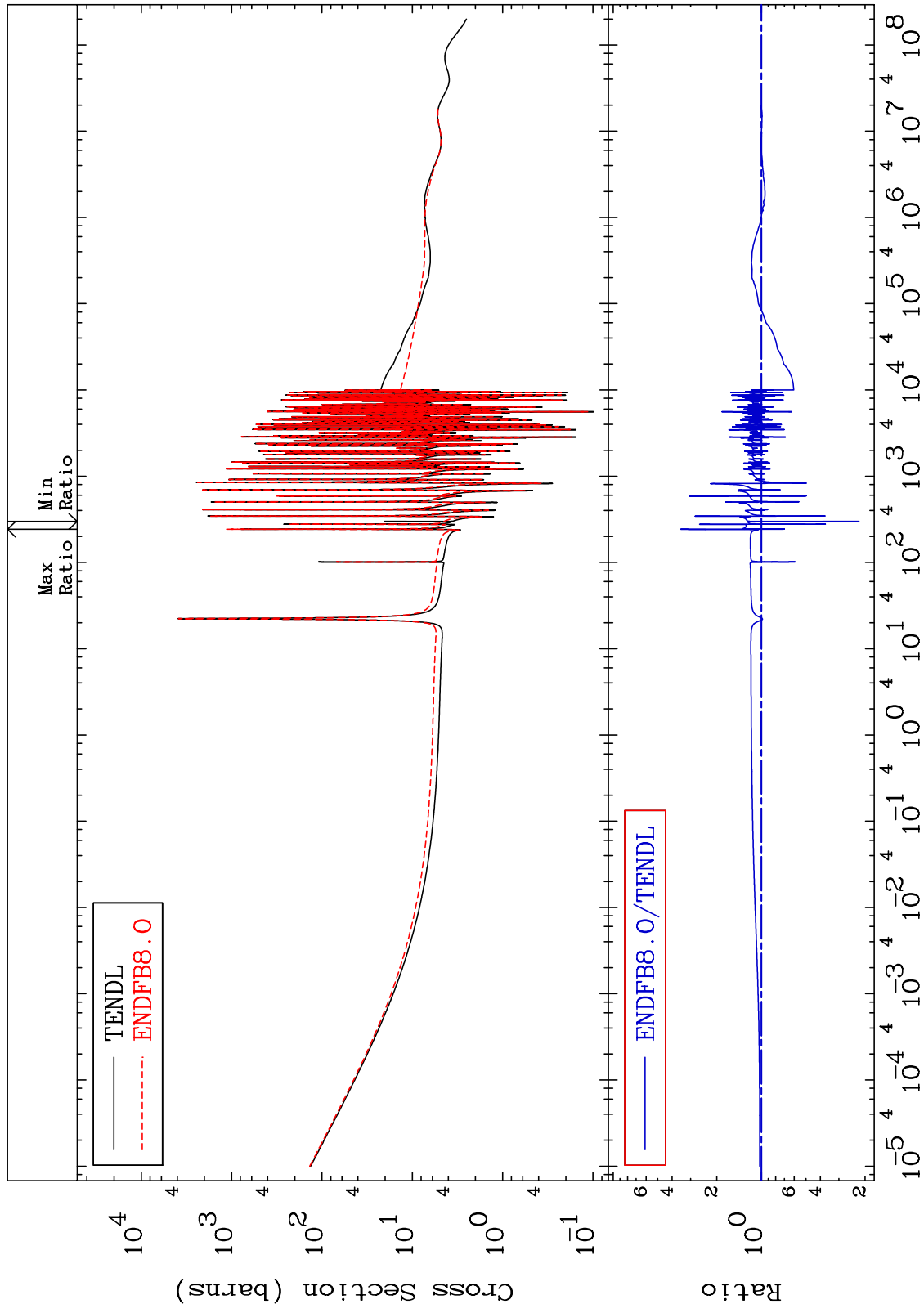
E.Mail: [redcullen1@comcast.net](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

MAT 6443

Total  
Cross Section

64-Gd-158  
-78.05 To 250.4 %



1

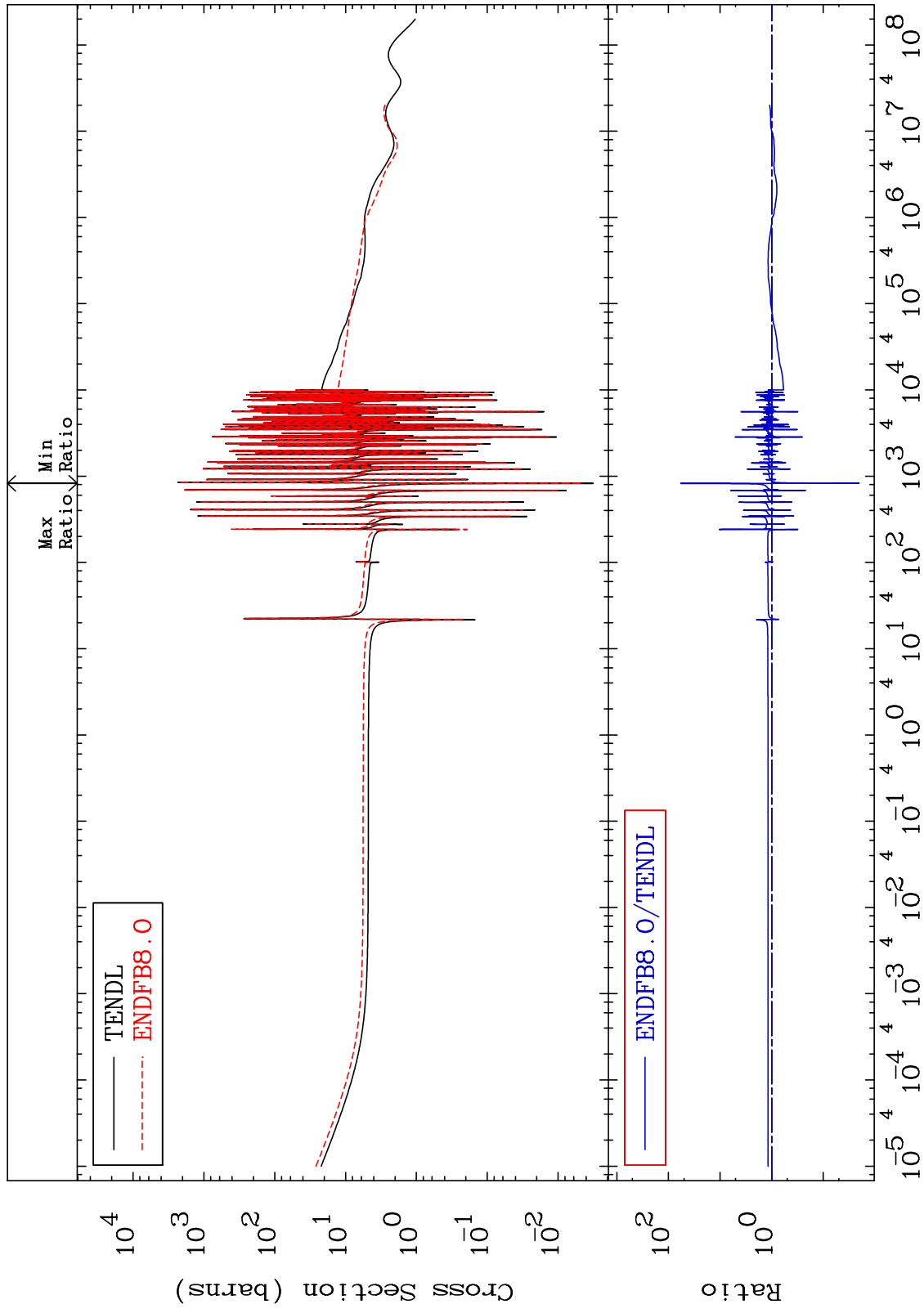
Incident Energy (eV)

64-Gd-158

MAT 6443

Elastic  
Cross Section

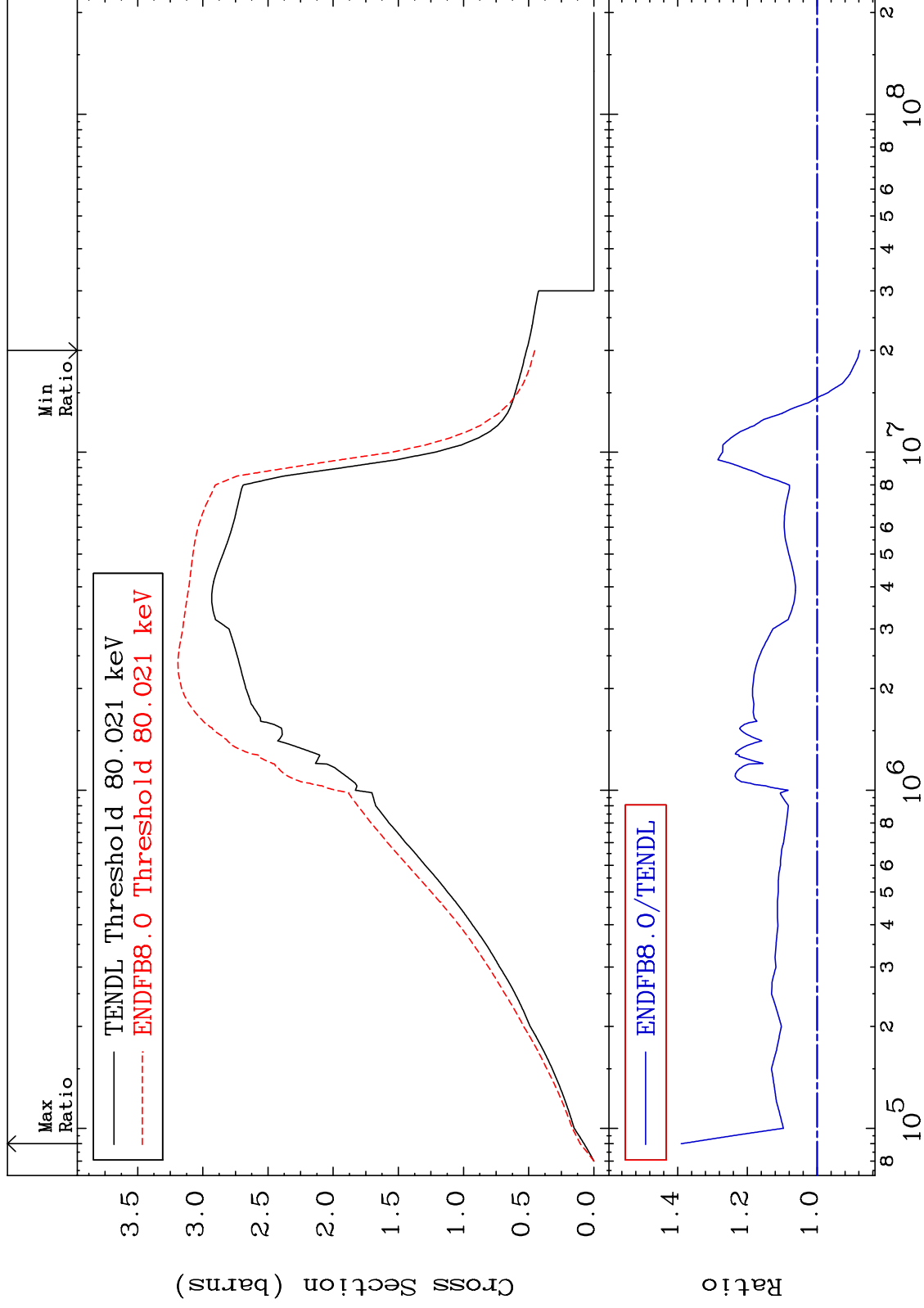
64-Gd-158  
-97.97 To 5701. %



MAT 6443

Inelastic  
Cross Section

64-Gd-158  
-12.24 To 38.96 %



3

Incident Energy (eV)

64-Gd-158

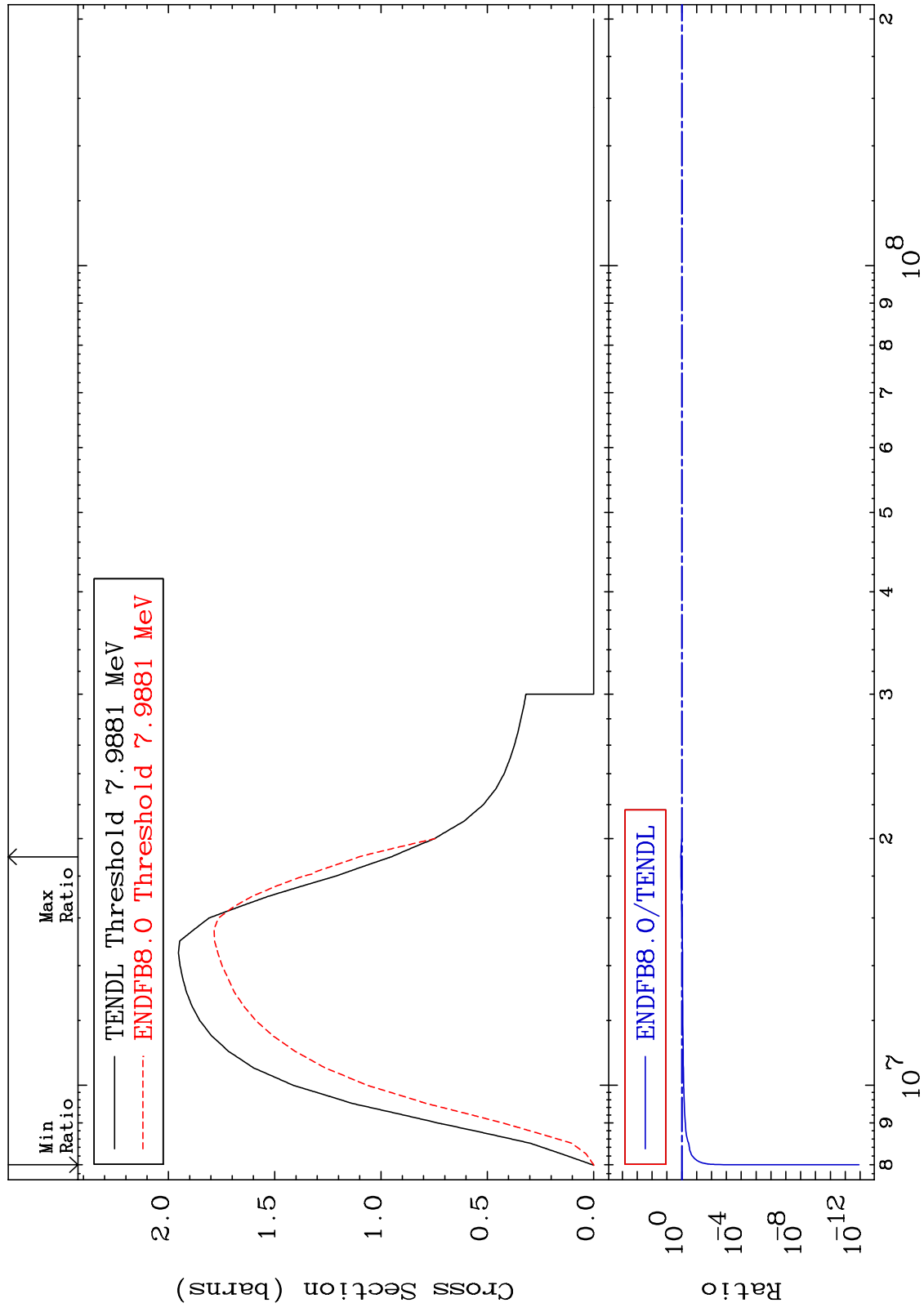
MAT 6443

(n,2n)

64-Gd-158

Cross Section

-100.0 To 15.91 %

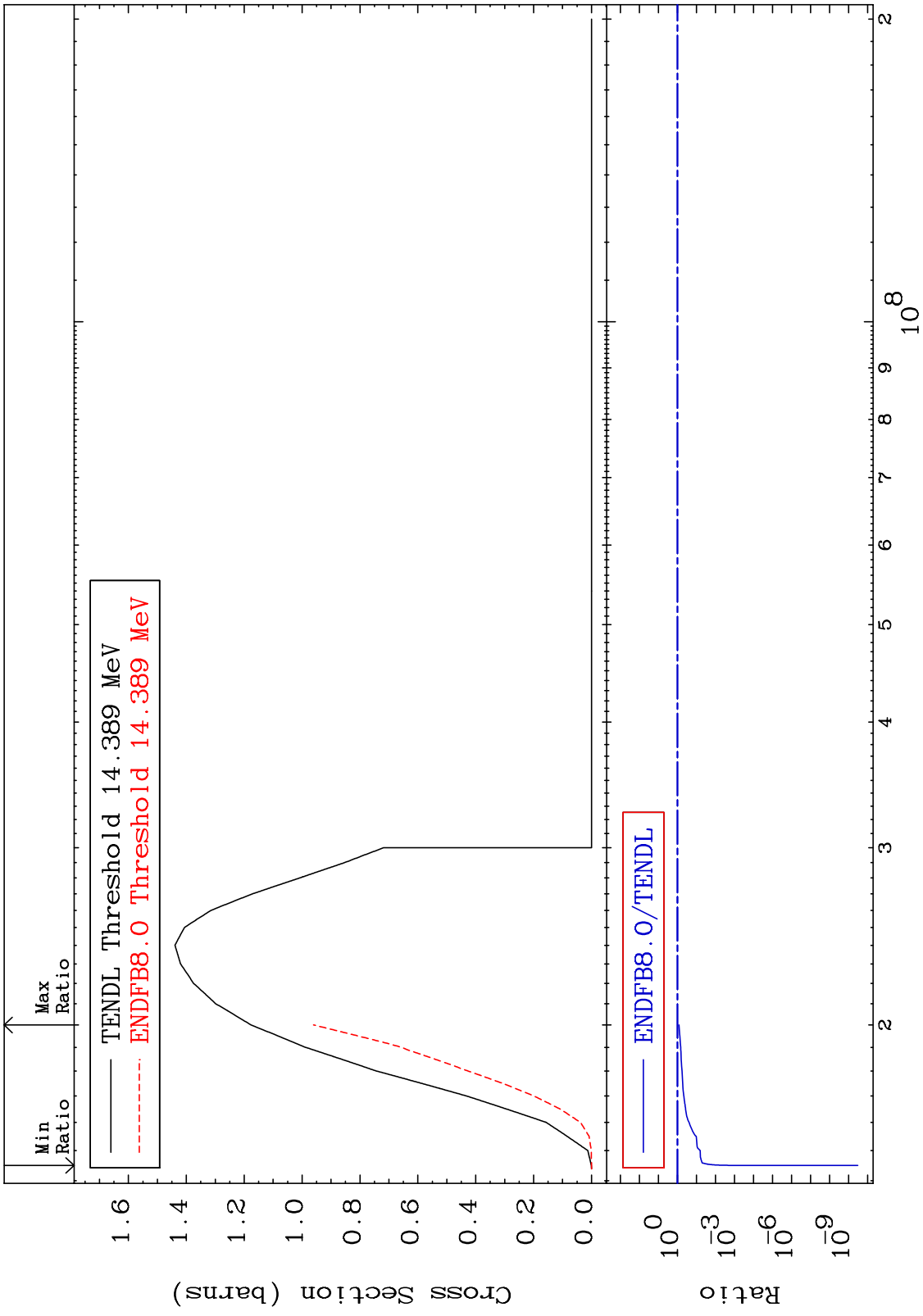


4

Incident Energy (eV)

64-Gd-158

MAT 6443 (n,3n) Cross Section 64-Gd-158 -100.0 To -18.39%



MAT 6443

(n, n')  $\alpha$

64-Gd-158

-53.19 To 1759. %

Cross Section

Min Ratio

Max Ratio

TENDL Threshold 663.49 keV  
ENDFB8.0 Threshold 7.0000 MeV

Cross Section (milli-barns)

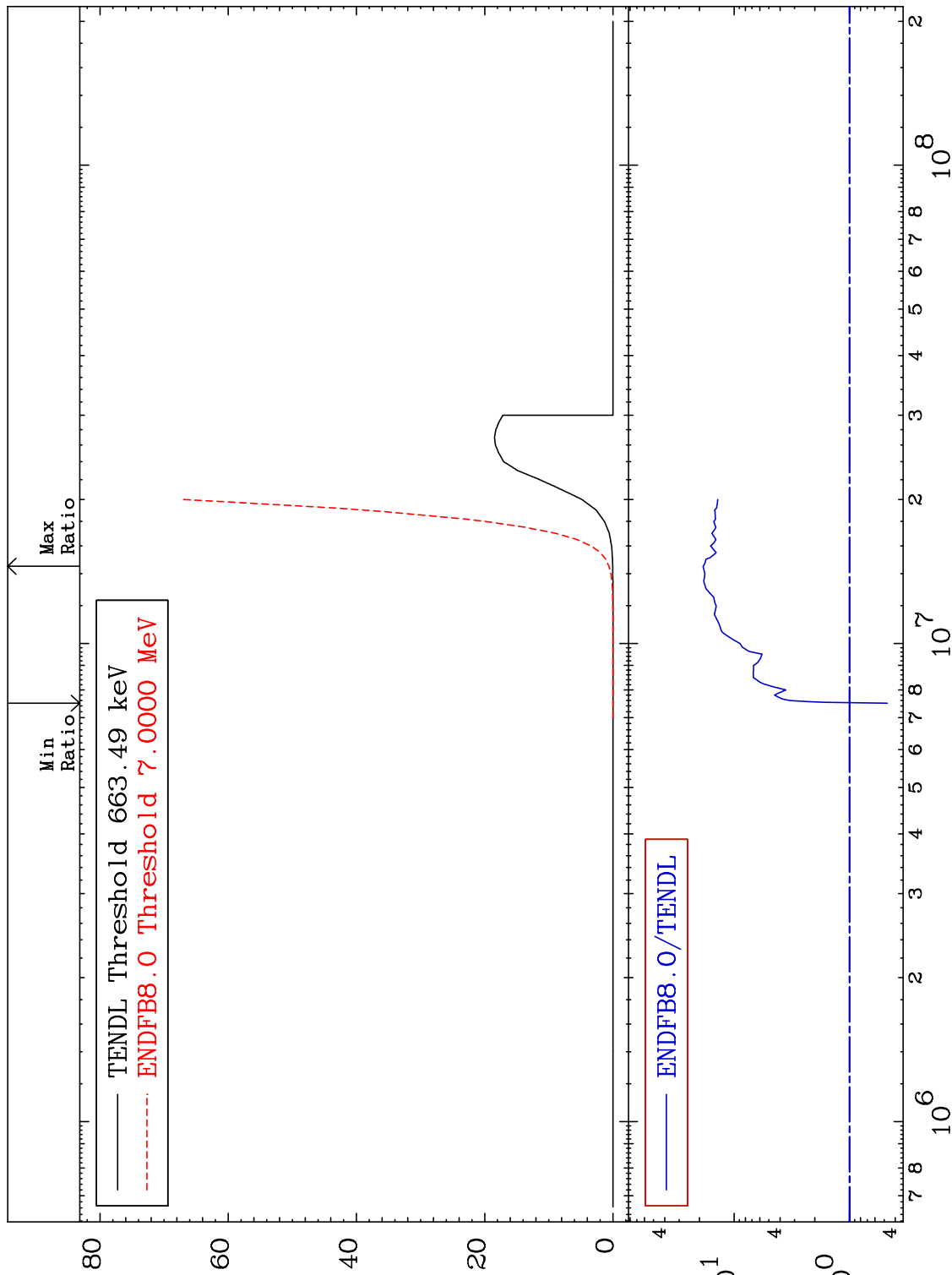
ENDFB8.0/TENDL

Ratio

6

Incident Energy (eV)

