

Program Complot
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

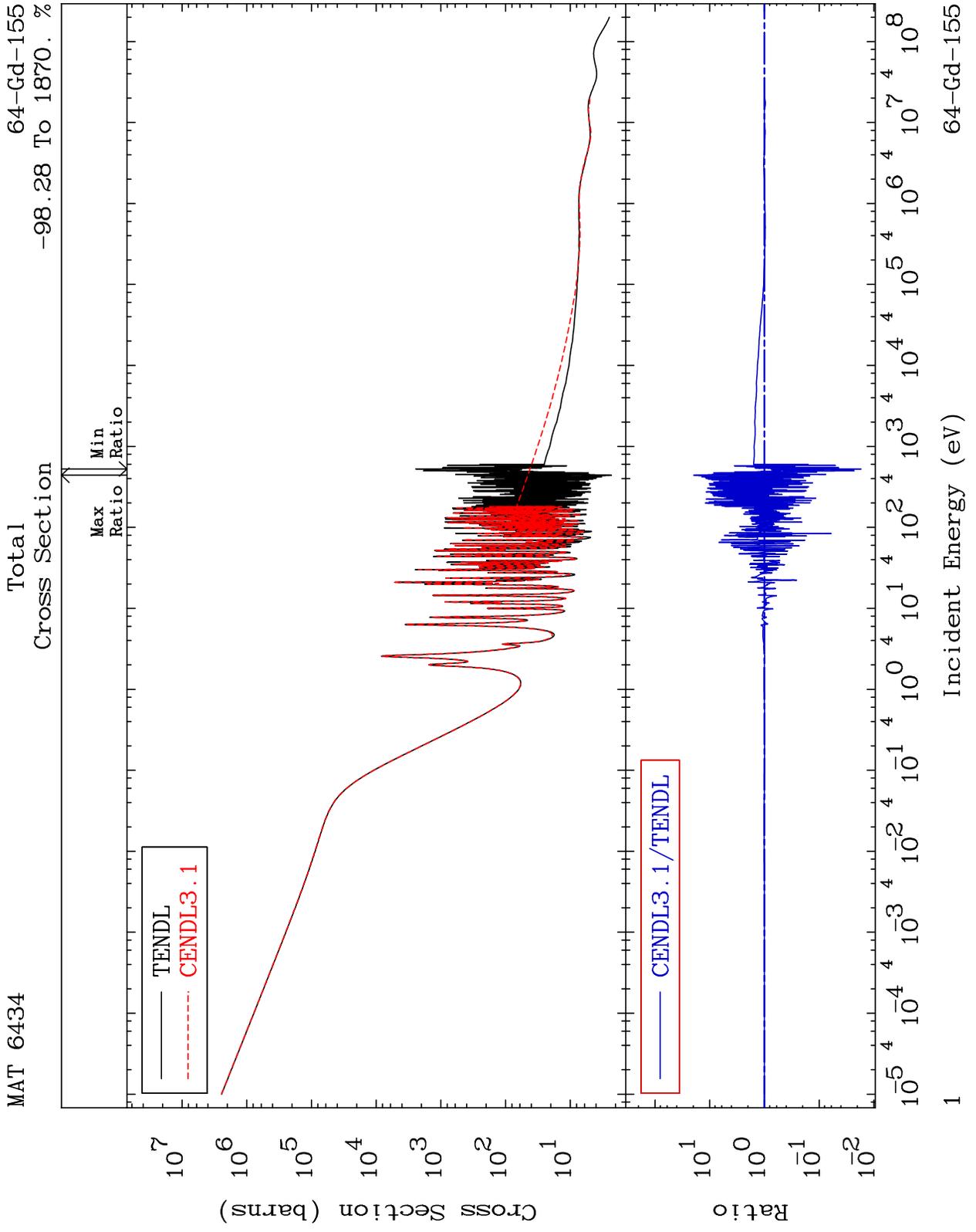