64-Gd-158



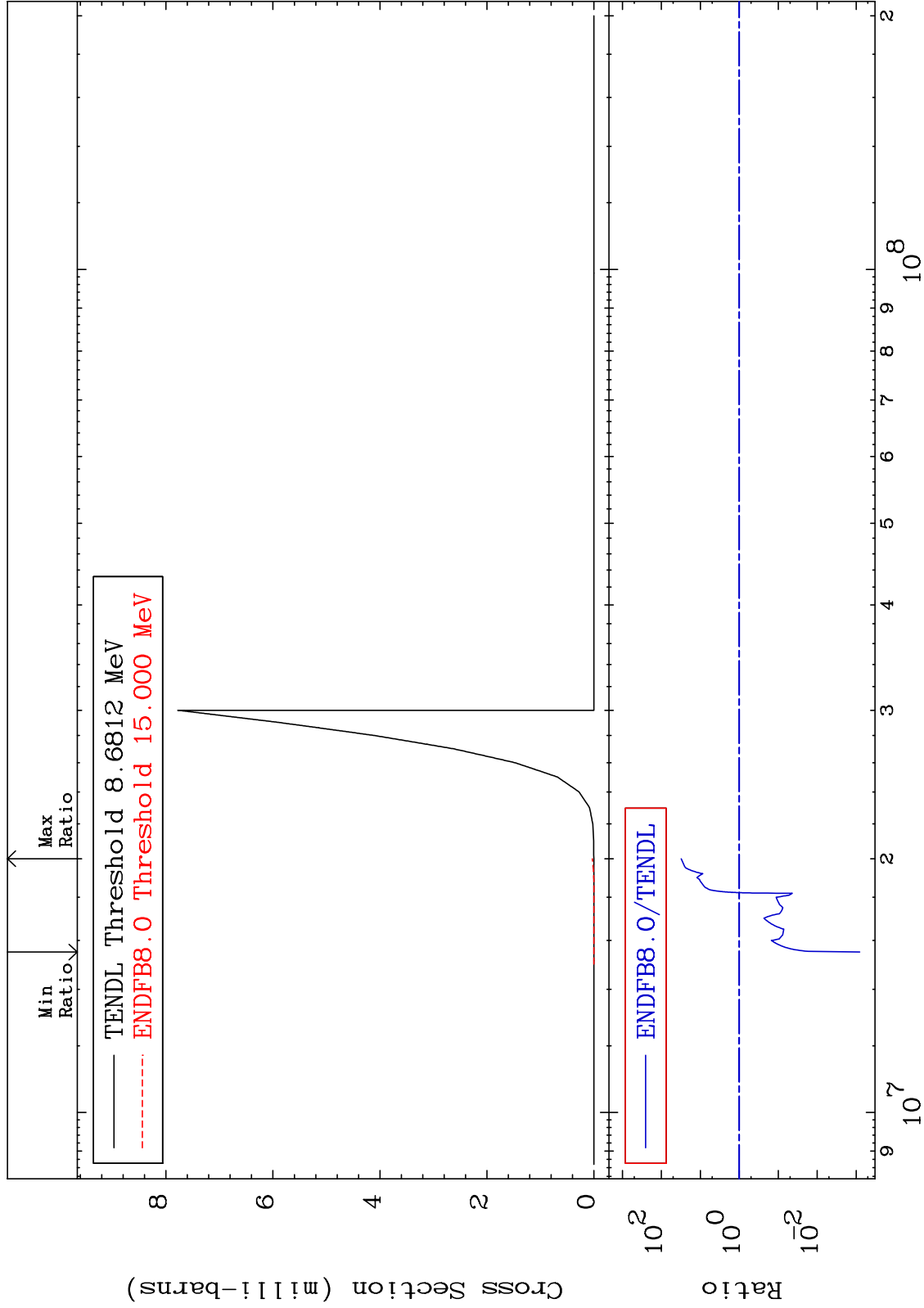
MAT 6443

(n,2n)  $\alpha$

64-Gd-158

Cross Section

-99.92 To 2997. %



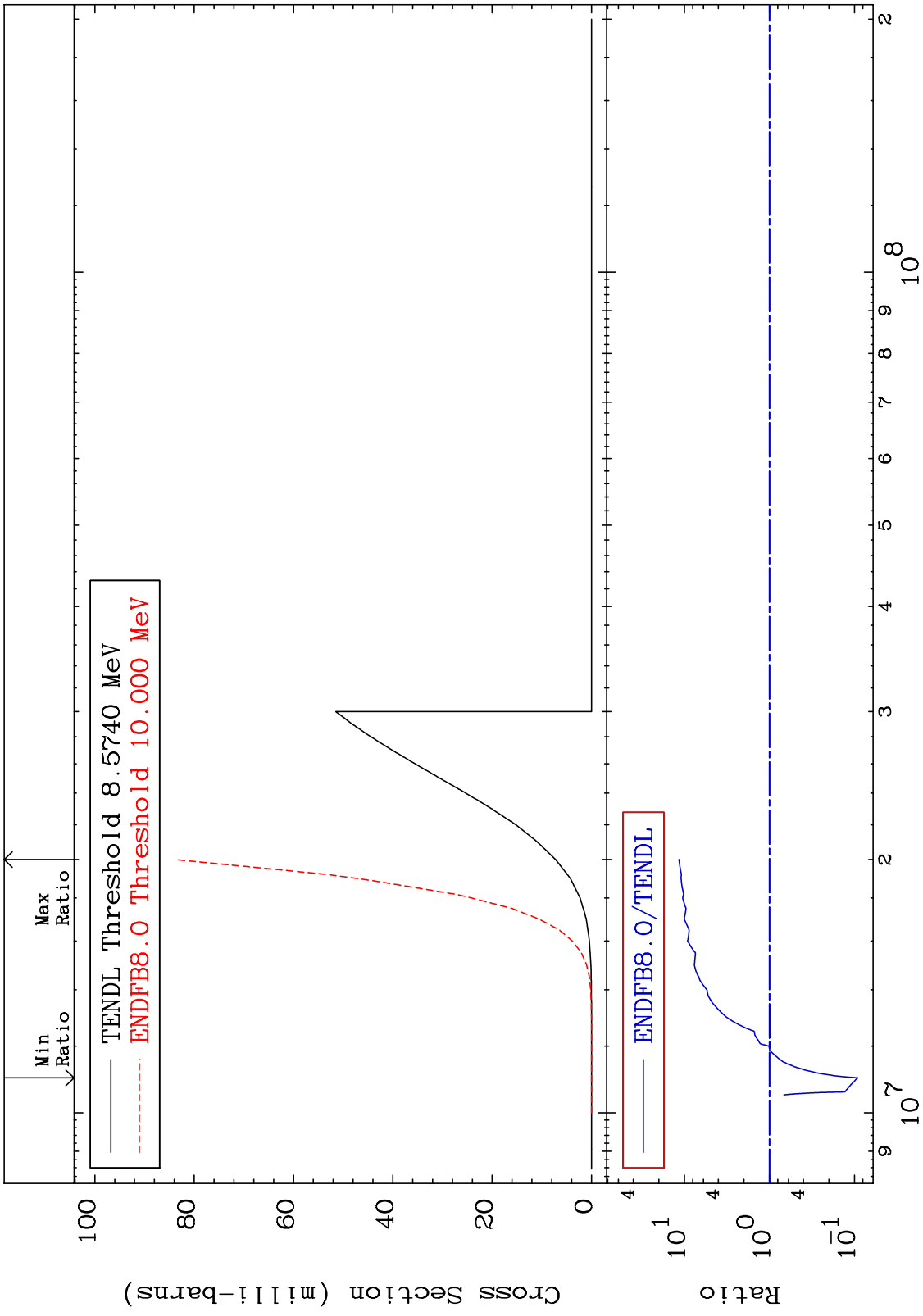
7

Incident Energy (eV)

64-Gd-158

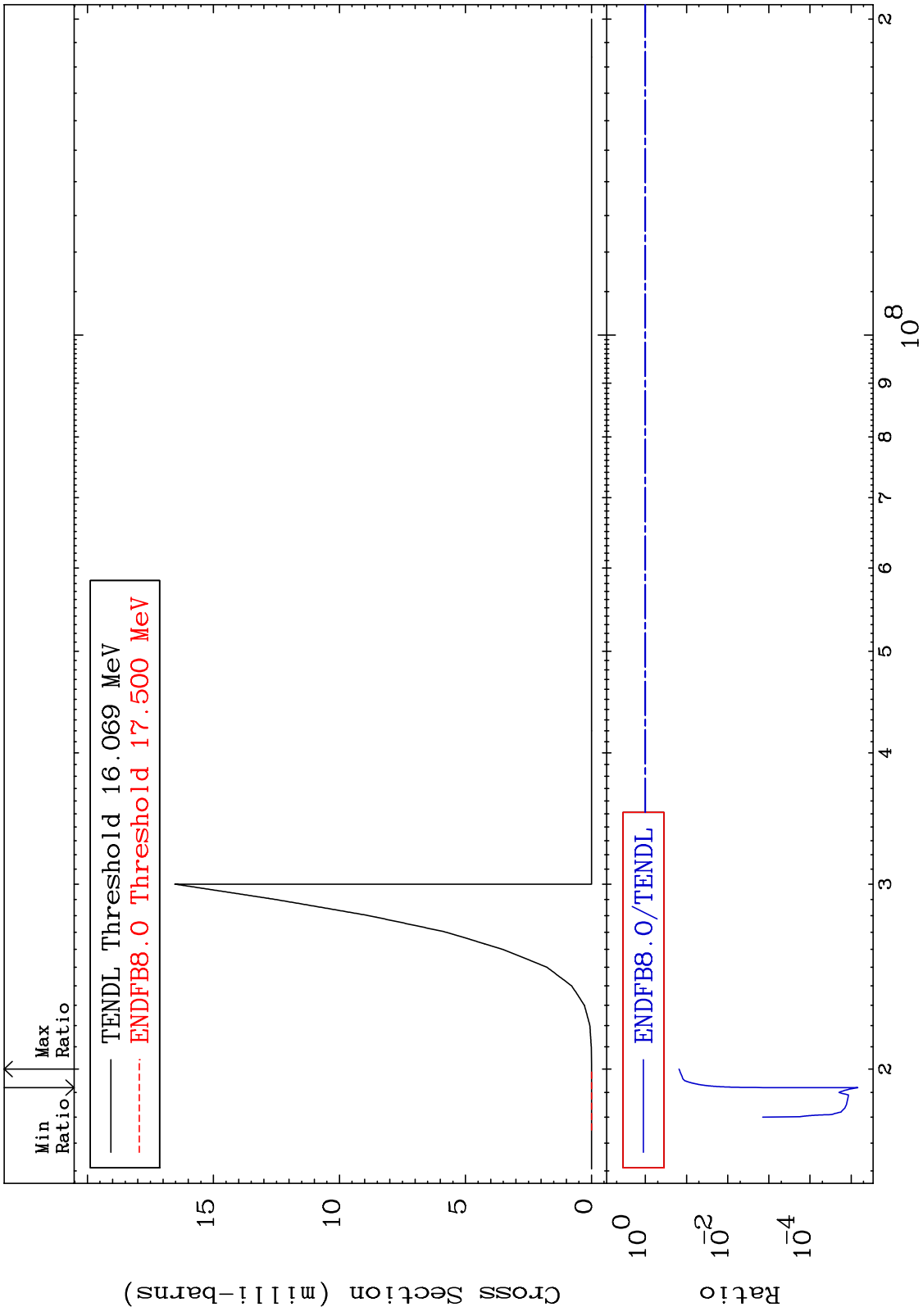


MAT 6443 64-Gd-158  
(n, n') p  
Cross Section  
-90.86 To 1061. %



8 Incident Energy (eV) 64-Gd-158

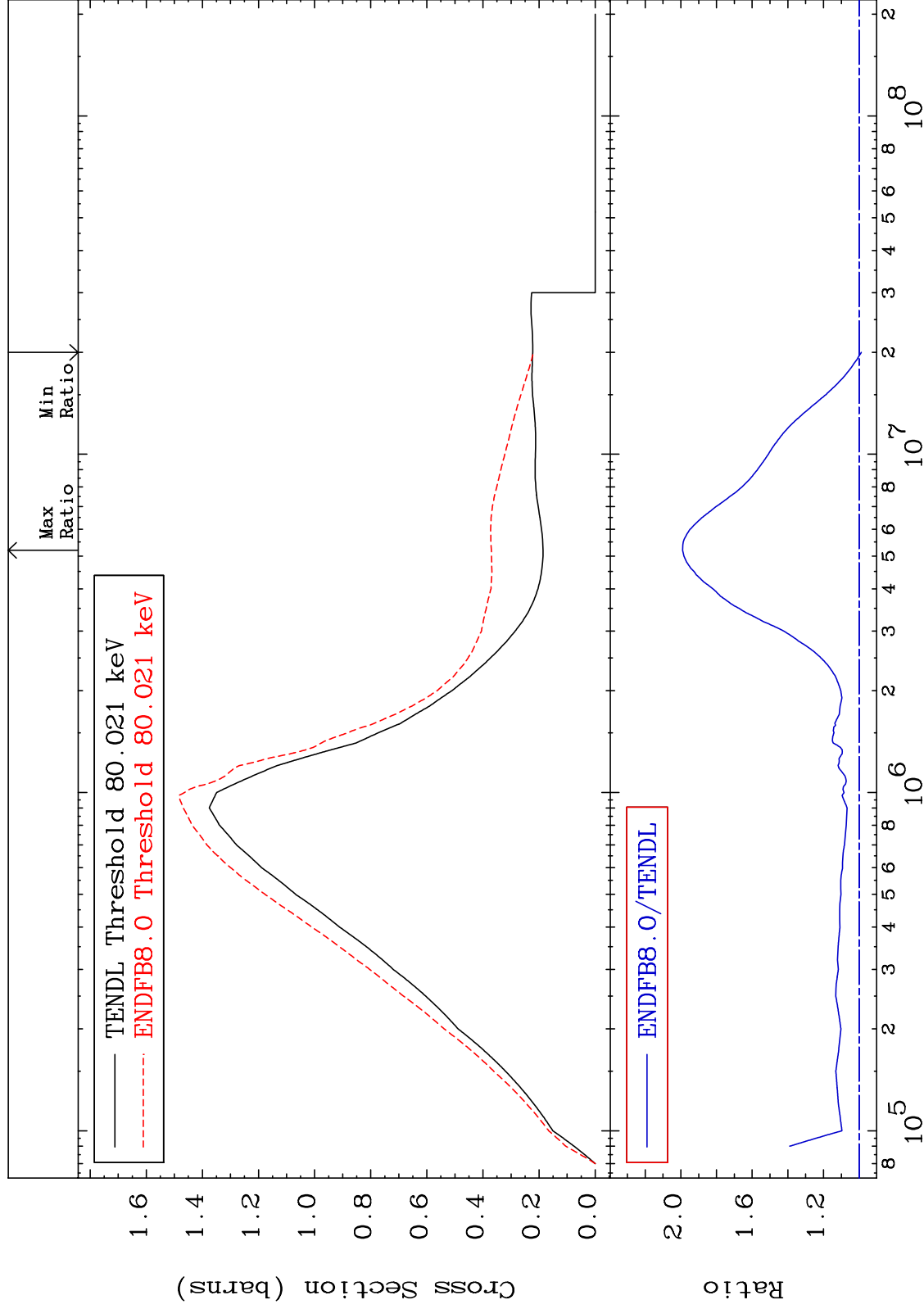
MAT 6443 (n,2n) p 64-Gd-158  
 Cross Section -100.0 To -84.77%



MAT 6443

MT= 51 (n,n') Level  
Cross Section

64-Gd-158  
-1.230 To 98.98 %

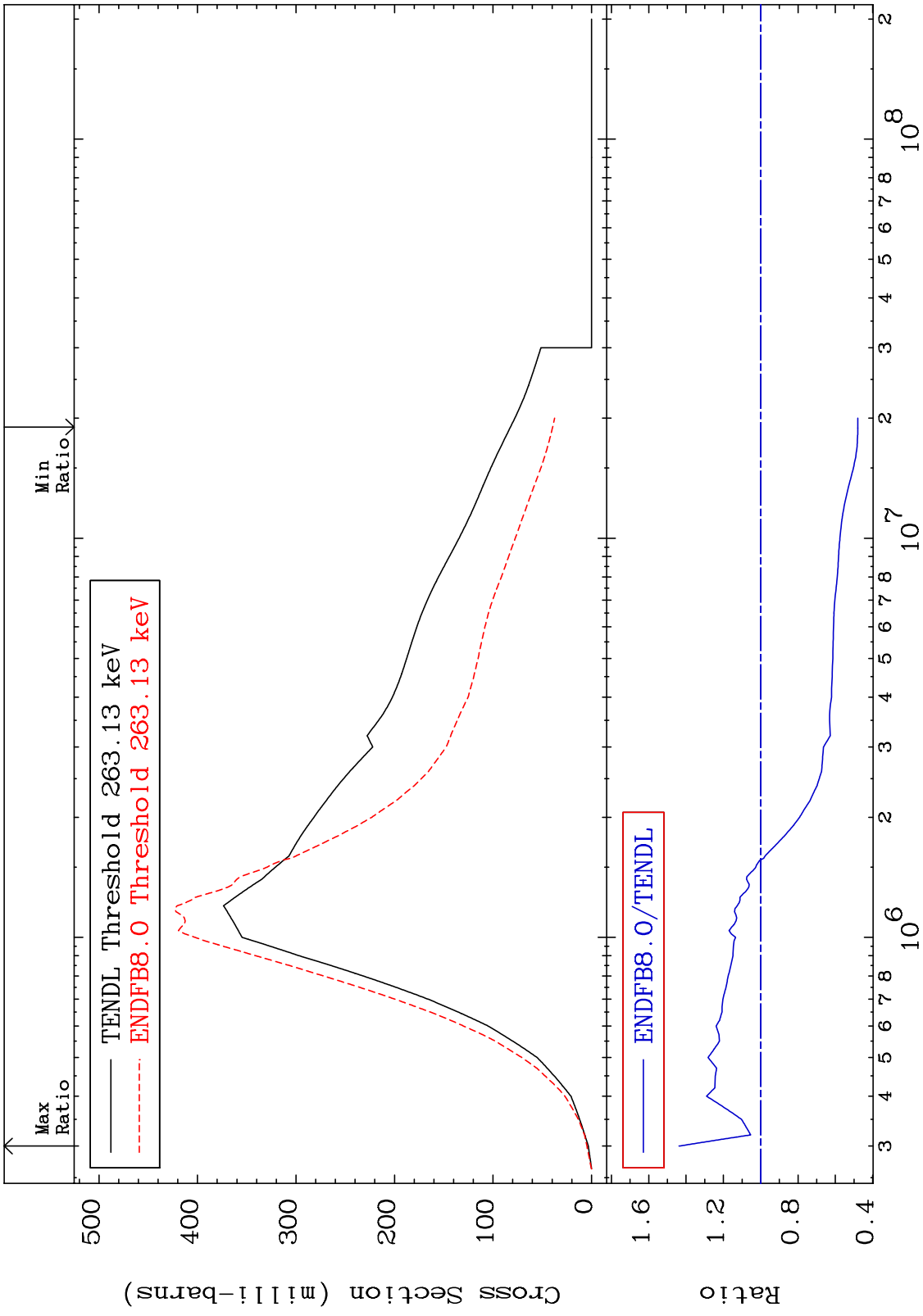


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Incident Energy (eV)

64-Gd-158

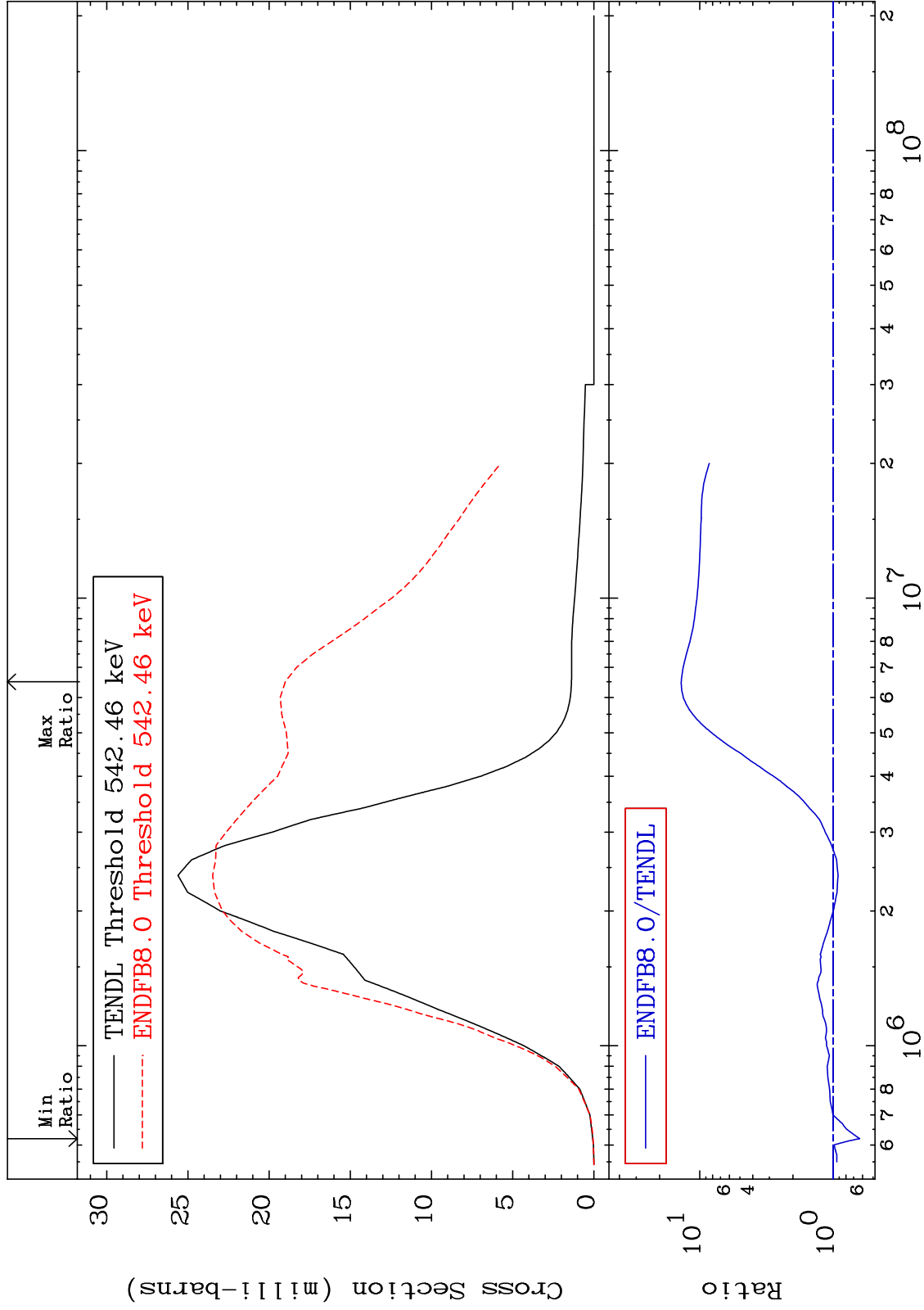
MAT 6443 MT= 52 (n,n') Level Cross Section 64-Gd-158 -52.03 To 43.75 %



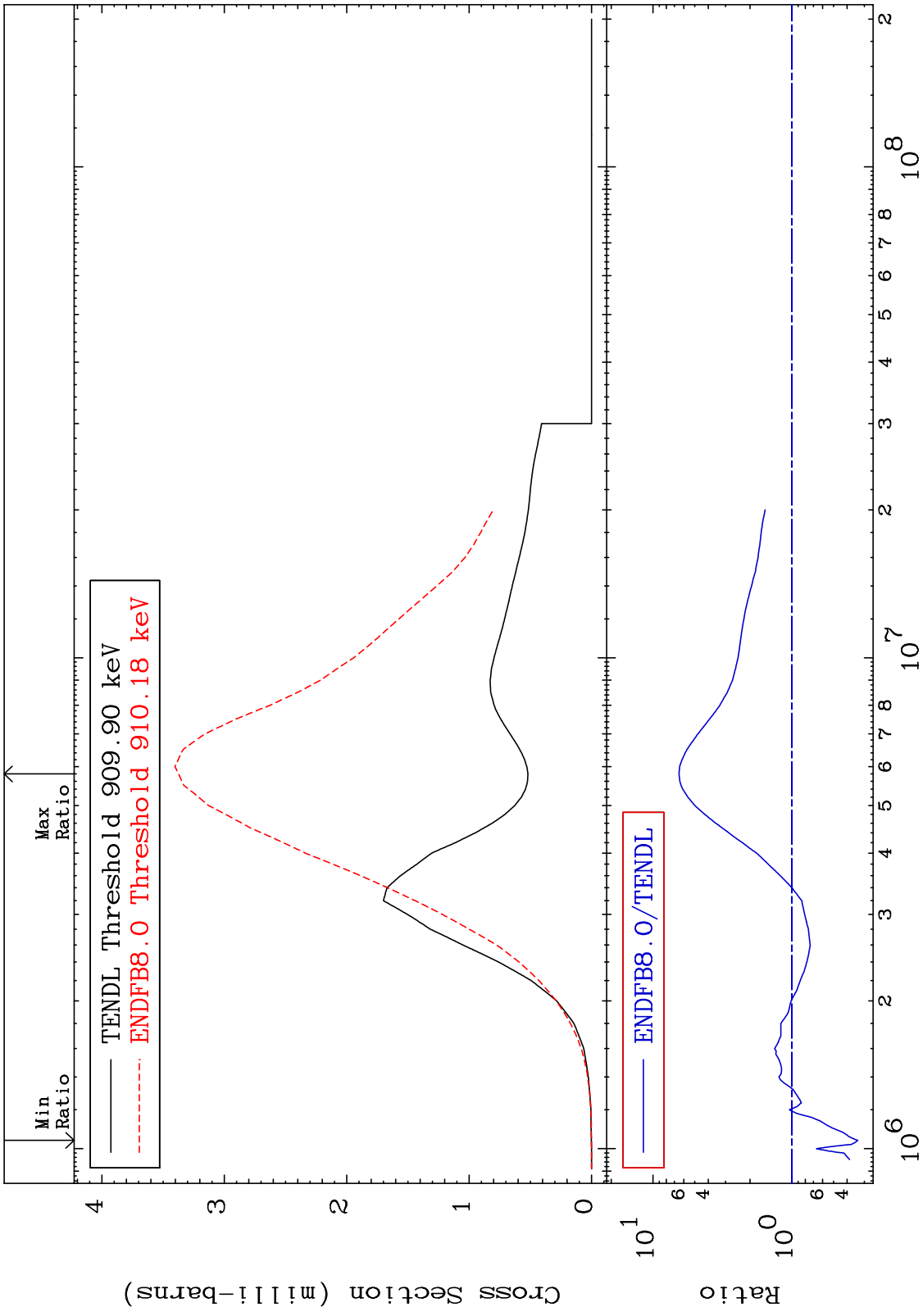
MAT 6443

MT= 53 (n,n') Level  
Cross Section

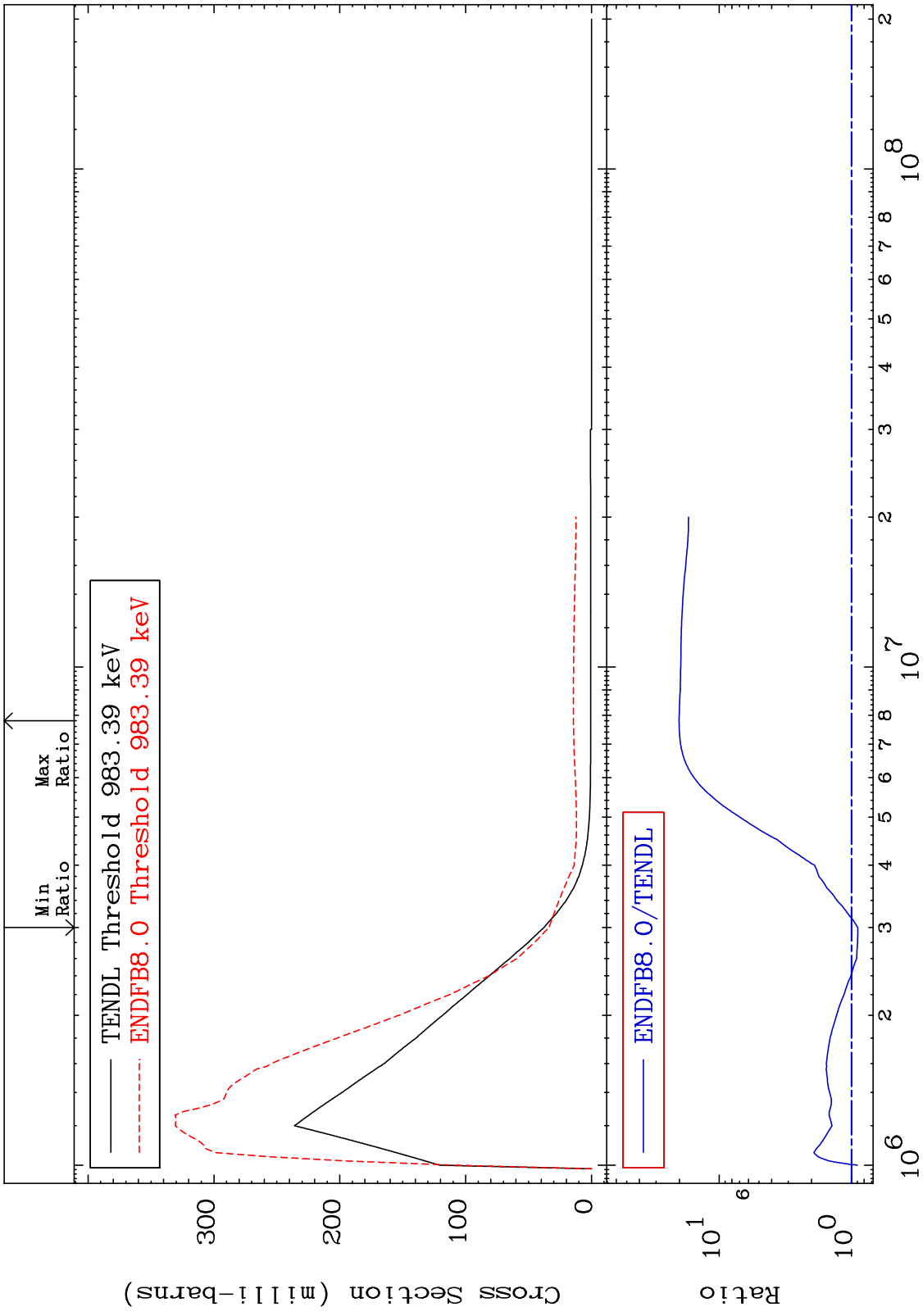
64-Gd-158  
-37.01 To 1277. %



MAT 6443 MT= 54 (n,n') Level Cross Section 64-Gd-158 -66.53 To 548.7 %



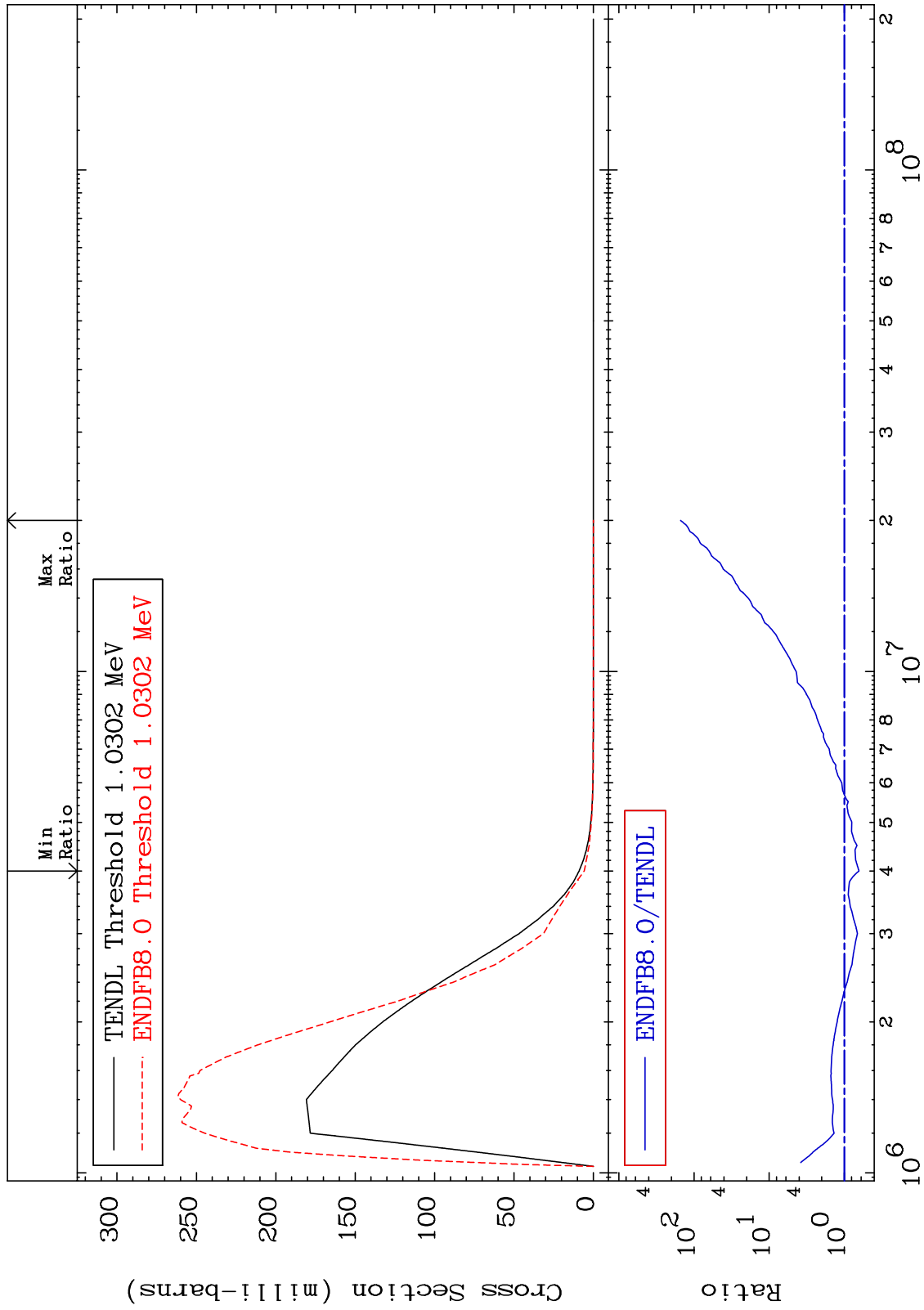
MAT 6443 MT= 55 (n,n') Level Cross Section 64-Gd-158  
 -10.66 To 1909. %



MAT 6443

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

64-Gd-158  
-36.16 To 9999. %



Incident Energy (eV)

64-Gd-158

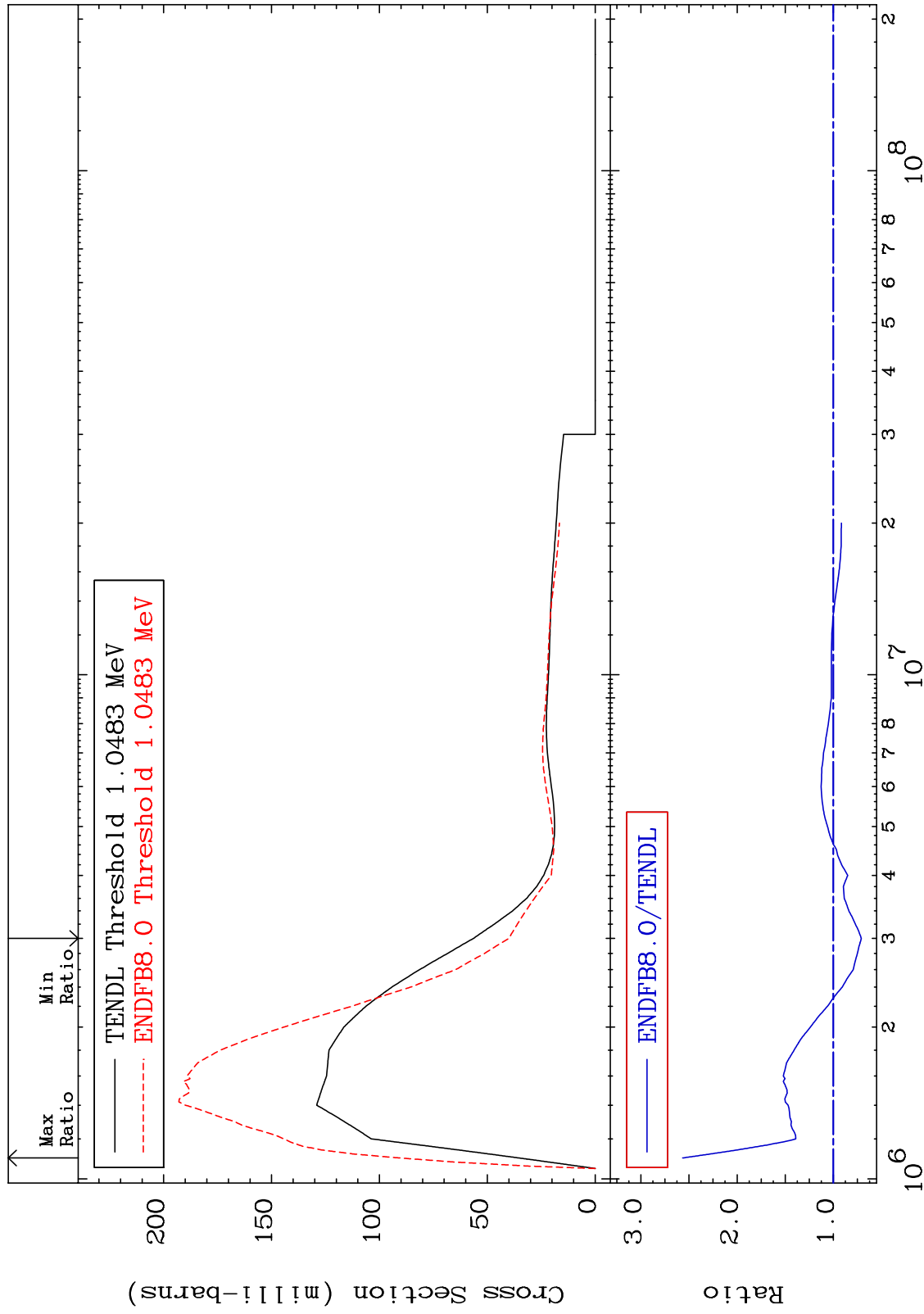
15



MAT 6443

MT= 57 (n,n') Level  
Cross Section

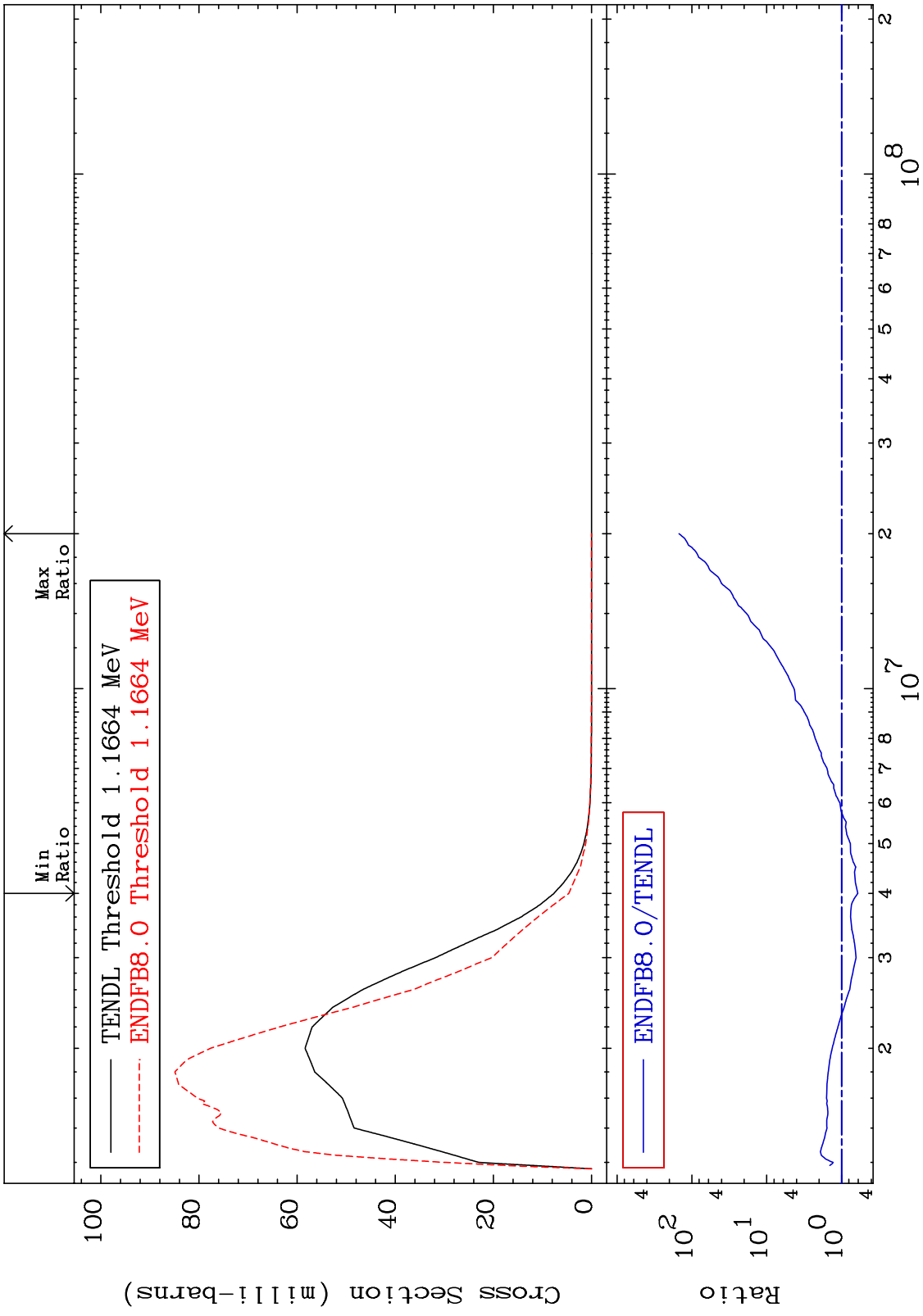
64-Gd-158  
-29.02 To 156.5 %



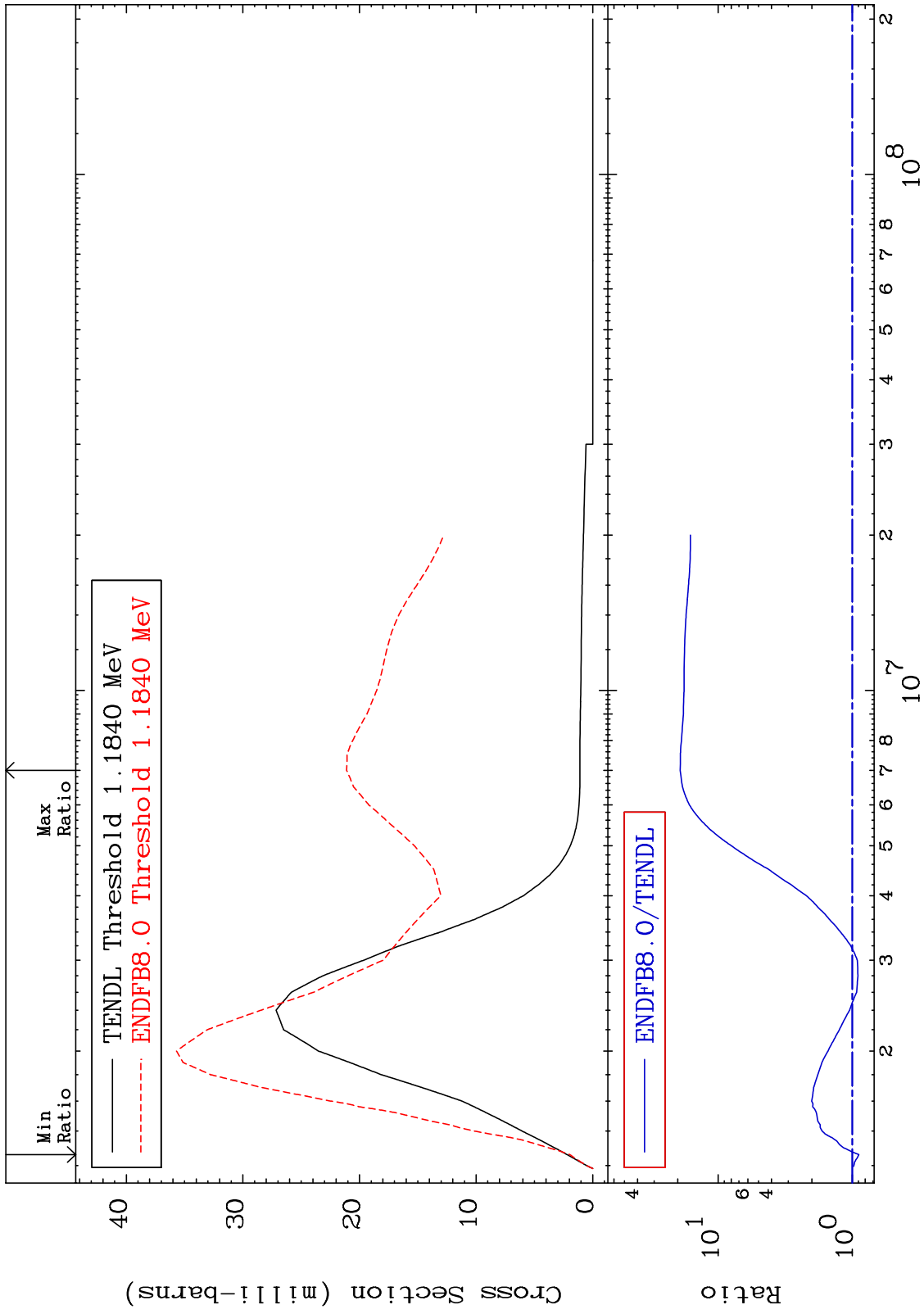
Incident Energy (eV)

64-Gd-158

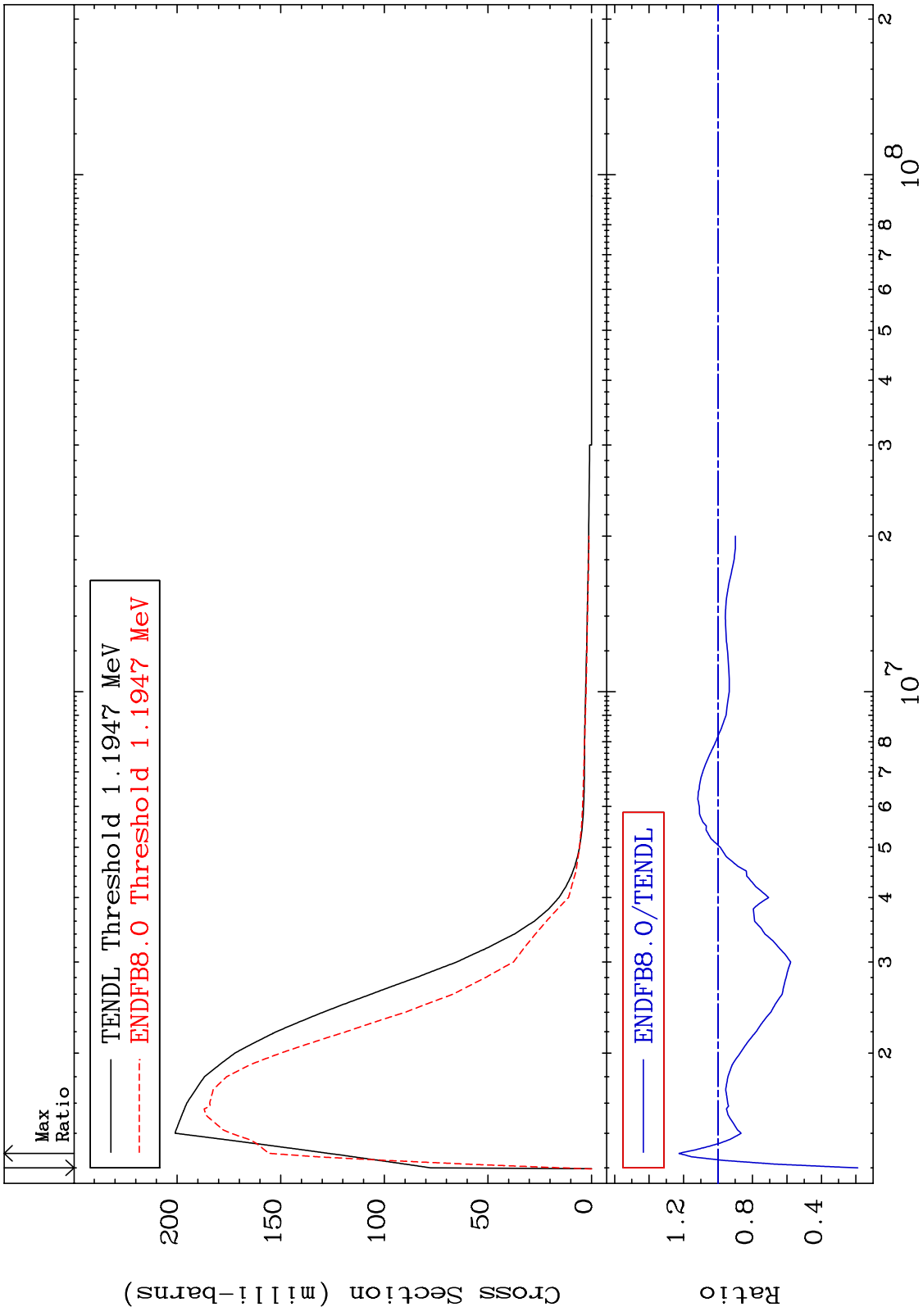
MAT 6443 MT= 58 (n,n') Level Cross Section 64-Gd-158 -39.41 To 9999. %



MAT 6443 MT= 59 (n,n') Level Cross Section 64-Gd-158  
 -10.83 To 1820. %



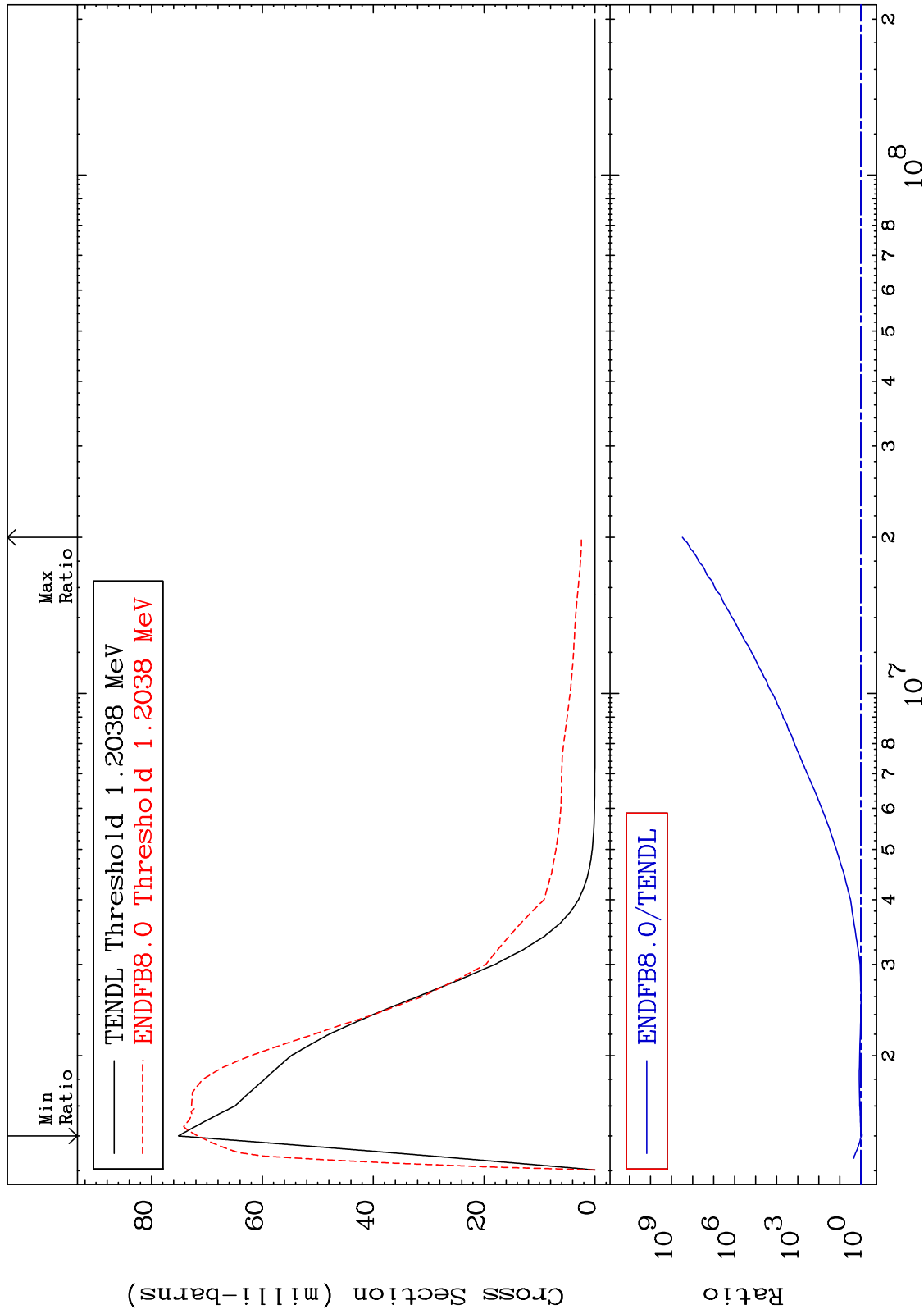
MAT 6443 MT= 60 (n,n') Level Cross Section 64-Gd-158 -81.14 To 22.61 %