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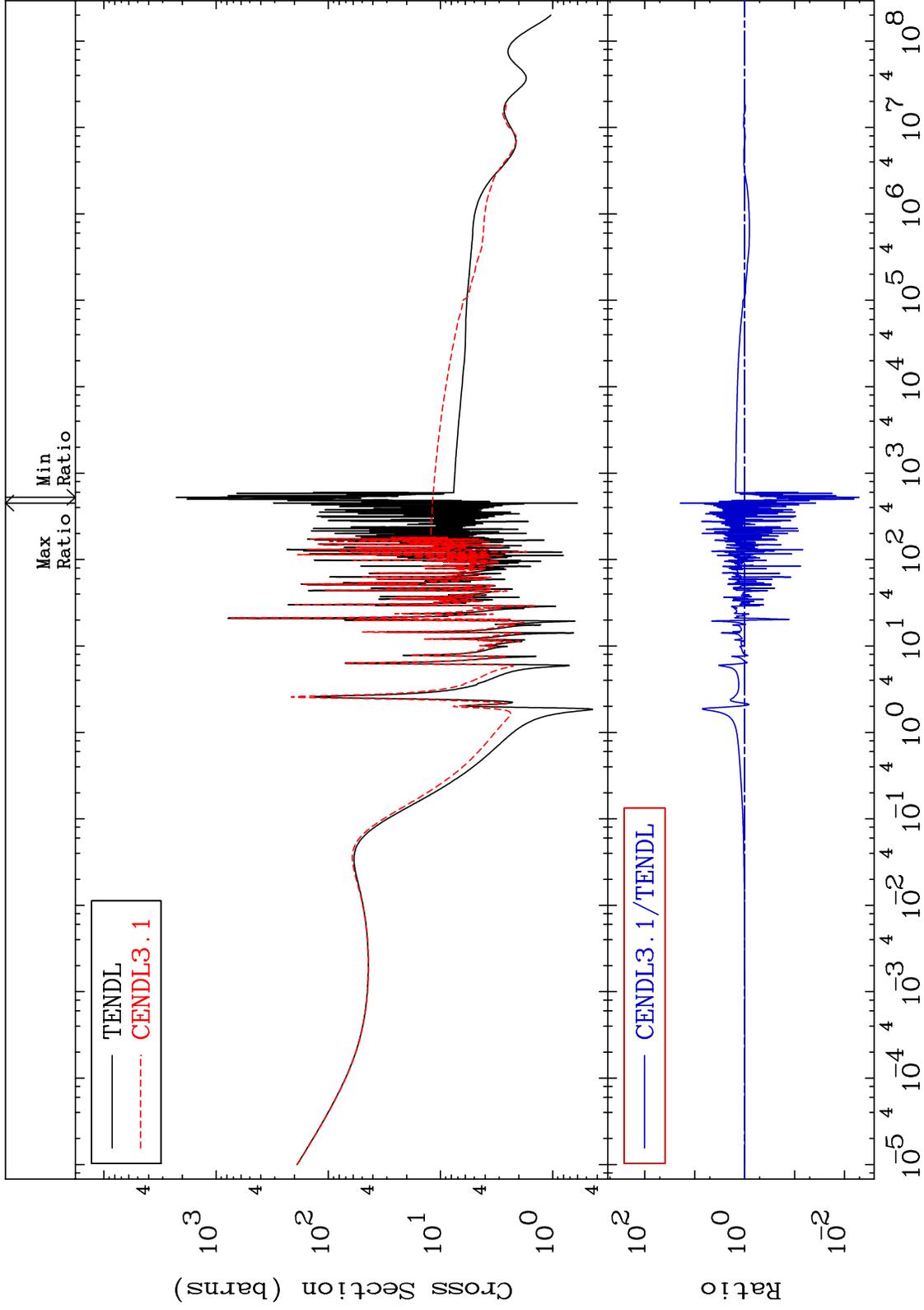
Press Mouse Button to Start