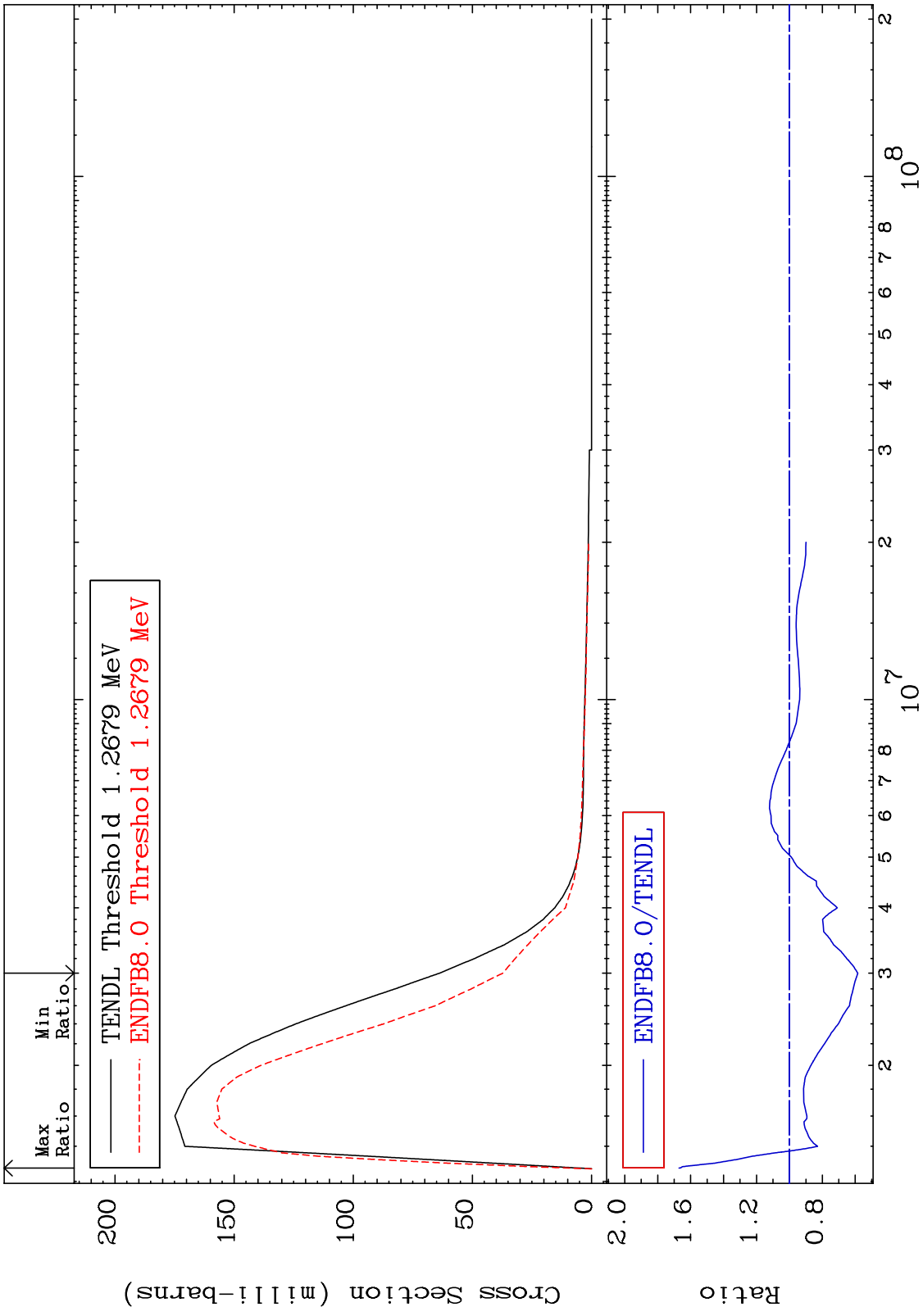
MAT 6443

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

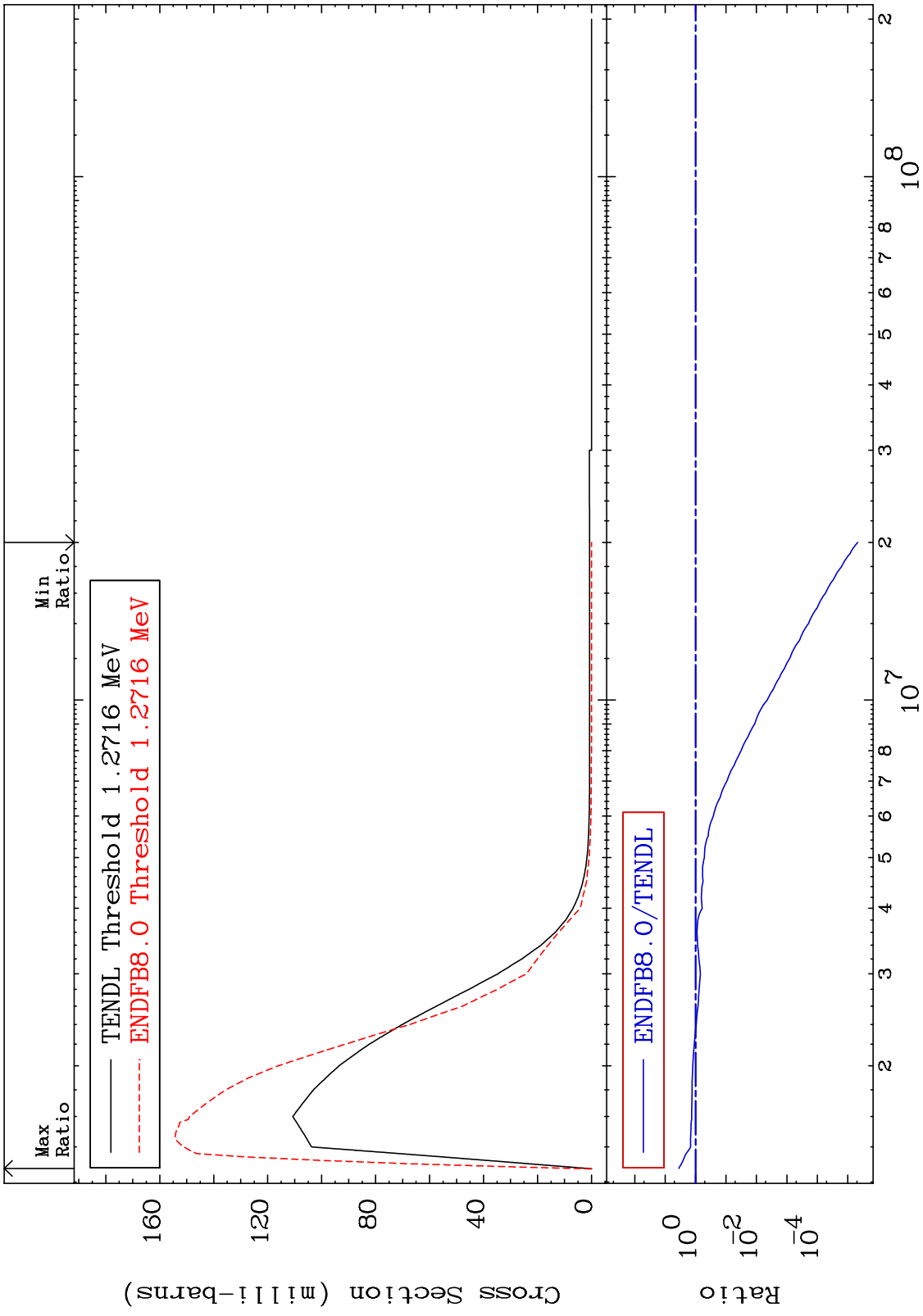
64-Gd-158  
-4.704 To 9999. %



MAT 6443 MT= 62 (n,n') Level Cross Section 64-Gd-158  
 -41.56 To 67.04 %

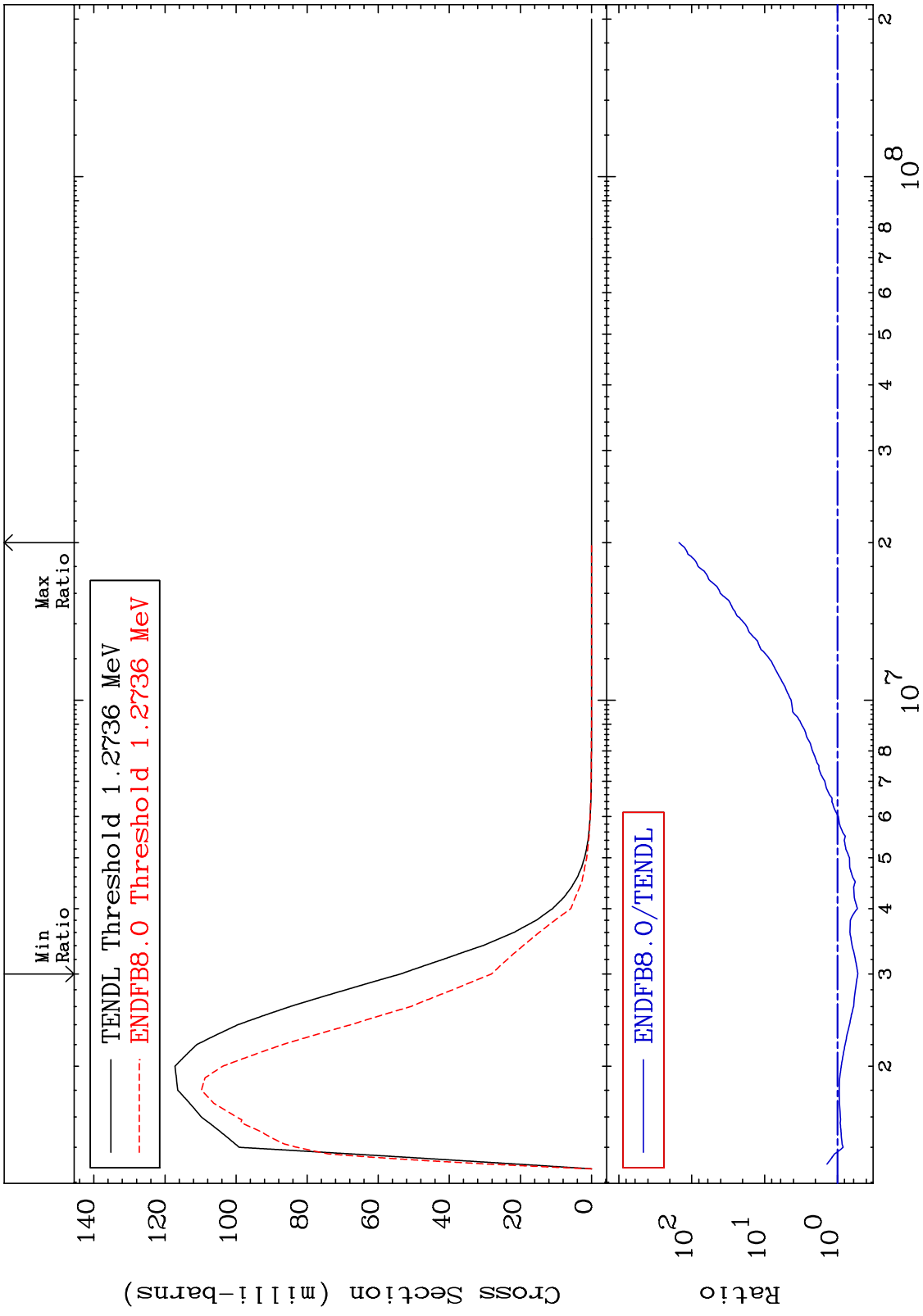


MAT 6443 MT= 63 (n,n') Level Cross Section 64-Gd-158  
 -100.0 To 250.3 %



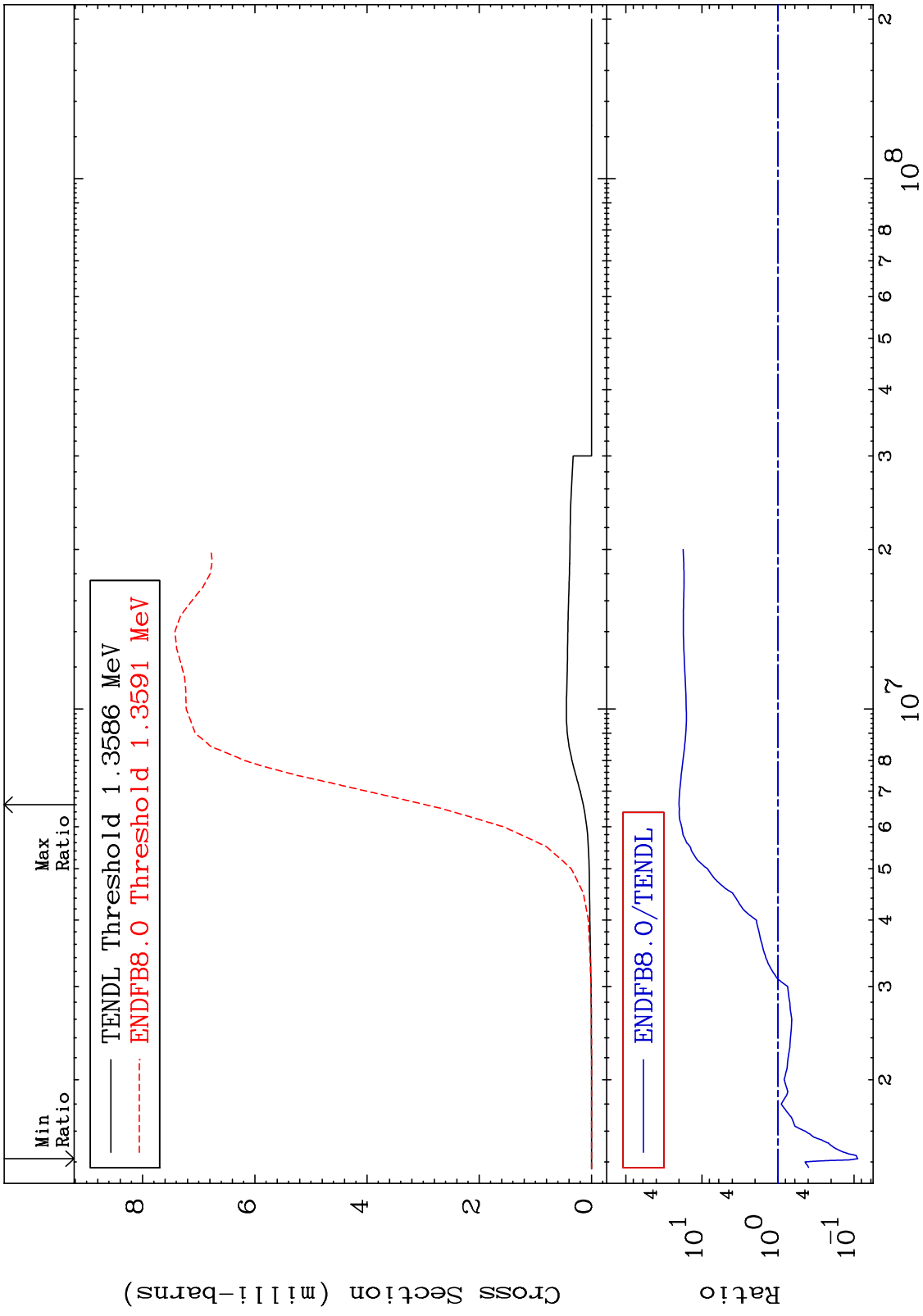
22 64-Gd-158

MAT 6443 MT= 64 (n,n') Level Cross Section 64-Gd-158 -47.63 To 9999. %

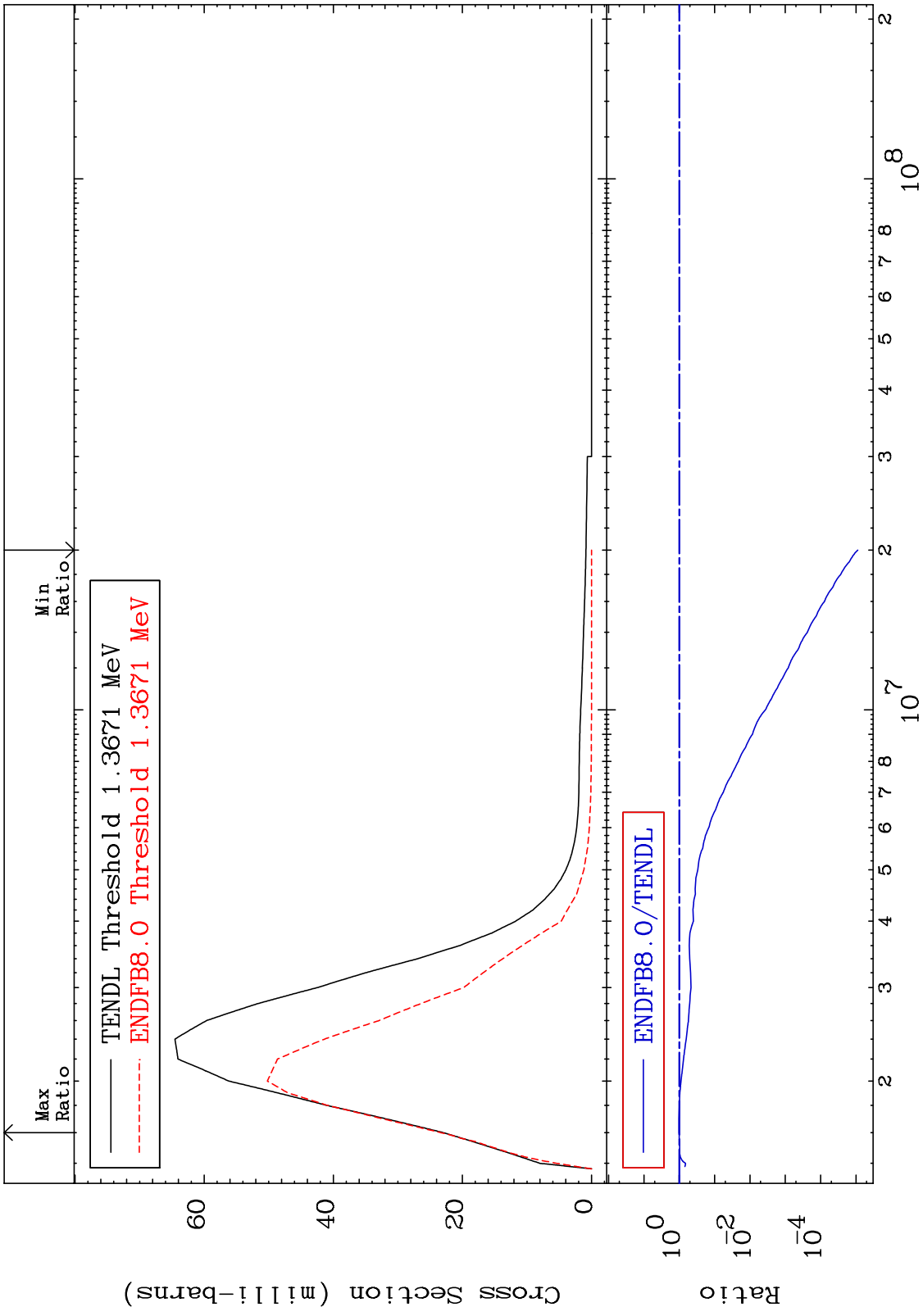




MAT 6443 MT= 65 (n,n') Level Cross Section 64-Gd-158 -91.10 To 1902. %



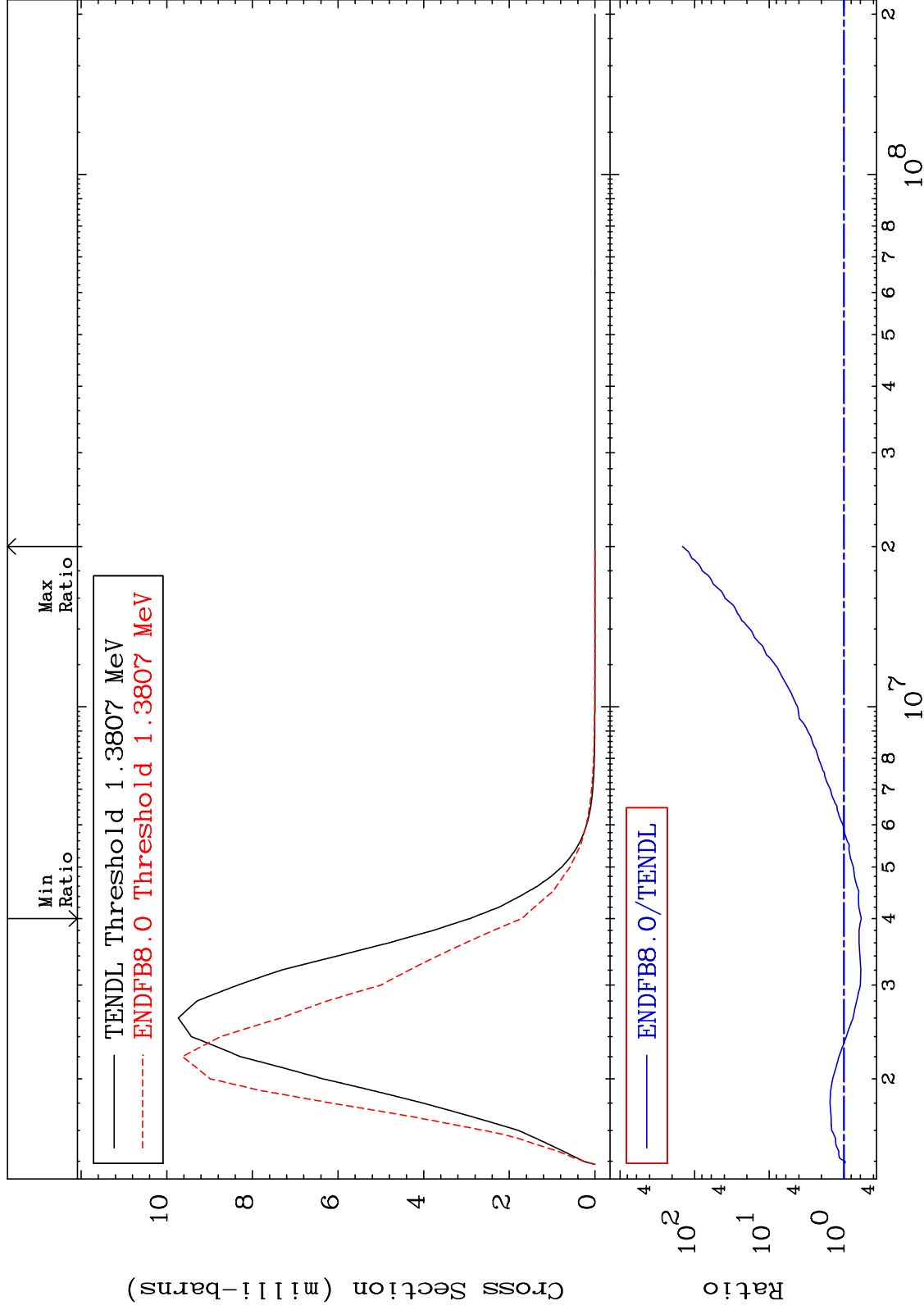
MAT 6443 MT= 66 (n,n') Level Cross Section 64-Gd-158  
 -100.0 To 1.702 %



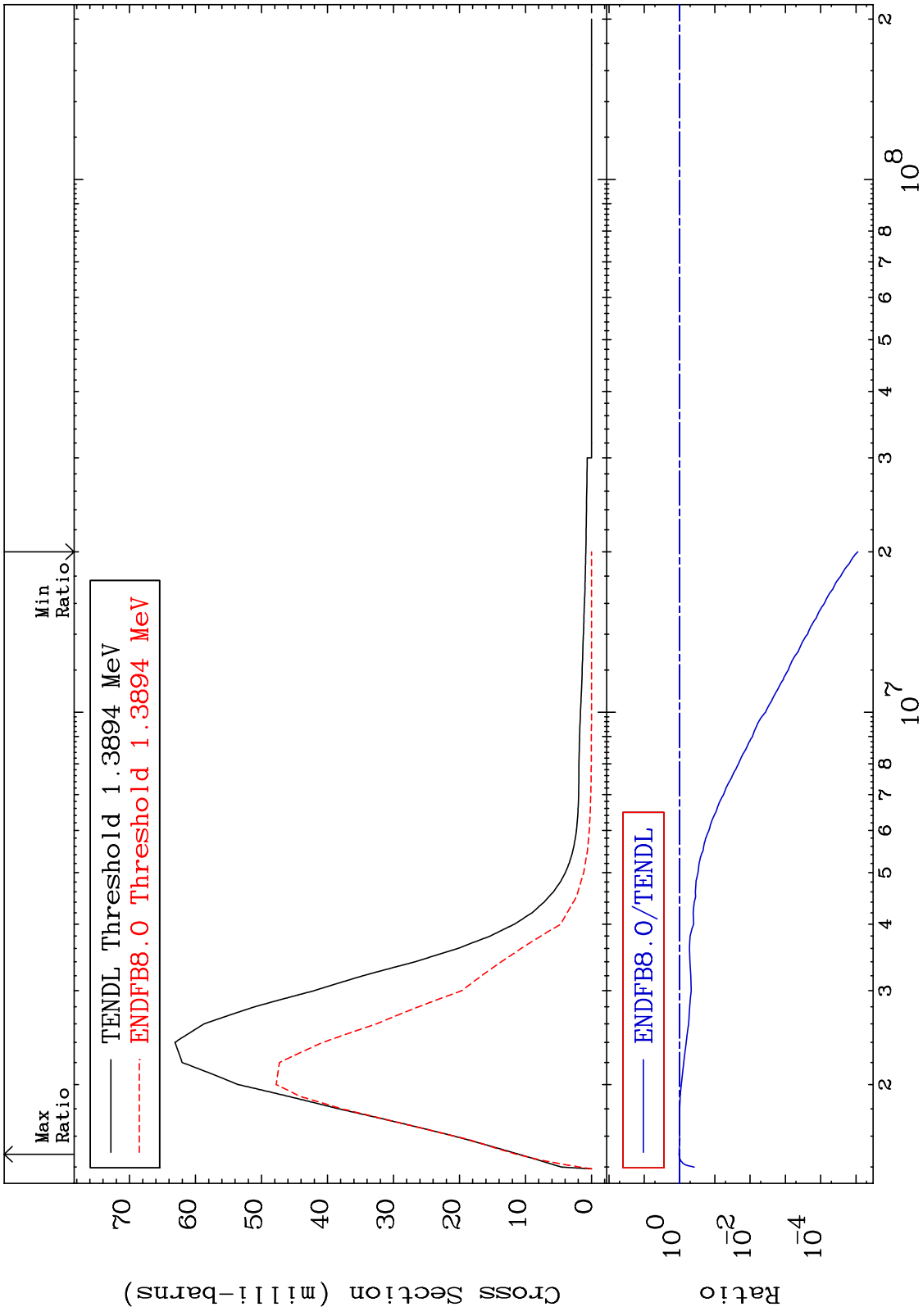
MAT 6443

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

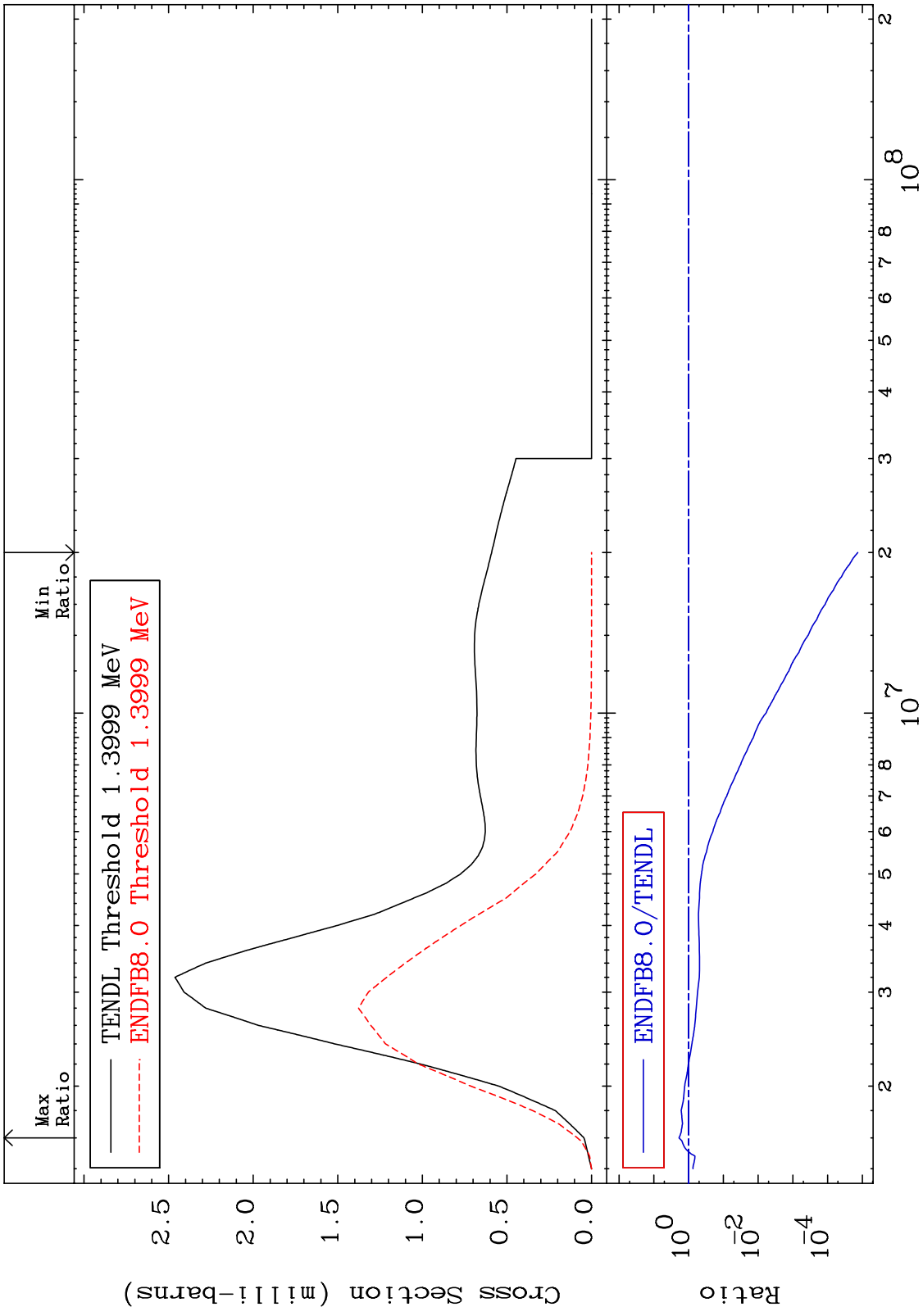
64-Gd-158  
-41.56 To 9999. %



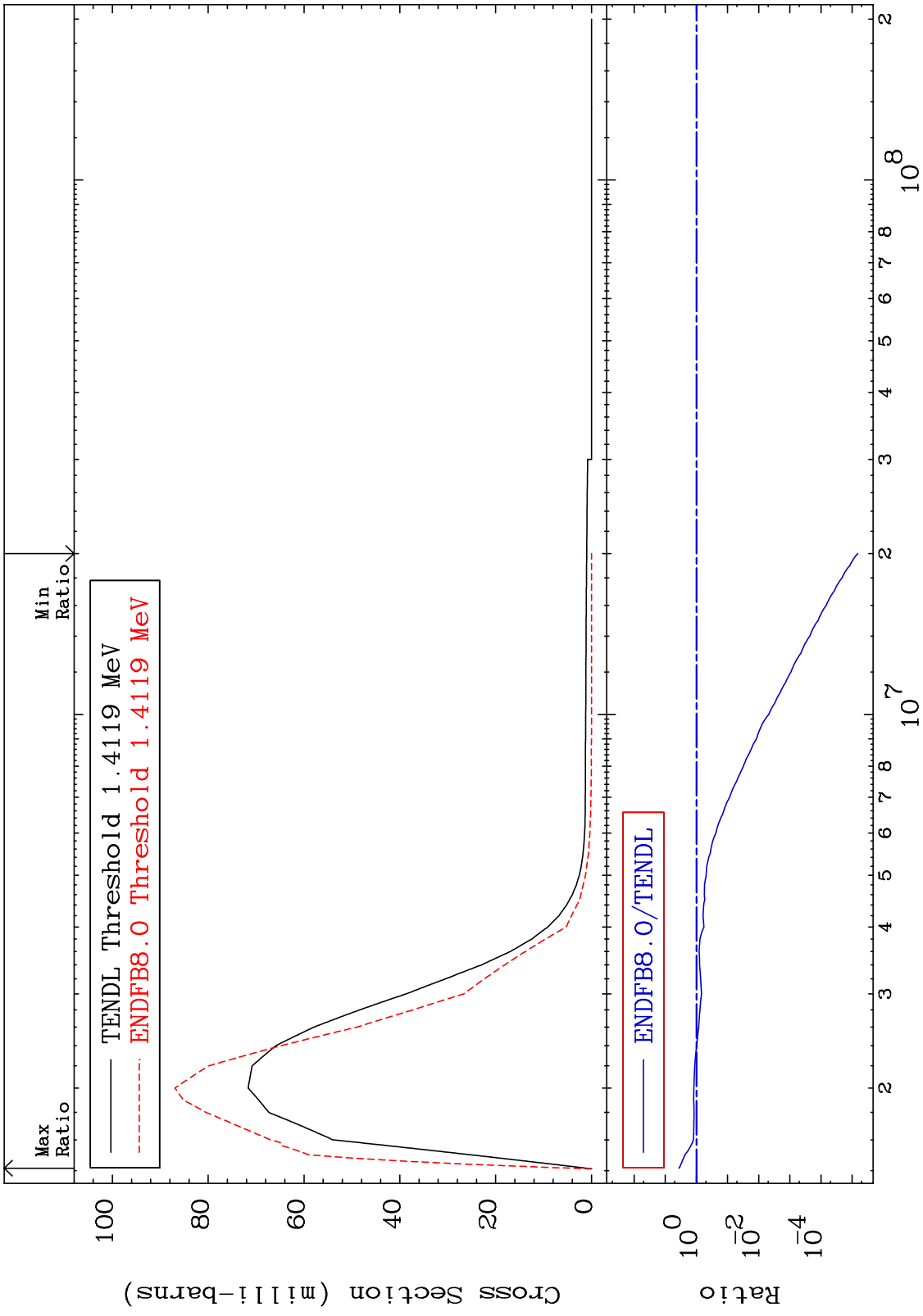
MAT 6443 MT= 68 (n,n') Level Cross Section 64-Gd-158 -100.0 To 3.256 %



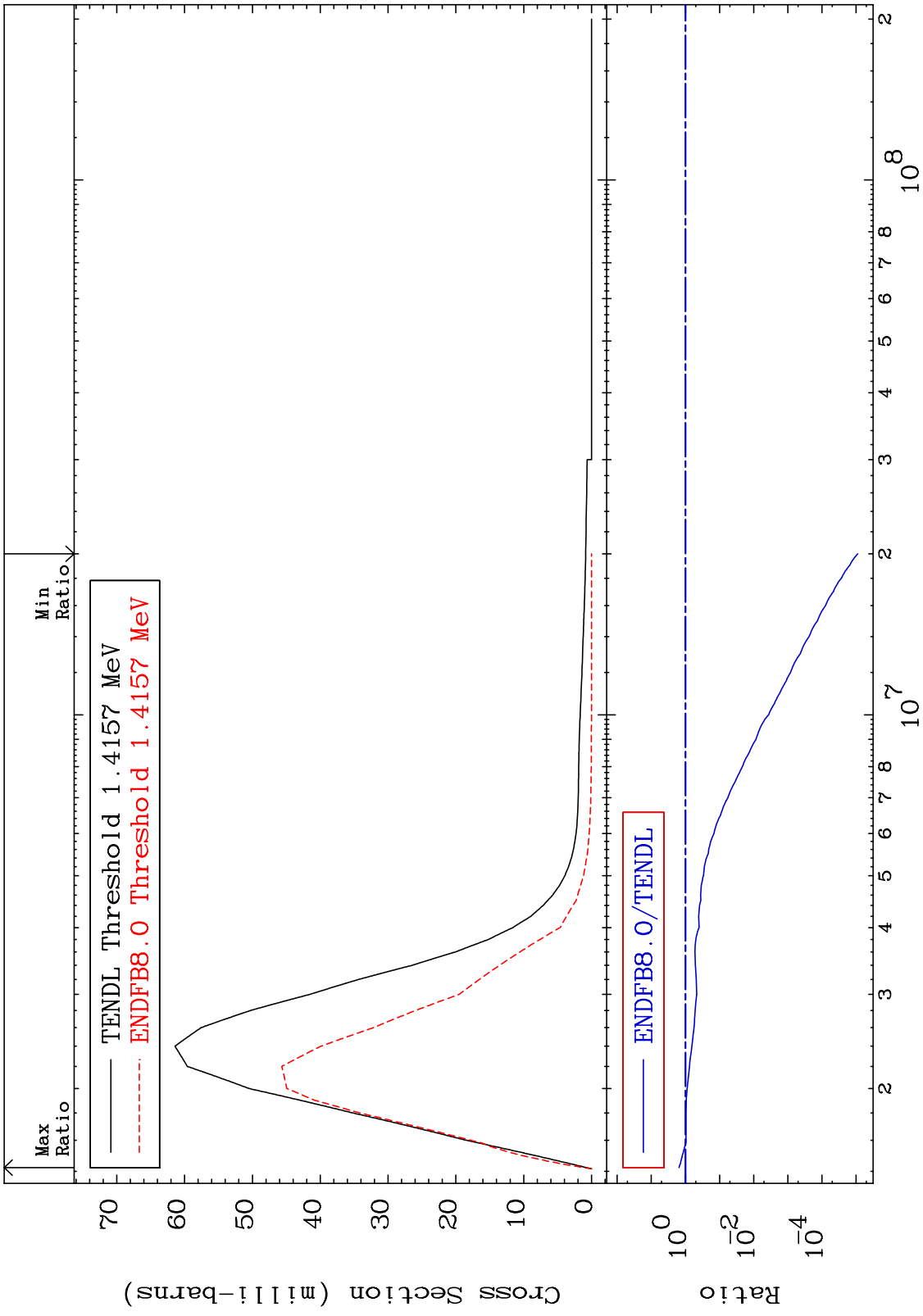
MAT 6443 MT= 69 (n,n') Level Cross Section 64-Gd-158 -100.0 To 88.12 %



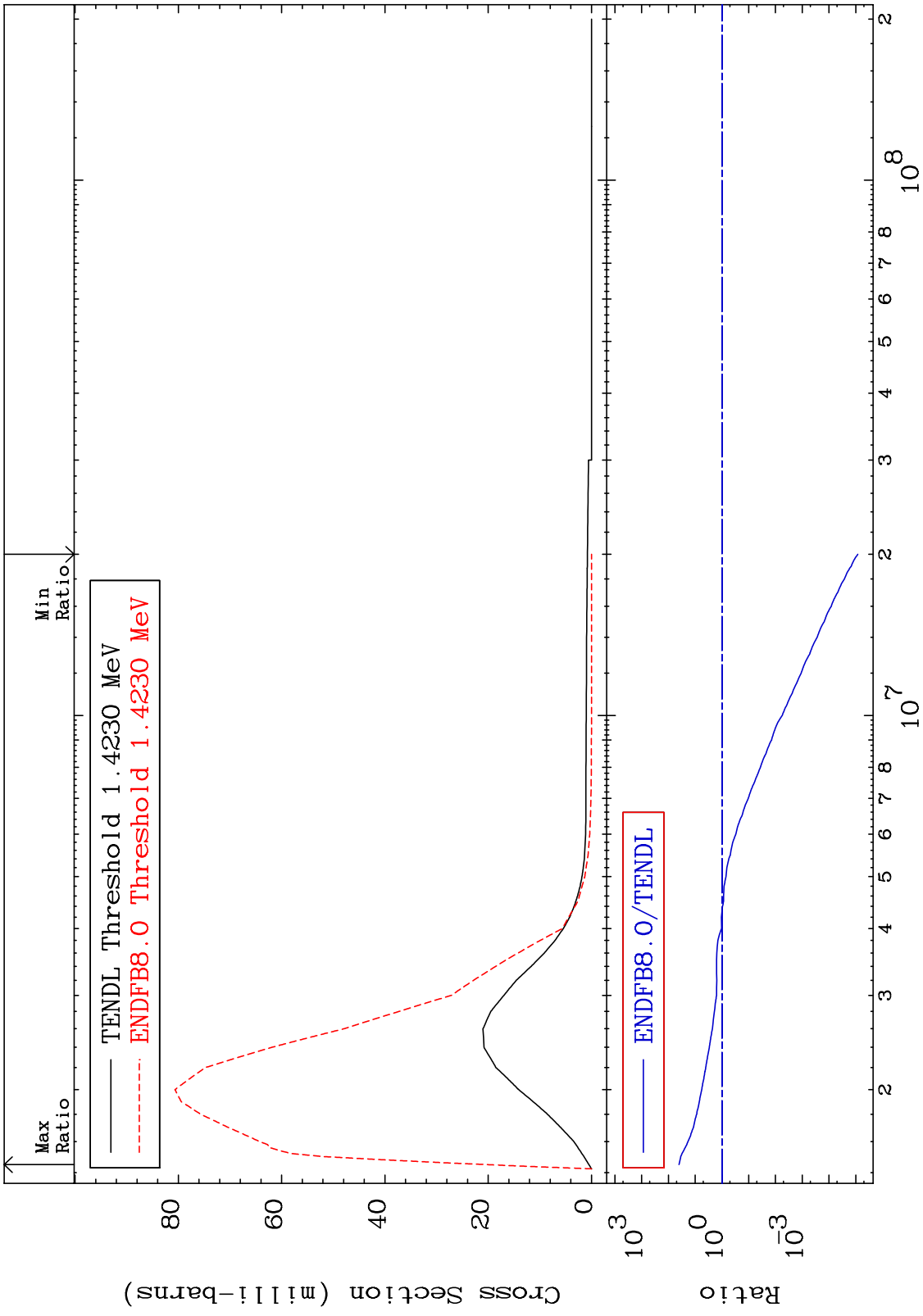
MAT 6443      MT= 70 (n,n') Level Cross Section      64-Gd-158  
 -100.0 To 261.6 %



MAT 6443 MT= 71 (n,n') Level Cross Section 64-Gd-158  
 -100.0 To 53.87 %

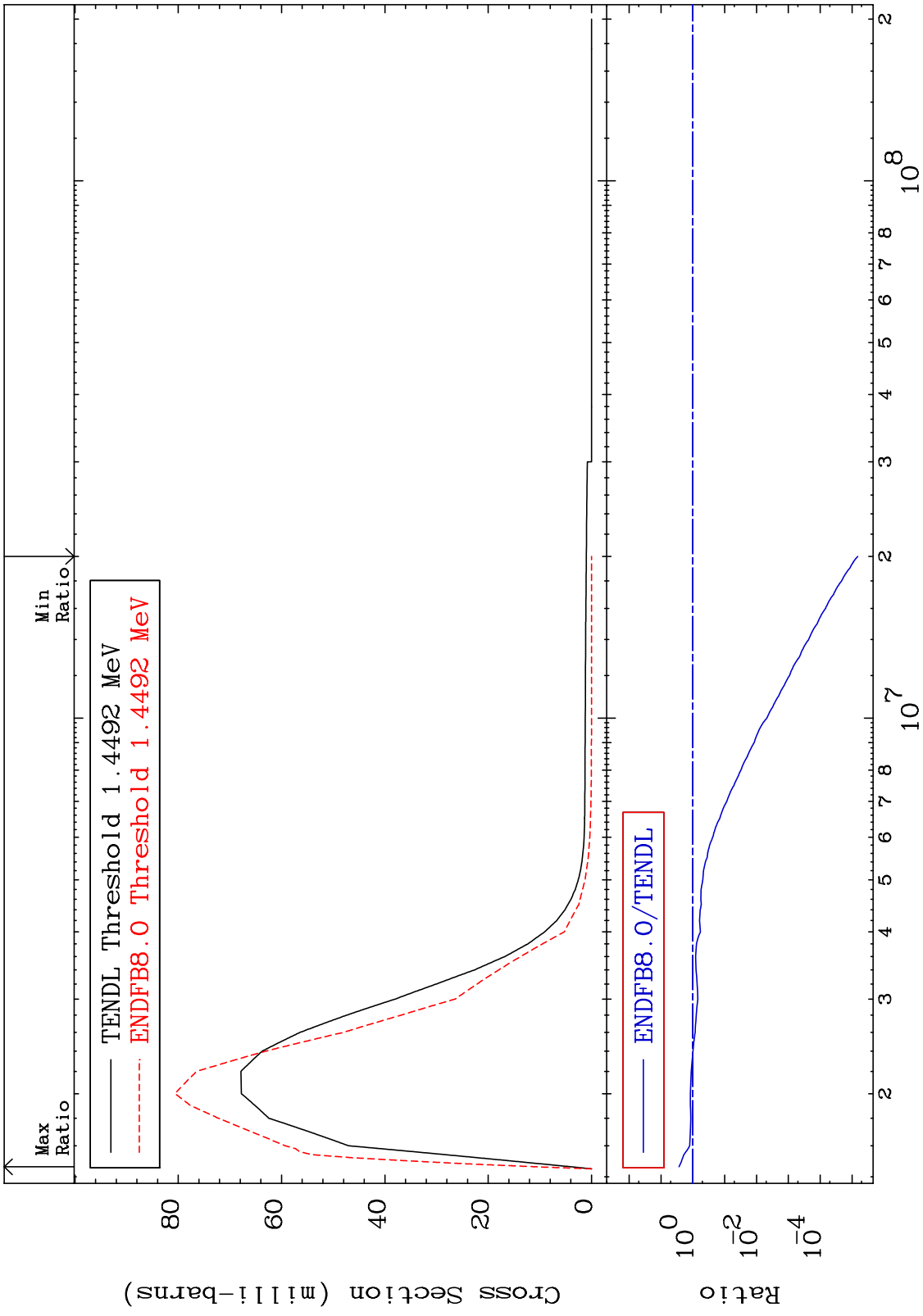


MAT 6443 MT= 72 (n,n') Level Cross Section 64-Gd-158 -100.0 To 3914. %





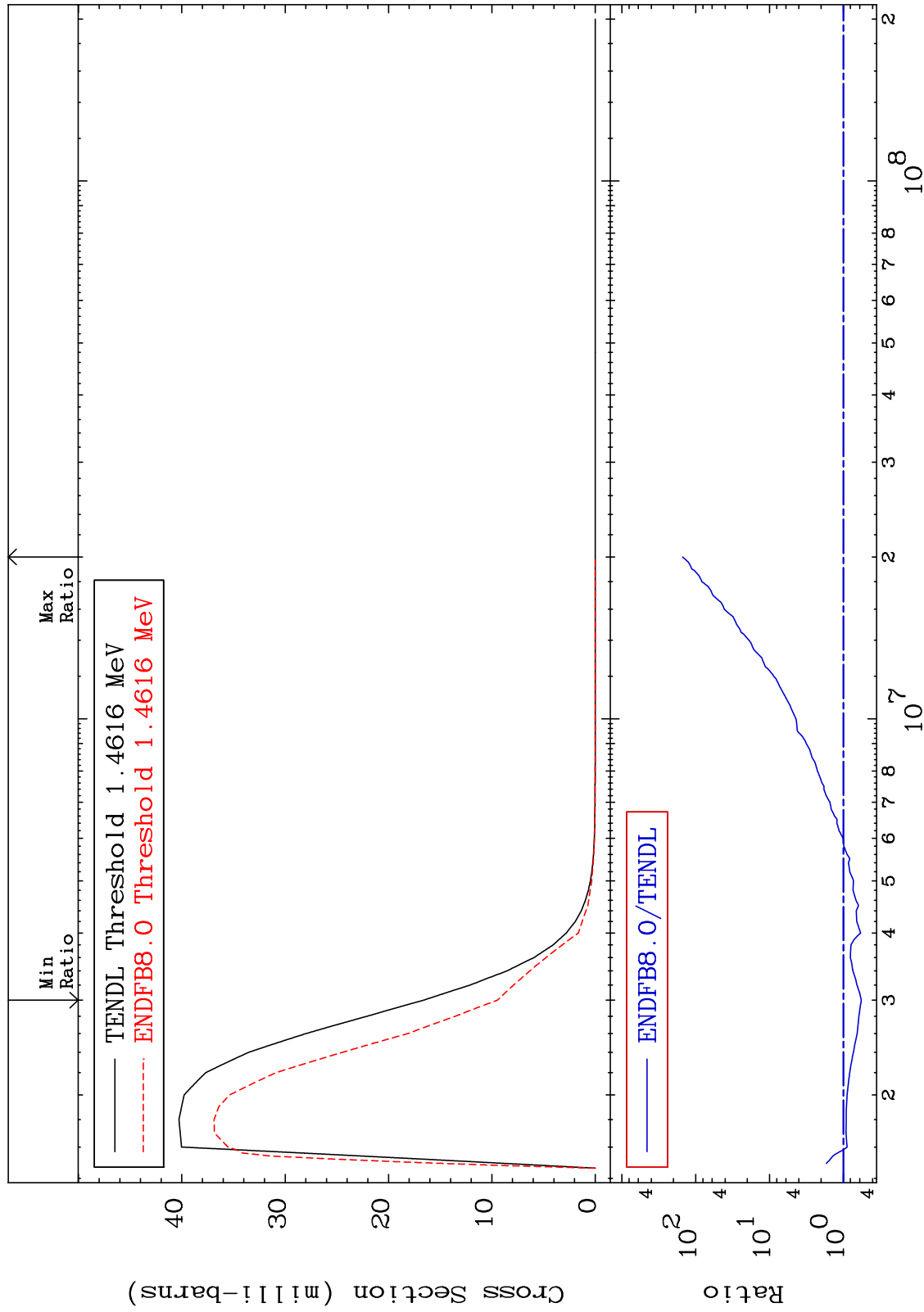
MAT 6443 MT= 73 (n,n') Level Cross Section 64-Gd-158  
 -100.0 To 171.0 %