MAT 6434

Elastic
Cross Section

64-Gd-155
-99.49 To 1854. %

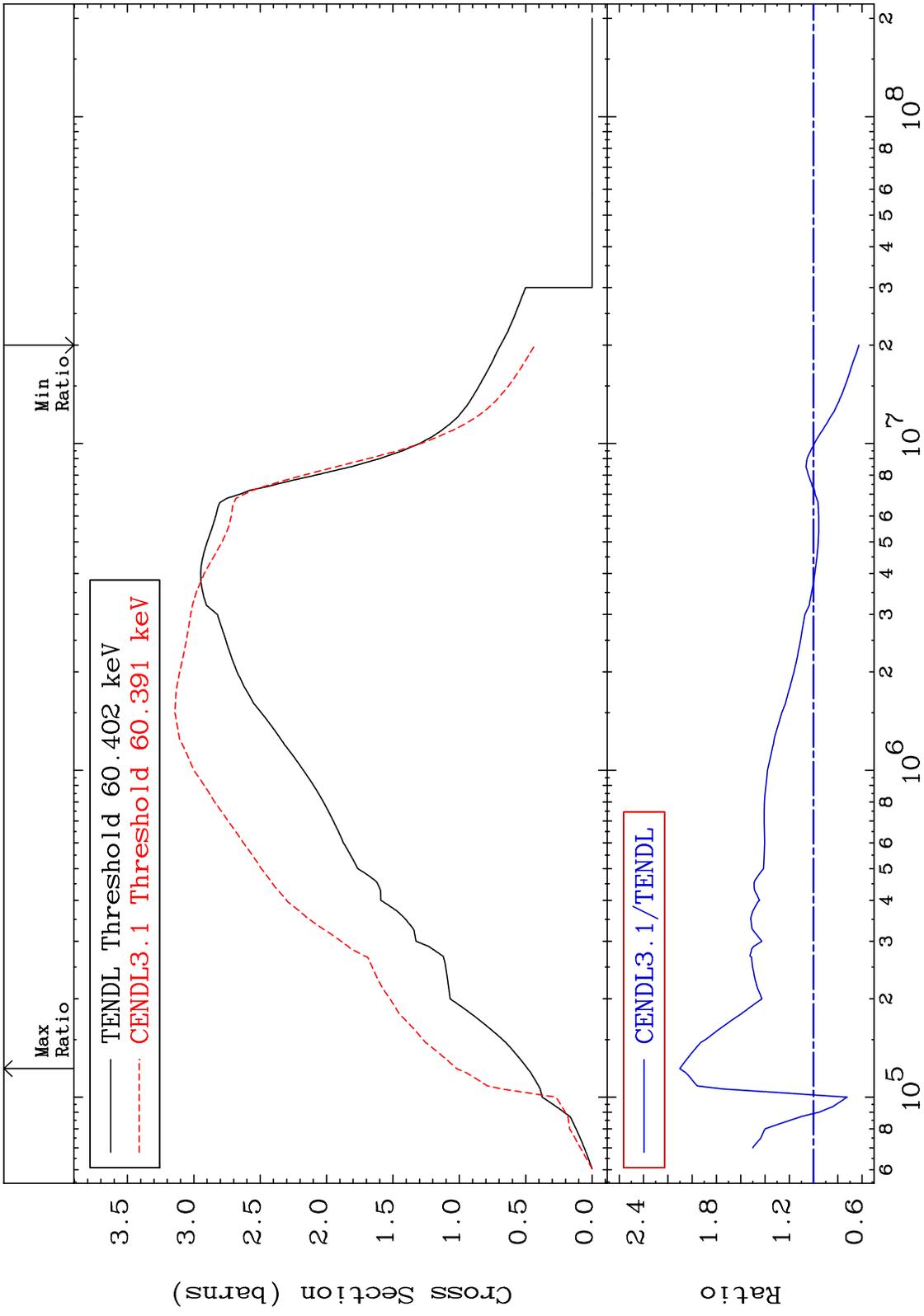


2

Incident Energy (eV)

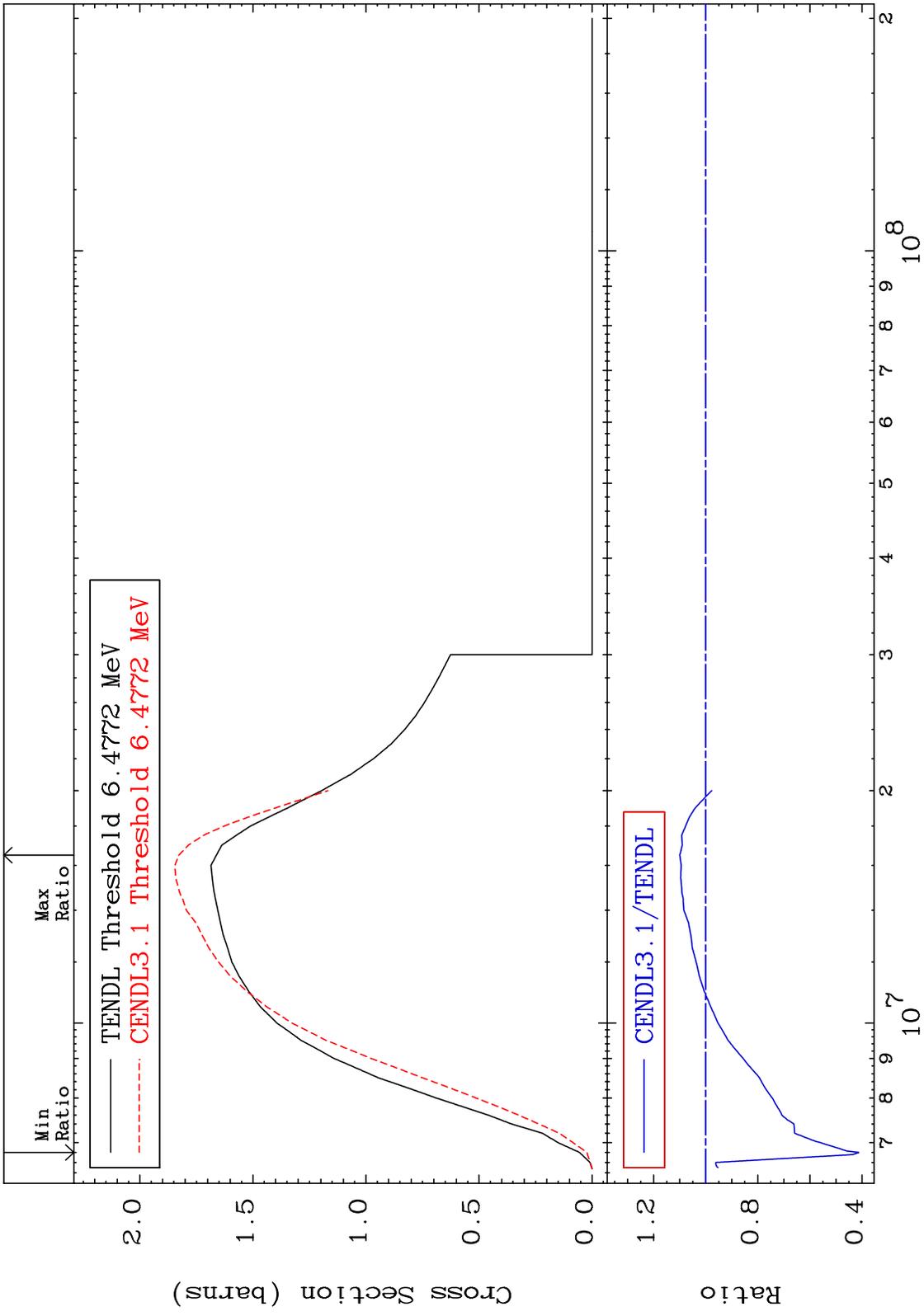
64-Gd-155

MAT 6434 Inelastic Cross Section 64-Gd-155 -37.26 To 110.2 %



3 64-Gd-155