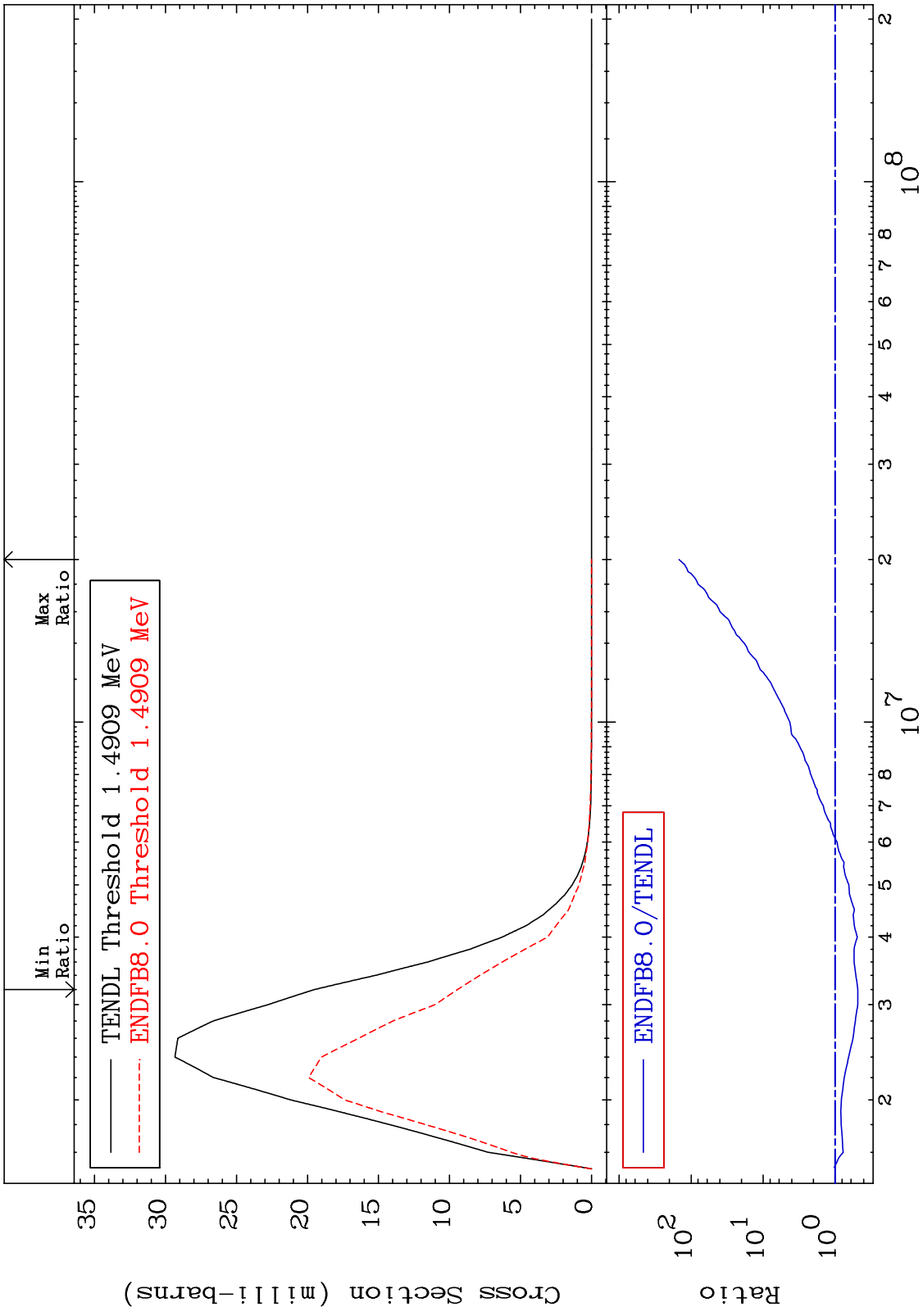
MAT 6443

MT= 74 (n,n') Level  
Cross Section

64-Gd-158  
-43.03 To 9999. %



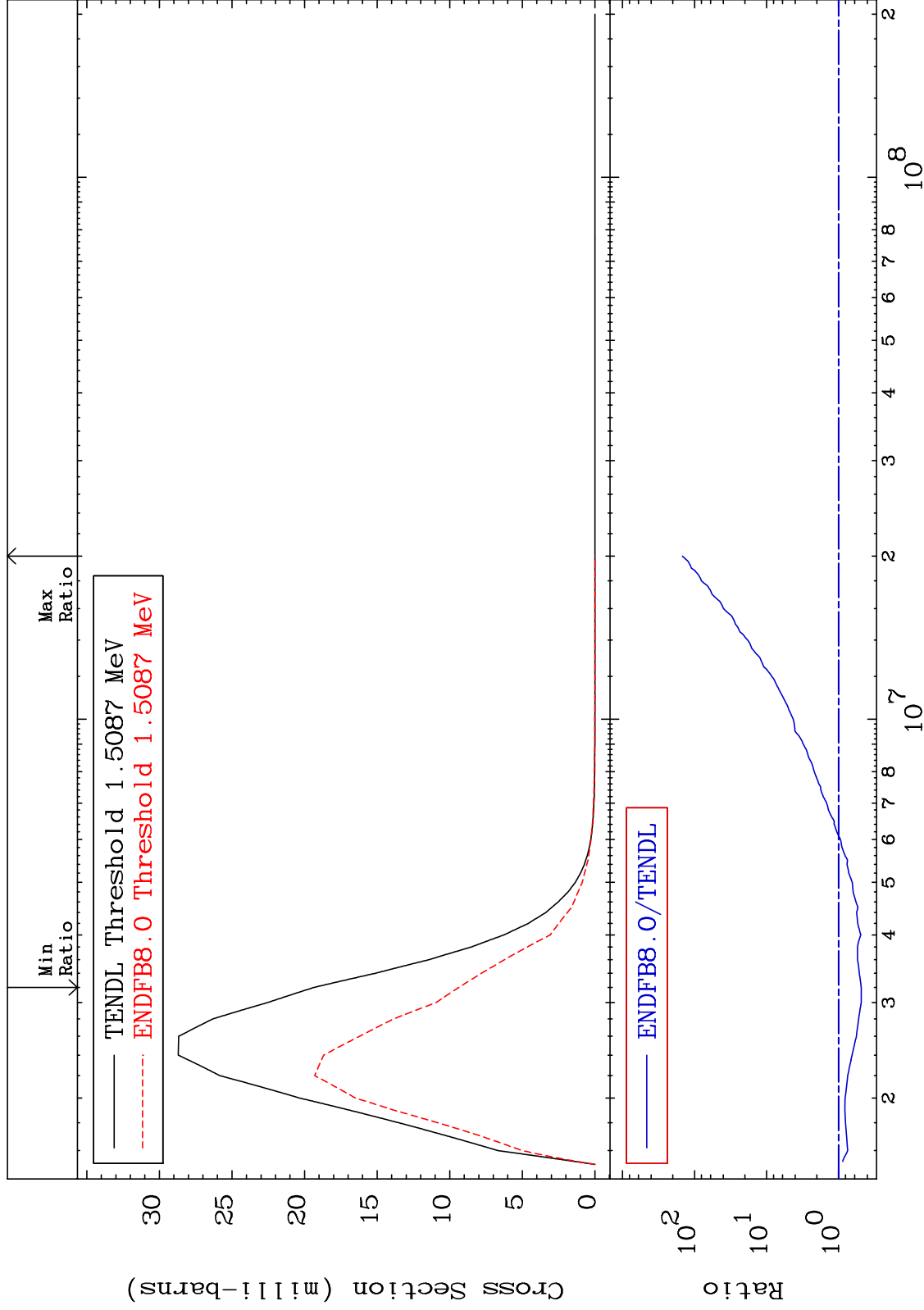
MAT 6443 MT= 75 (n,n') Level Cross Section 64-Gd-158  
 -51.65 To 9999. %



MAT 6443

MT= 76 (n,n') Level  
Cross Section

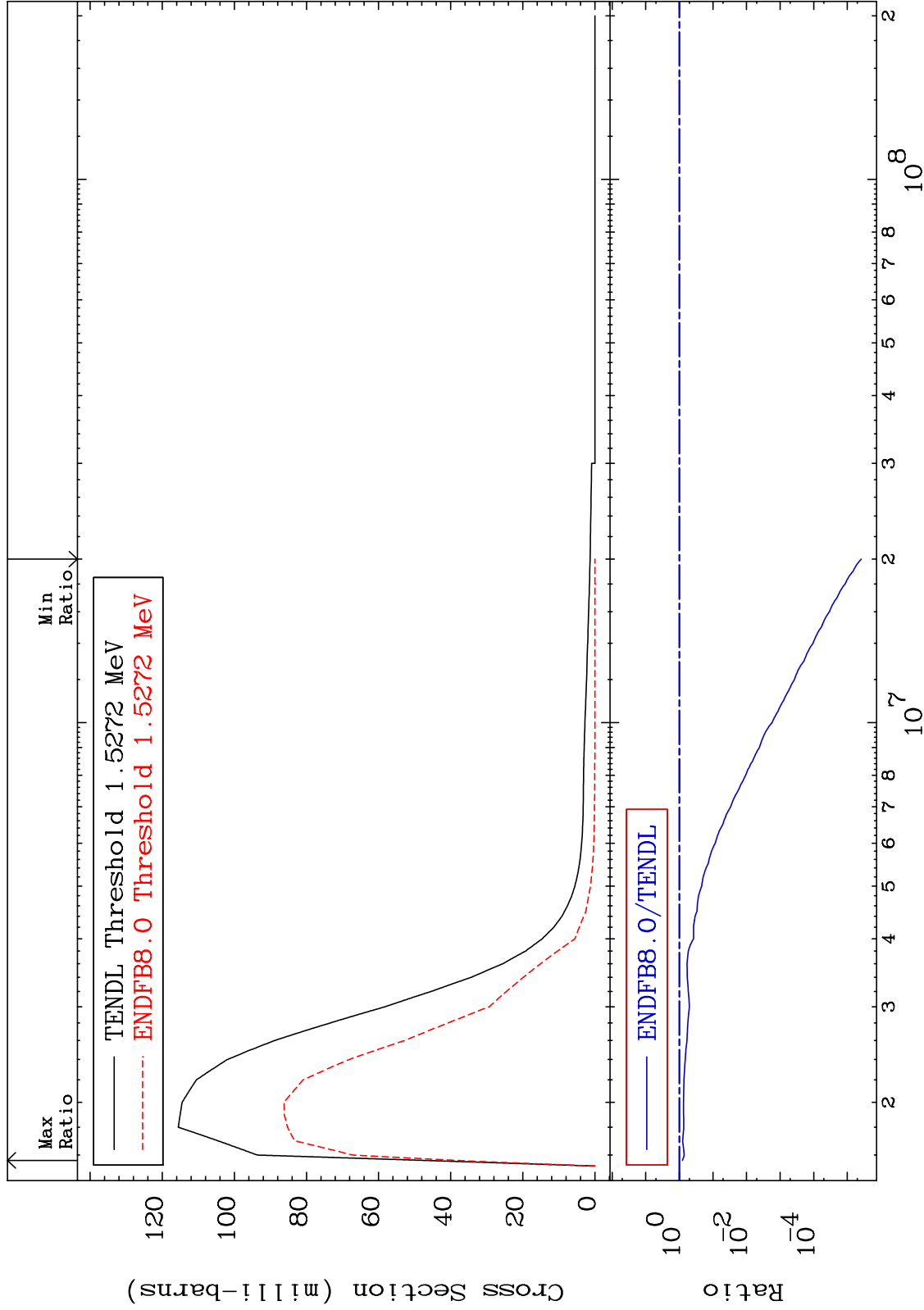
64-Gd-158  
-51.56 To 9999. %



MAT 6443

MT= 77 (n,n') Level  
Cross Section

64-Gd-158  
-100.0 To -19.31%

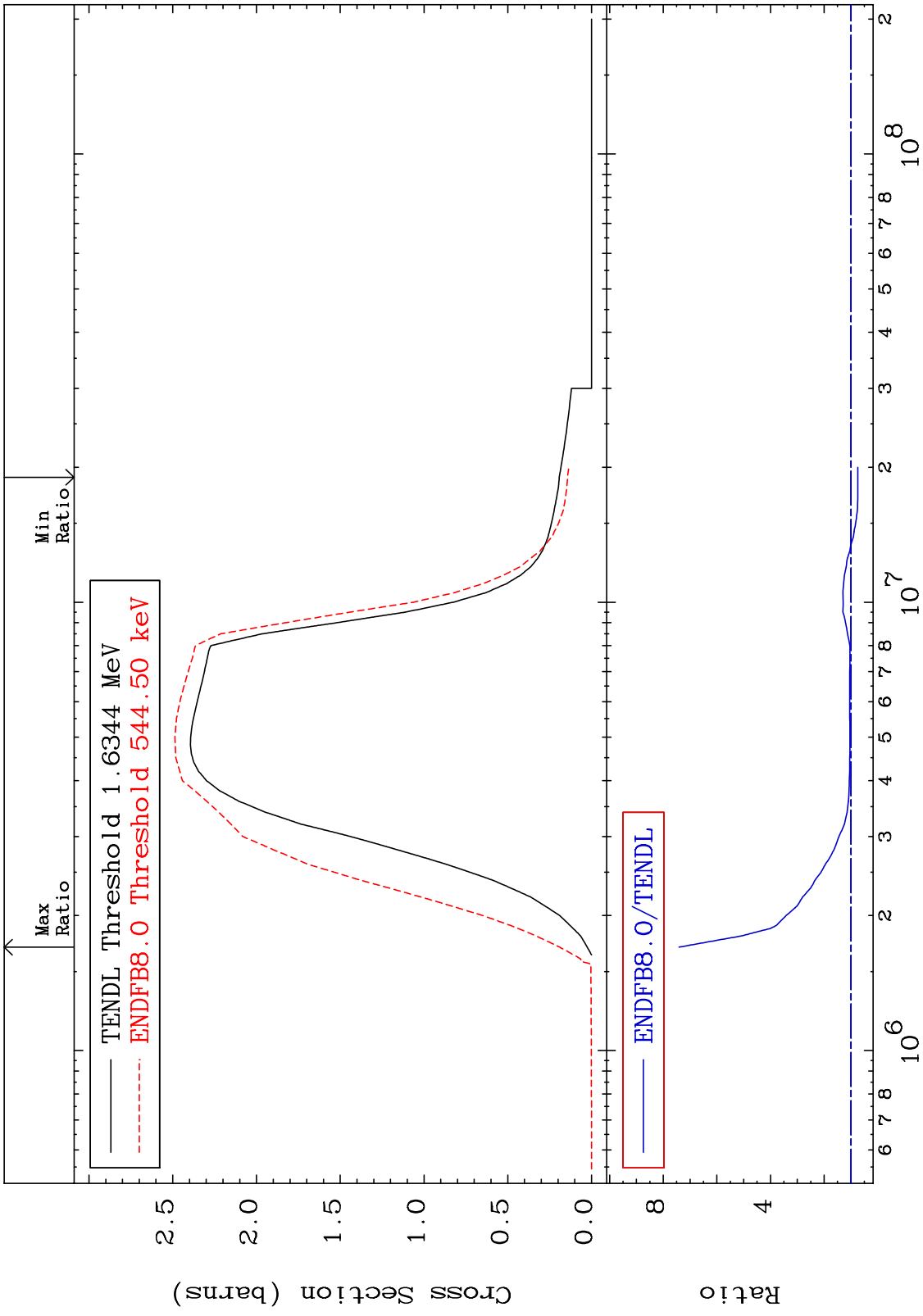


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Incident Energy (eV)

64-Gd-158

MAT 6443 (n, n') Continuum Cross Section 64-Gd-158 -25.77 To 641.1 %



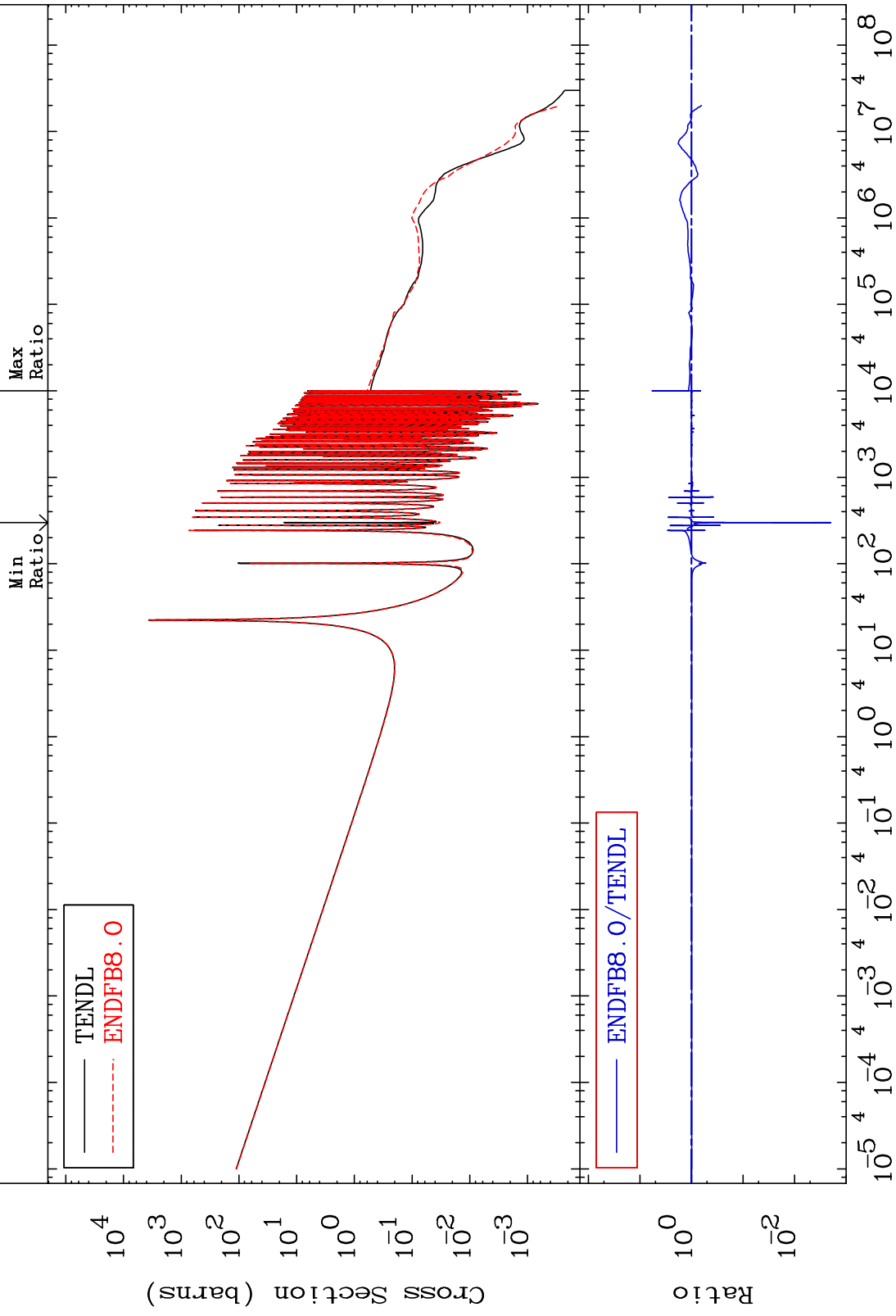
MAT 6443

(n,  $\gamma$ )

64-Gd-158

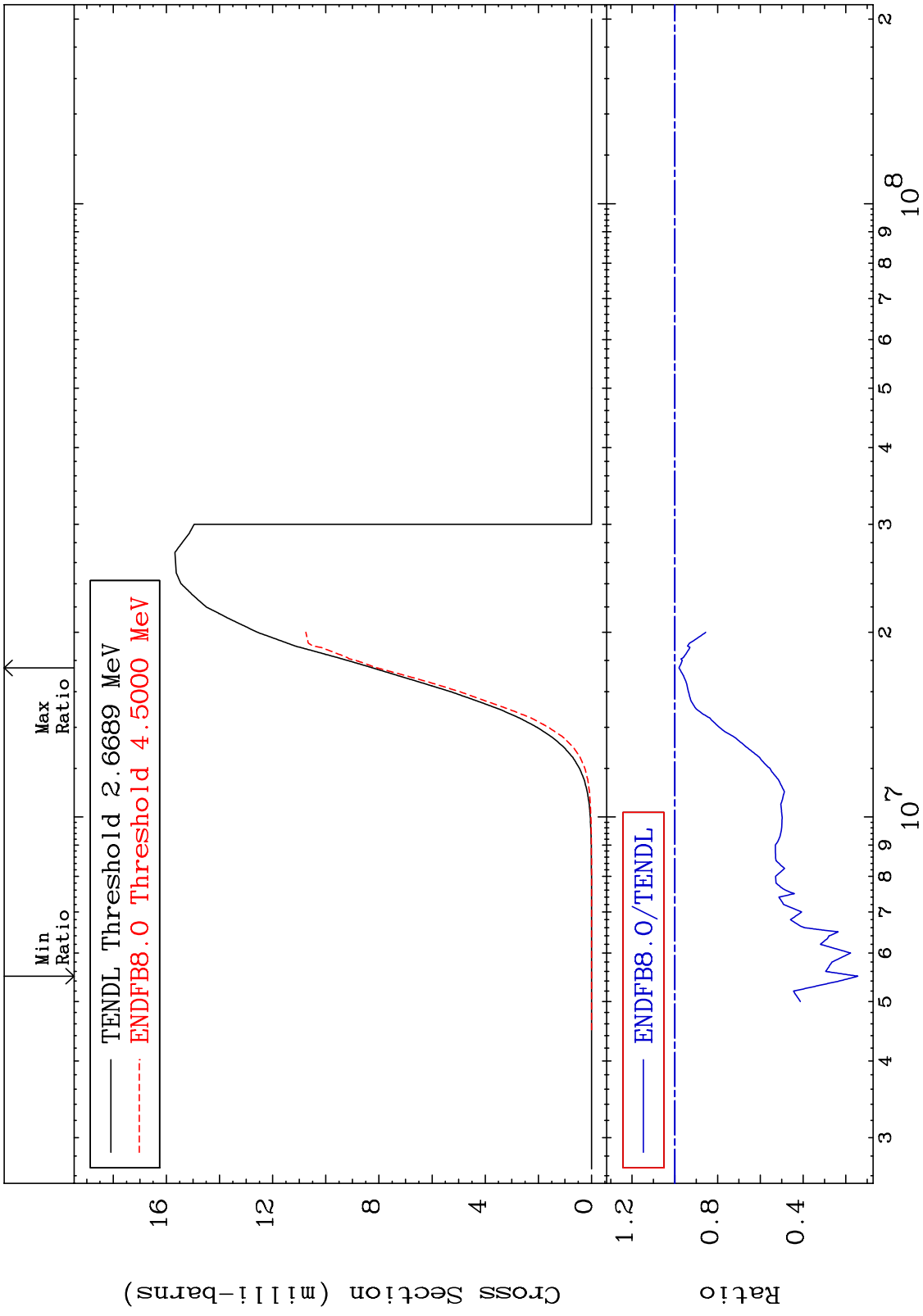
-99.80 To 477.1 %

Cross Section



MAT 6443 64-Gd-158  
-85.61 To -1.982%

(n,p)  
 Cross Section





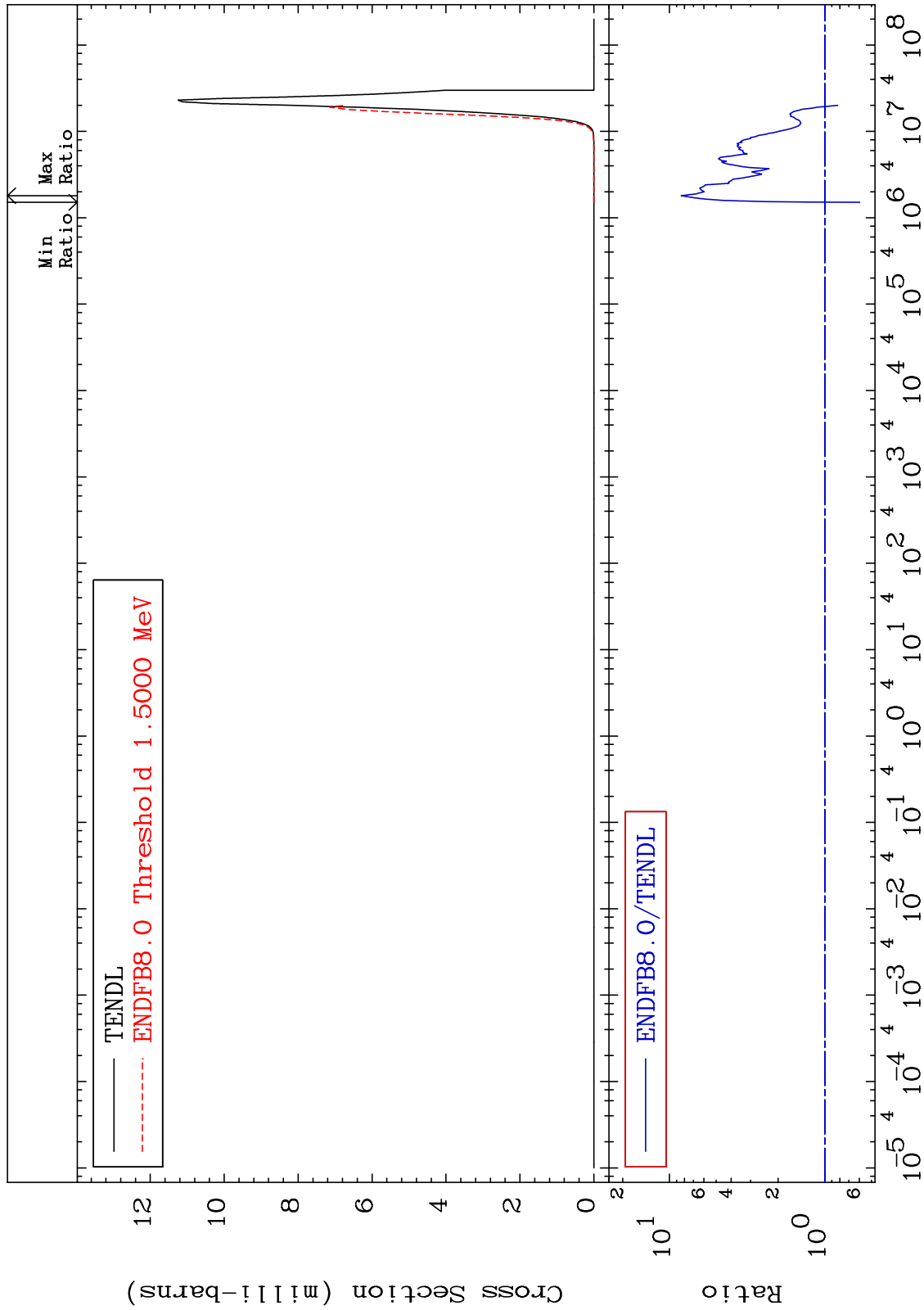
MAT 6443

(n,  $\alpha$ )