MAT 6434 (n,2n) Cross Section 64-Gd-155 -58.79 To 9.989 %



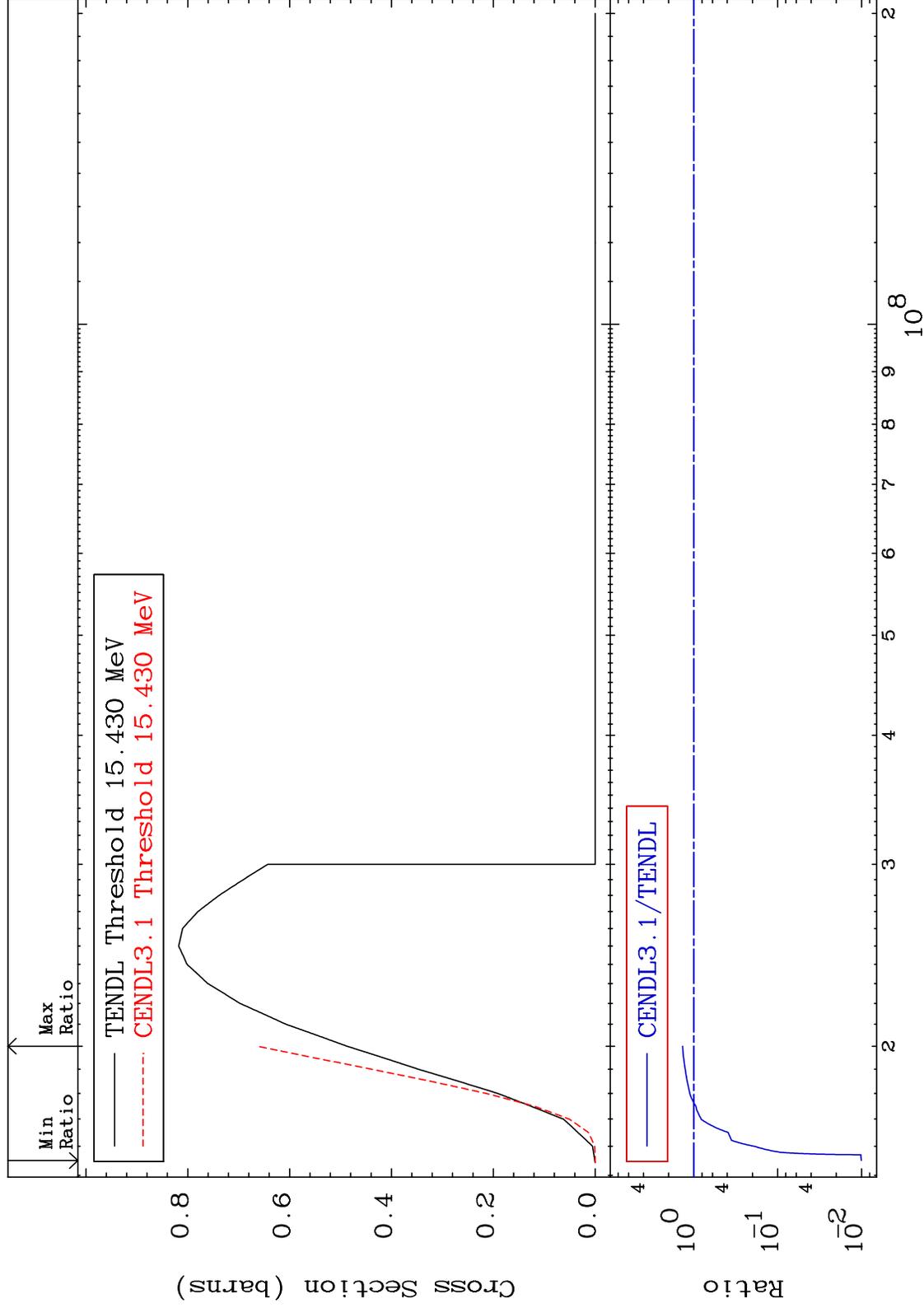
MAT 6434

(n,3n)