64-Gd-158

Cross Section

-40.51 To 739.4 %



40

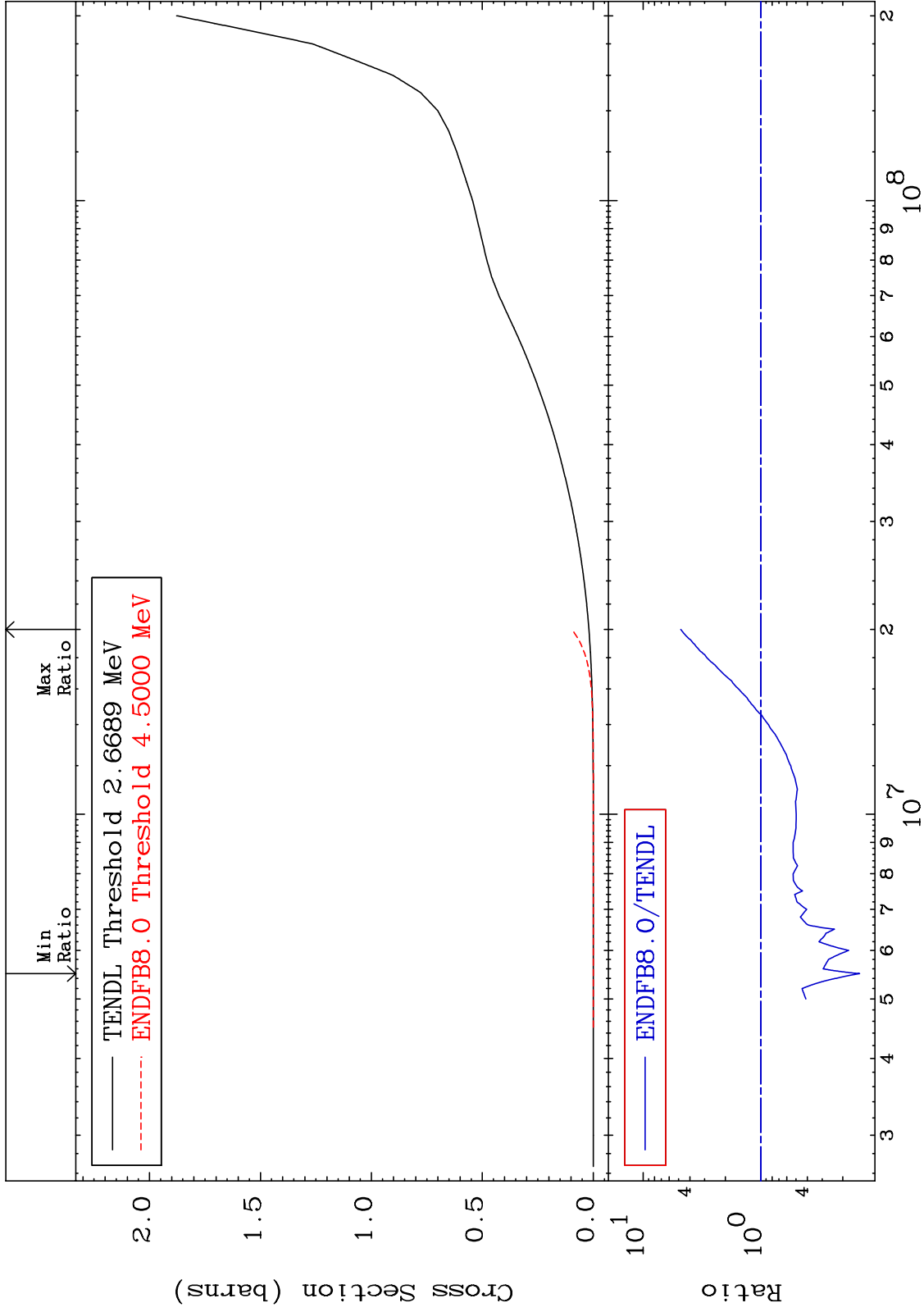
Incident Energy (eV)

64-Gd-158

MAT 6443

Hydrogen Production  
Cross Section

64-Gd-158  
-85.61 To 377.9 %



41

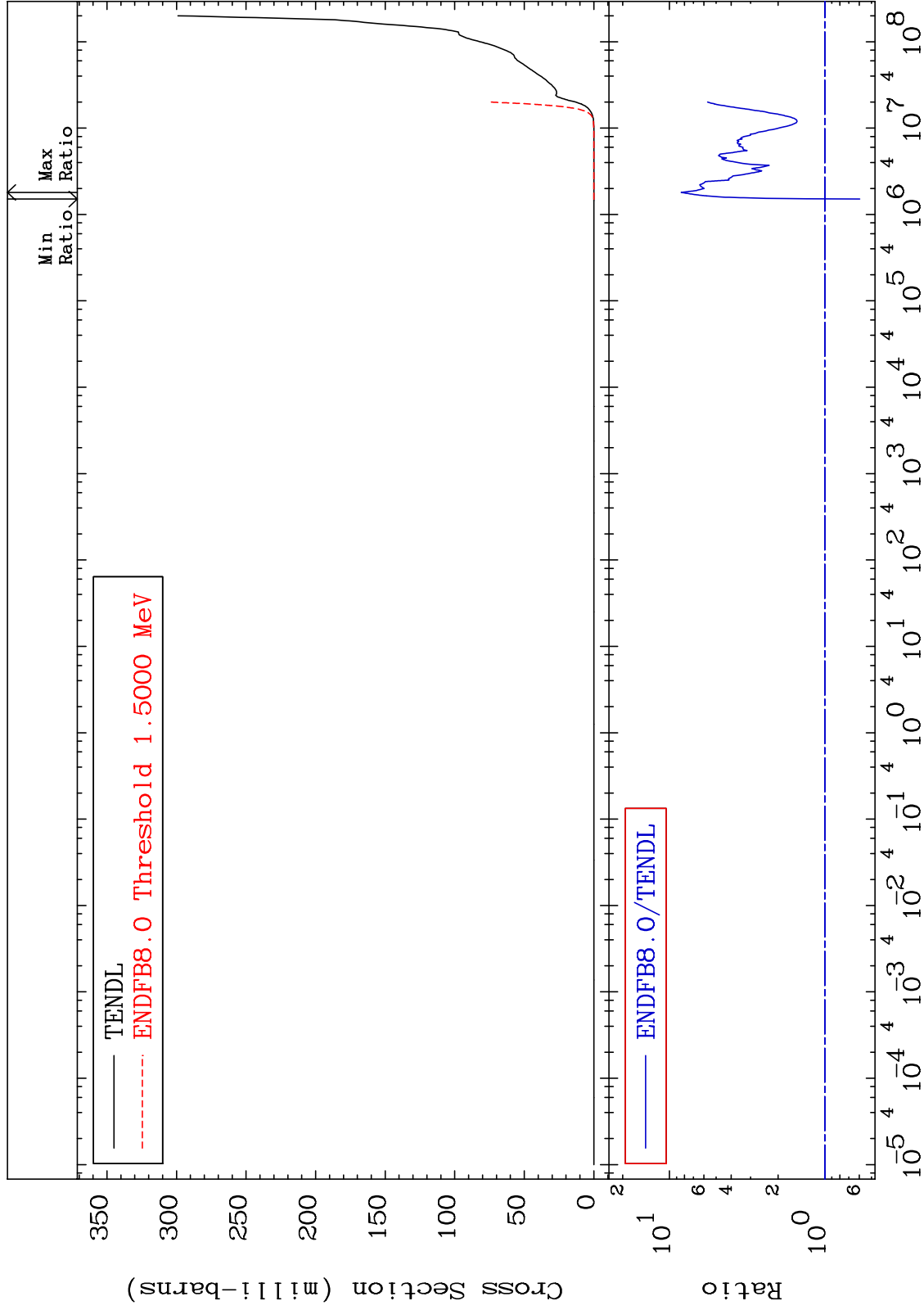
Incident Energy (eV)

64-Gd-158

MAT 6443

He-4 Production  
Cross Section

64-Gd-158  
-40.51 To 739.4 %

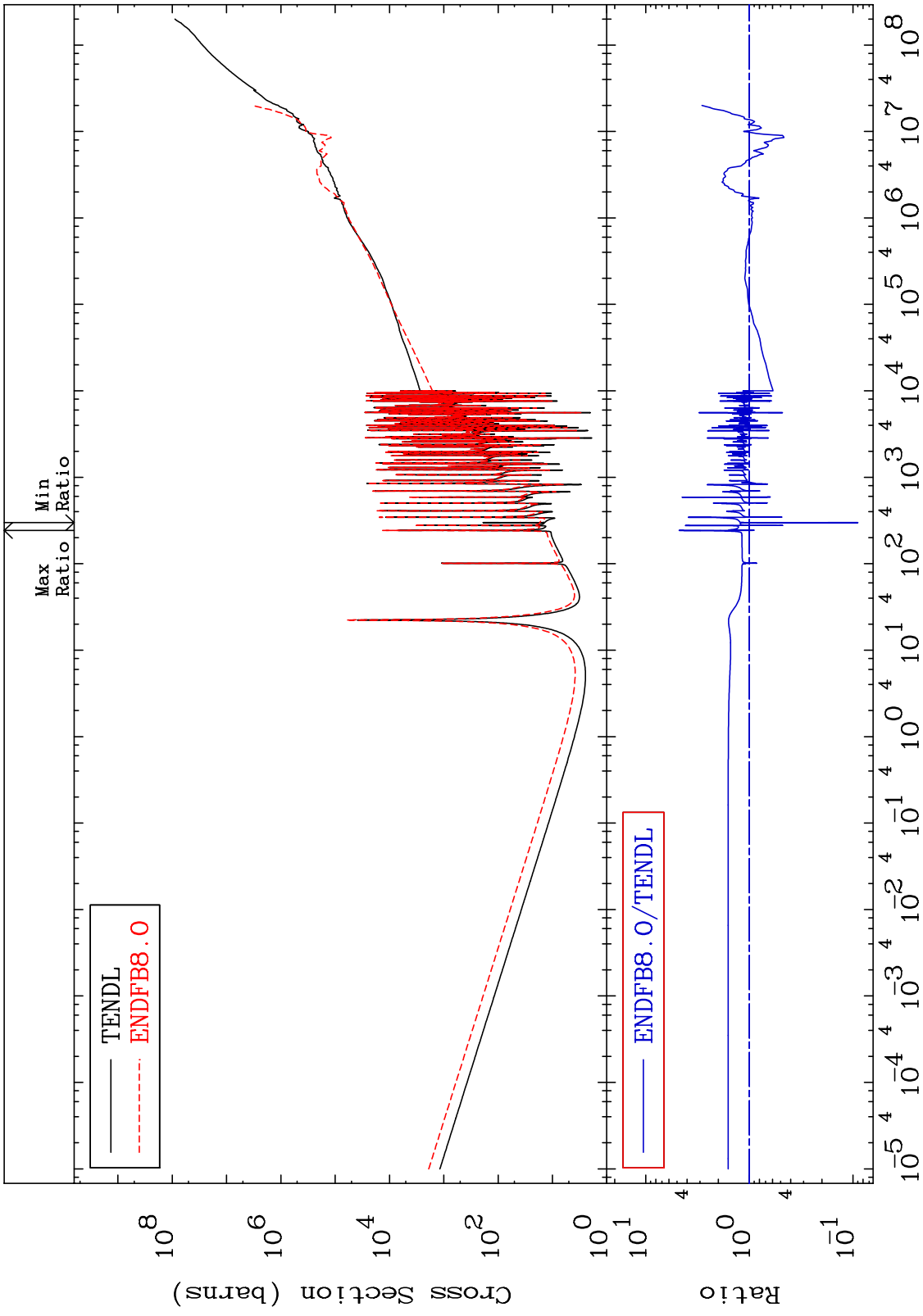


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Incident Energy (eV)

64-Gd-158

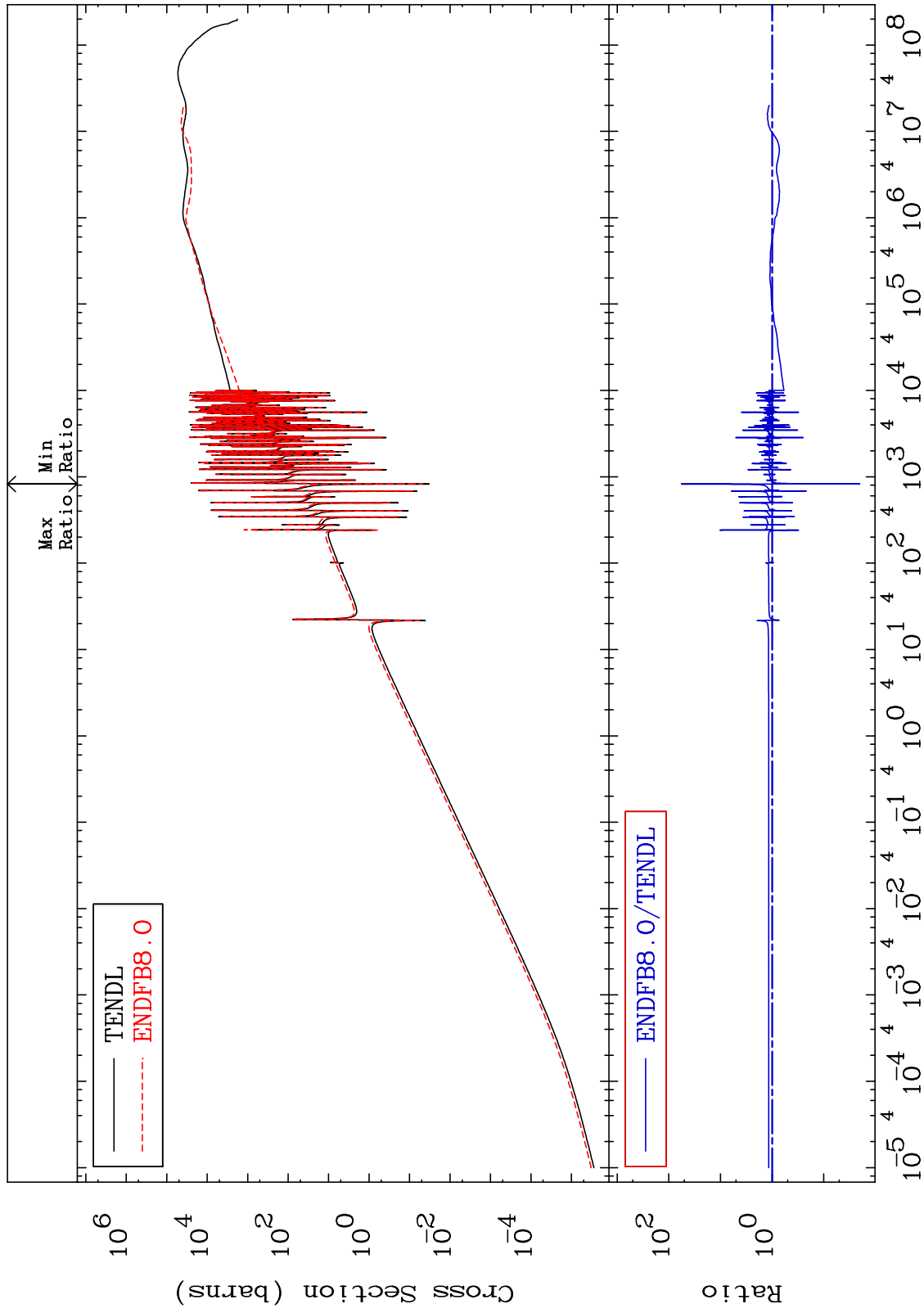
MAT 6443      Kerma total (eV-barns)      64-Gd-158  
 Cross Section      -91.01 To 378.1 %



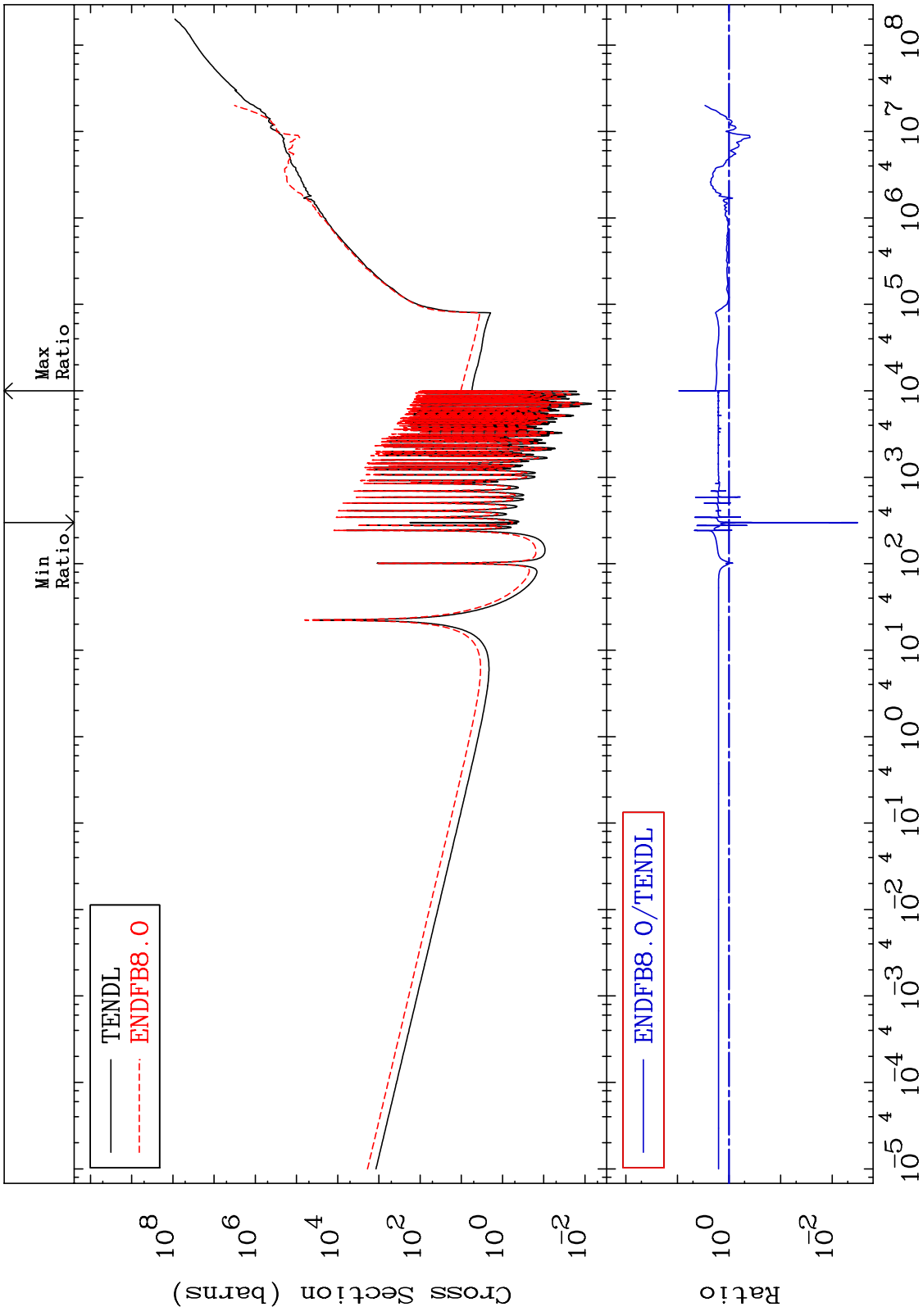
MAT 6443

Kerma elastic  
Cross Section

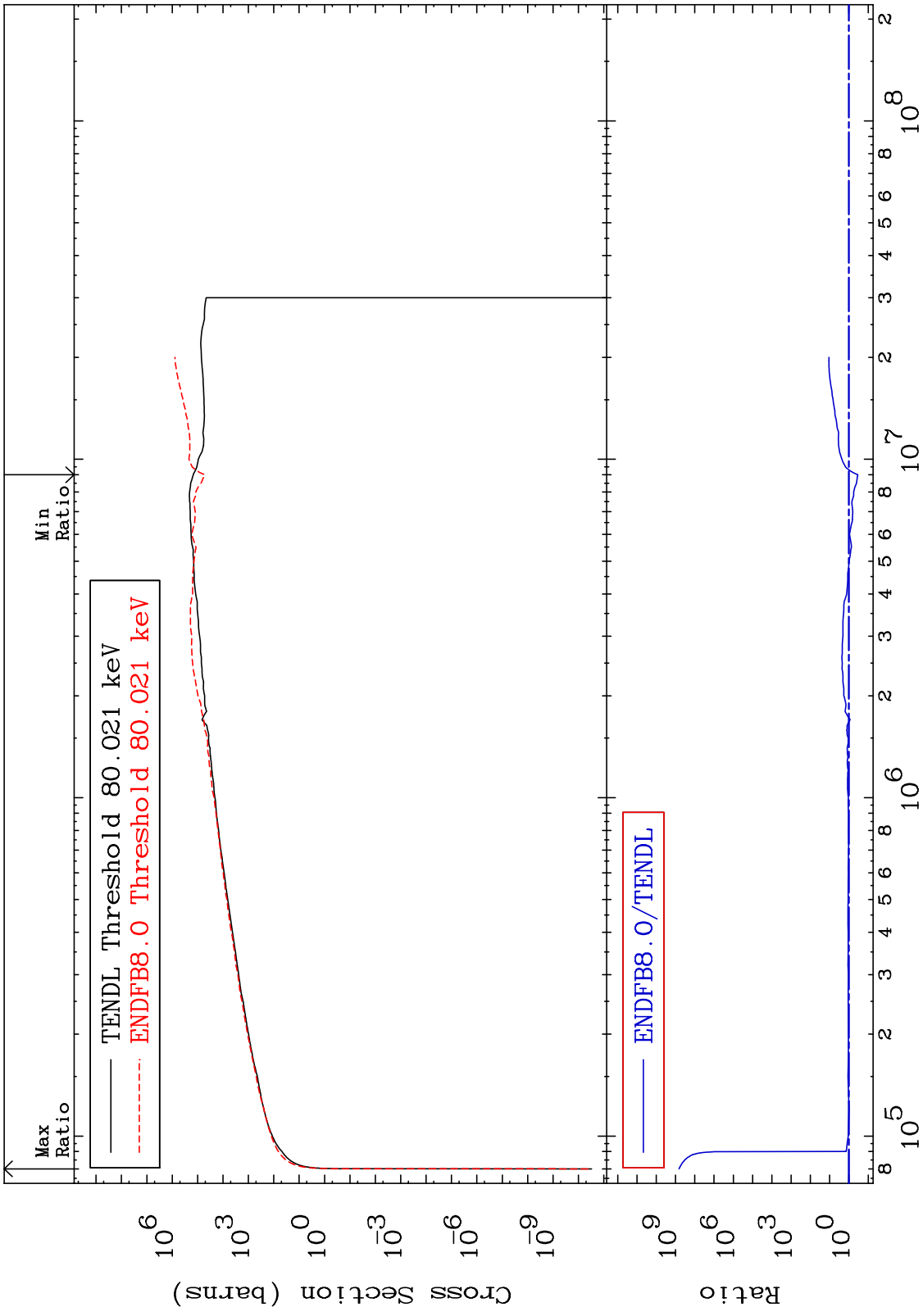
64-Gd-158  
-97.99 To 5639. %



MAT 6443      Kerma non-elastic (all but mt2)      64-Gd-158  
 Cross Section      -99.68 To 832.4 %



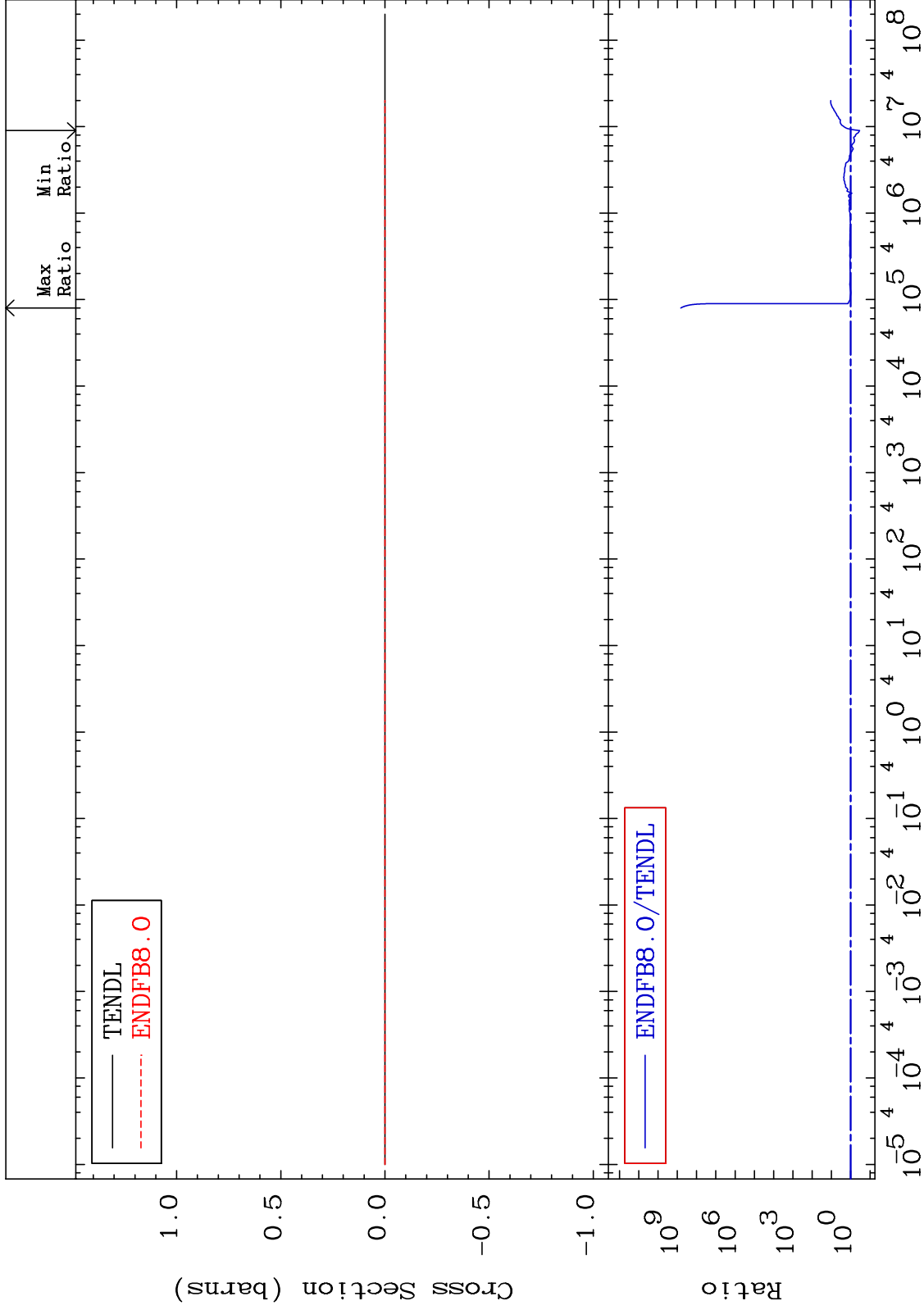
MAT 6443 Kerma inelastic (mt51-91) 64-Gd-158  
 Cross Section -65.51 To 9999. %



MAT 6443

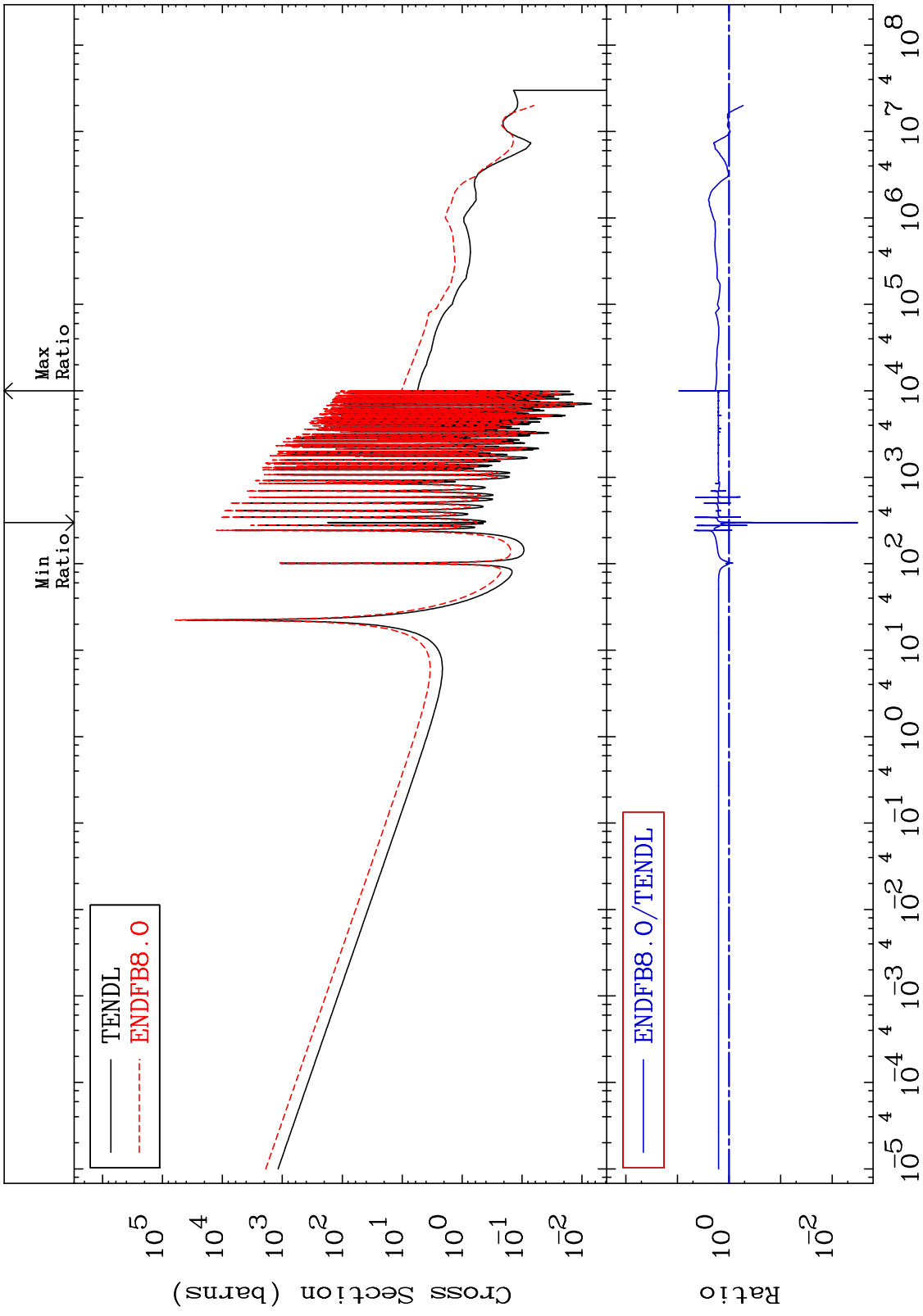
Kerma fission (mt18 or mt19-20-21-38)  
Cross Section

64-Gd-158  
-65.51 To 9999. %





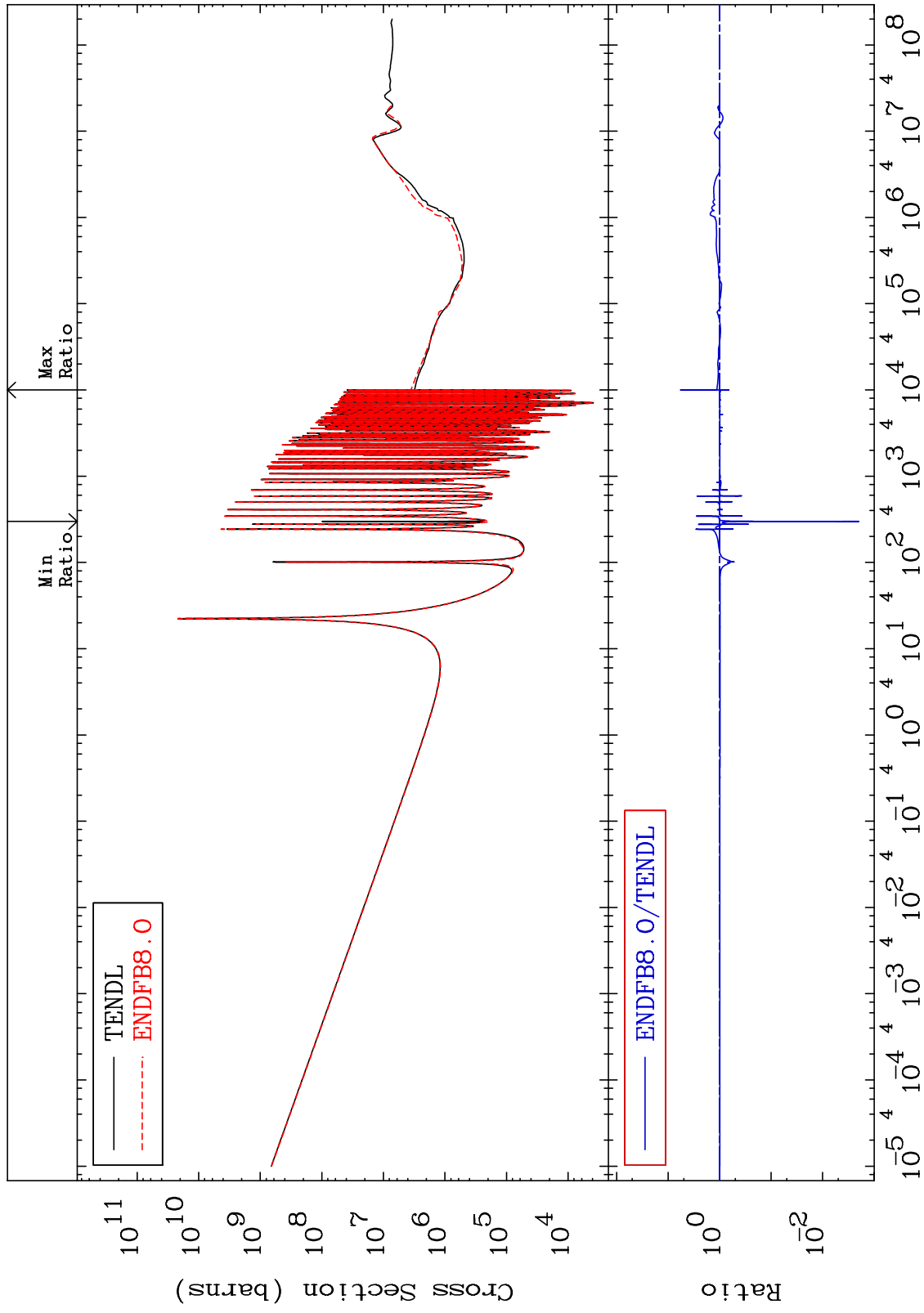
MAT 6443      Kerma capture (mt102)      64-Gd-158  
 Cross Section      -99.68 To 832.4 %



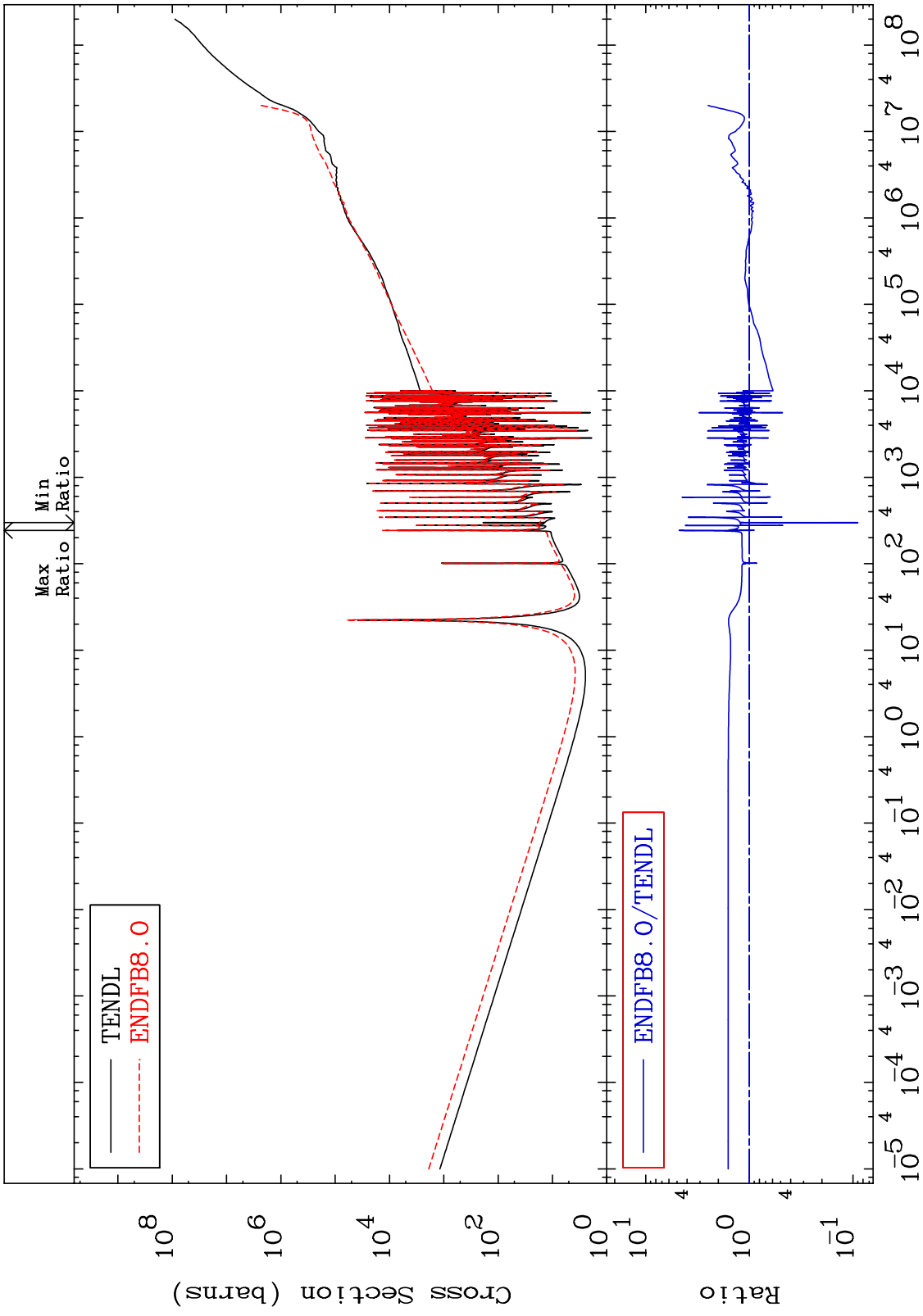
MAT 6443

Total photon (eV-barns)  
Cross Section

64-Gd-158  
-99.80 To 474.2 %

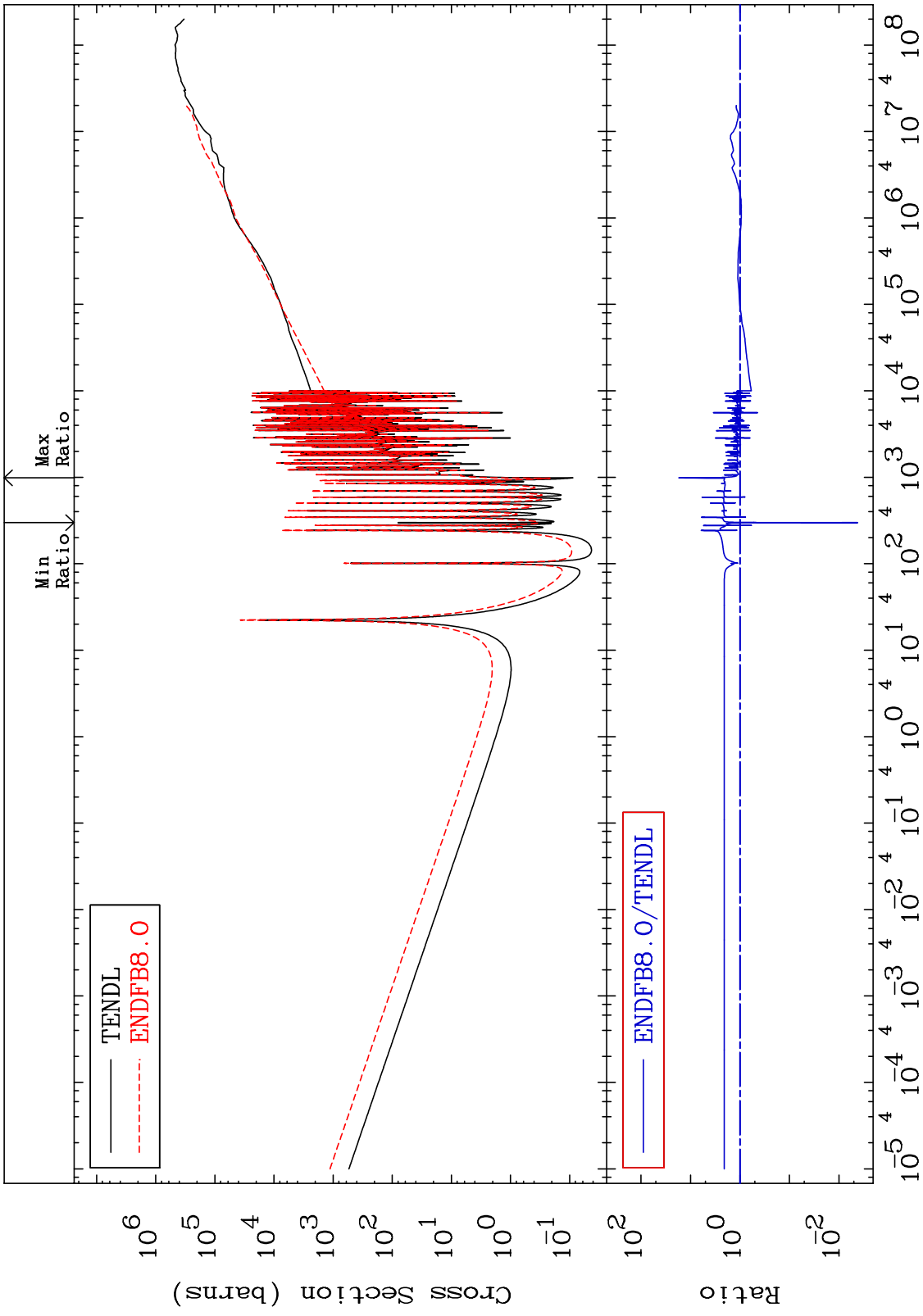


MAT 6443      Total kinematic kerma (high limit)      64-Gd-158  
 Cross Section      -91.01 To 378.1 %

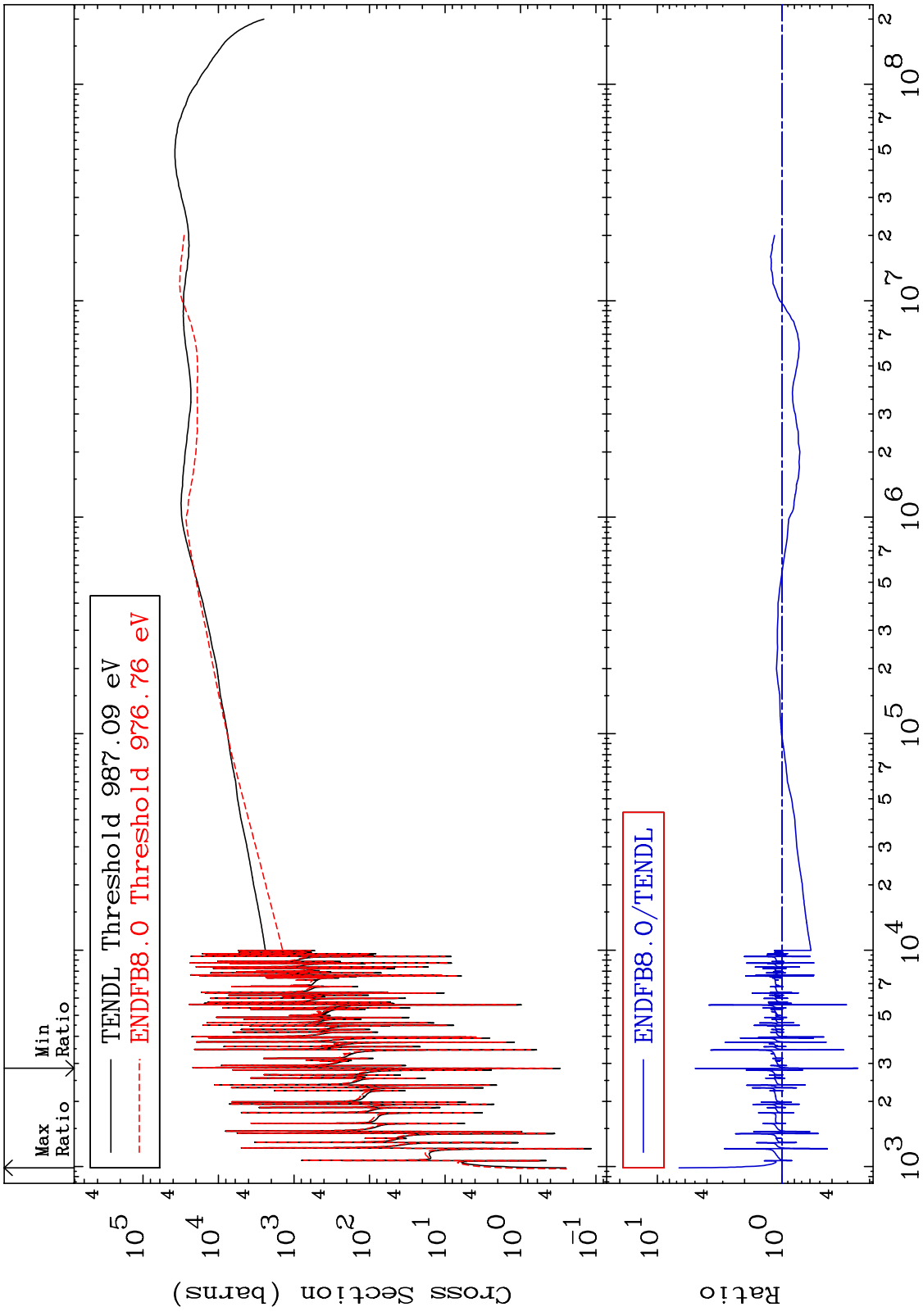


50      Incident Energy (eV)      64-Gd-158

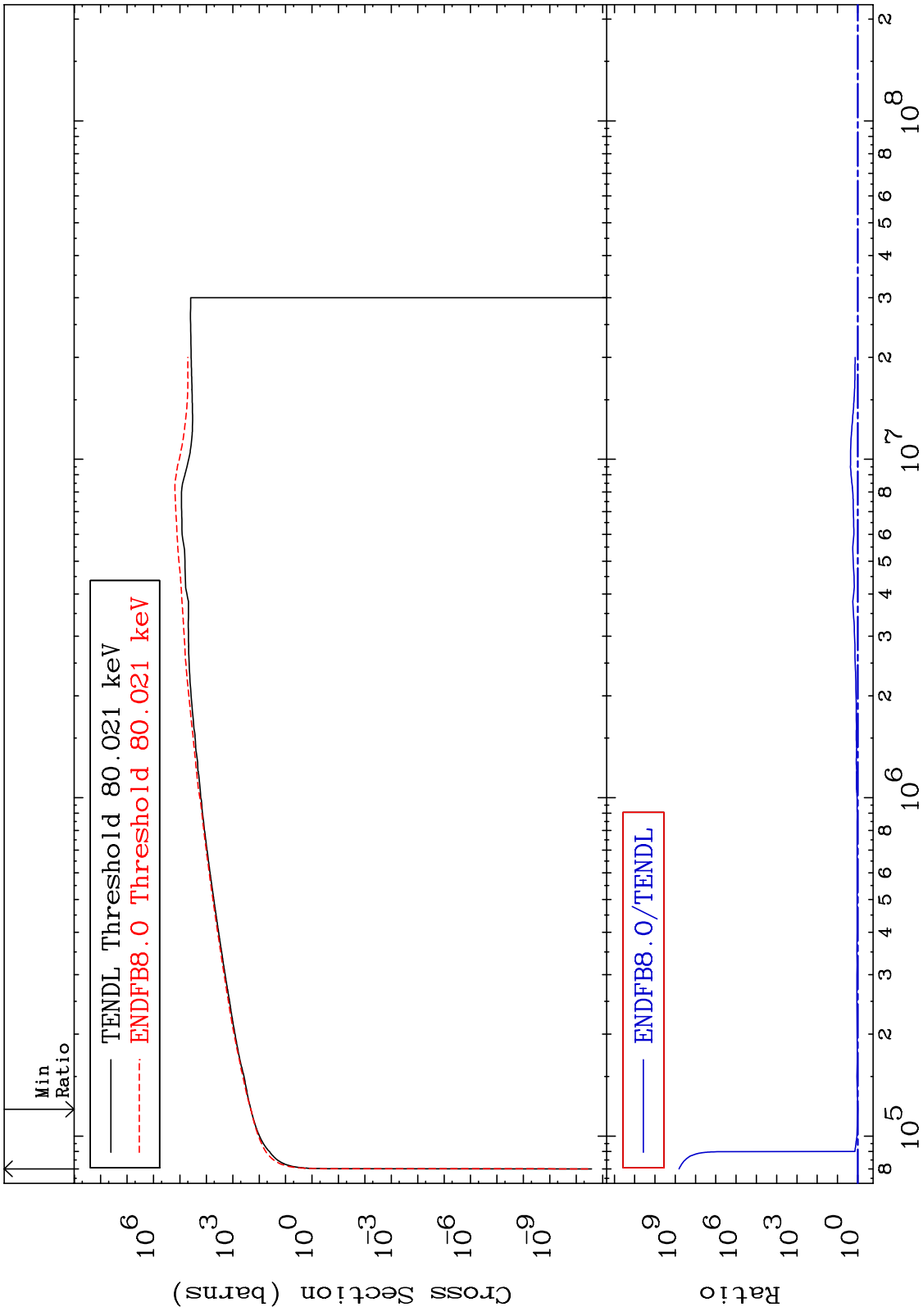
MAT 6443      Dpa total (eV-barns)      64-Gd-158  
 Cross Section      -99.59 To 1604. %



MAT 6443      Dpa elastic (mt2)      64-Gd-158  
 Cross Section      -75.19 To 569.9 %



MAT 6443      Dpa inelastic (mt51-91)      64-Gd-158  
 Cross Section      -0.666 To 9999. %



MAT 6443      Dpa disappearance (mt102 -120)      64-Gd-158  
 Cross Section      -99.59 To 1107. %