64-Gd-155

Cross Section

-99.00 To 35.98 %



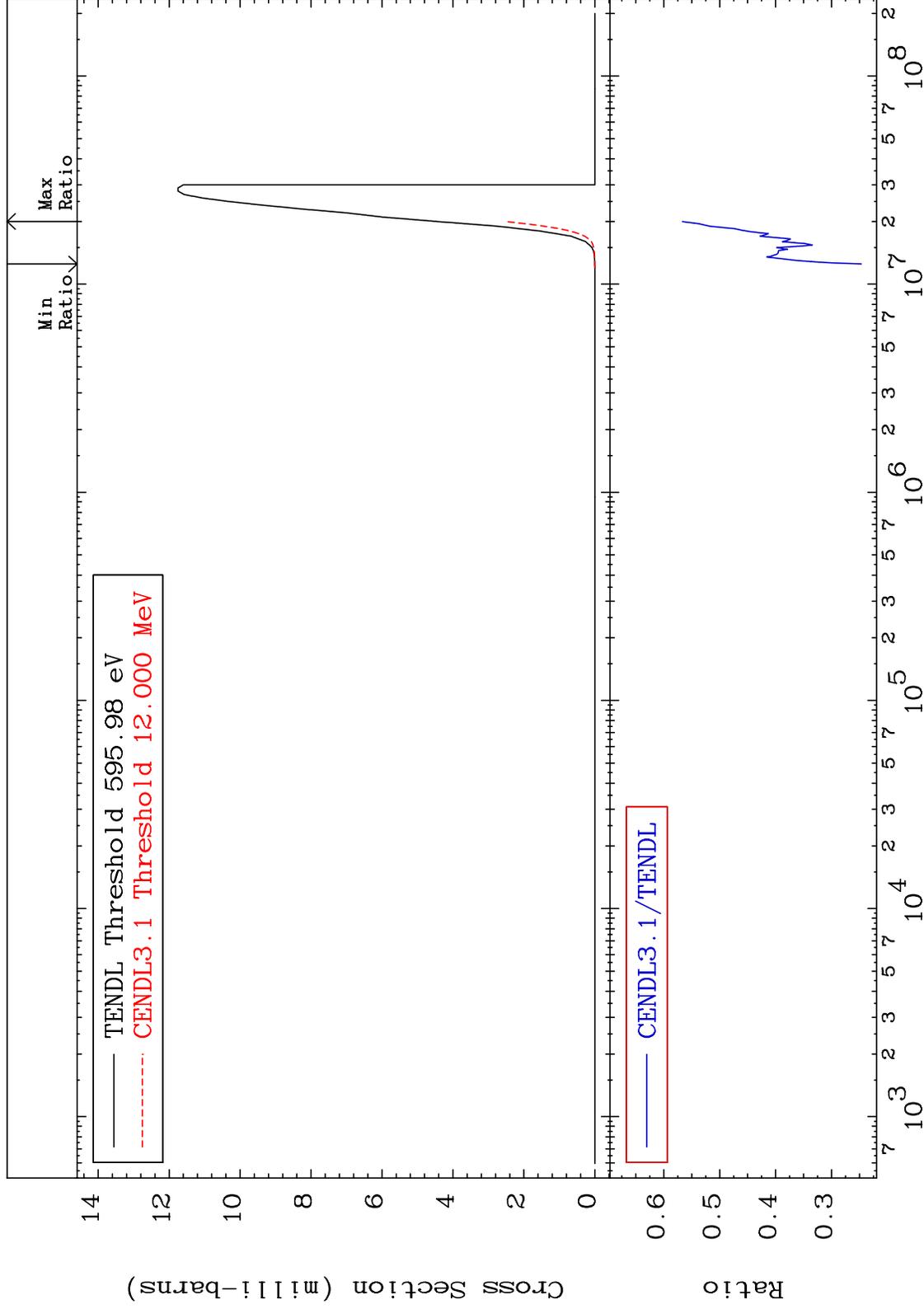
MAT 6434

(n, n') α

64-Gd-155

Cross Section

-75.32 To -43.34%

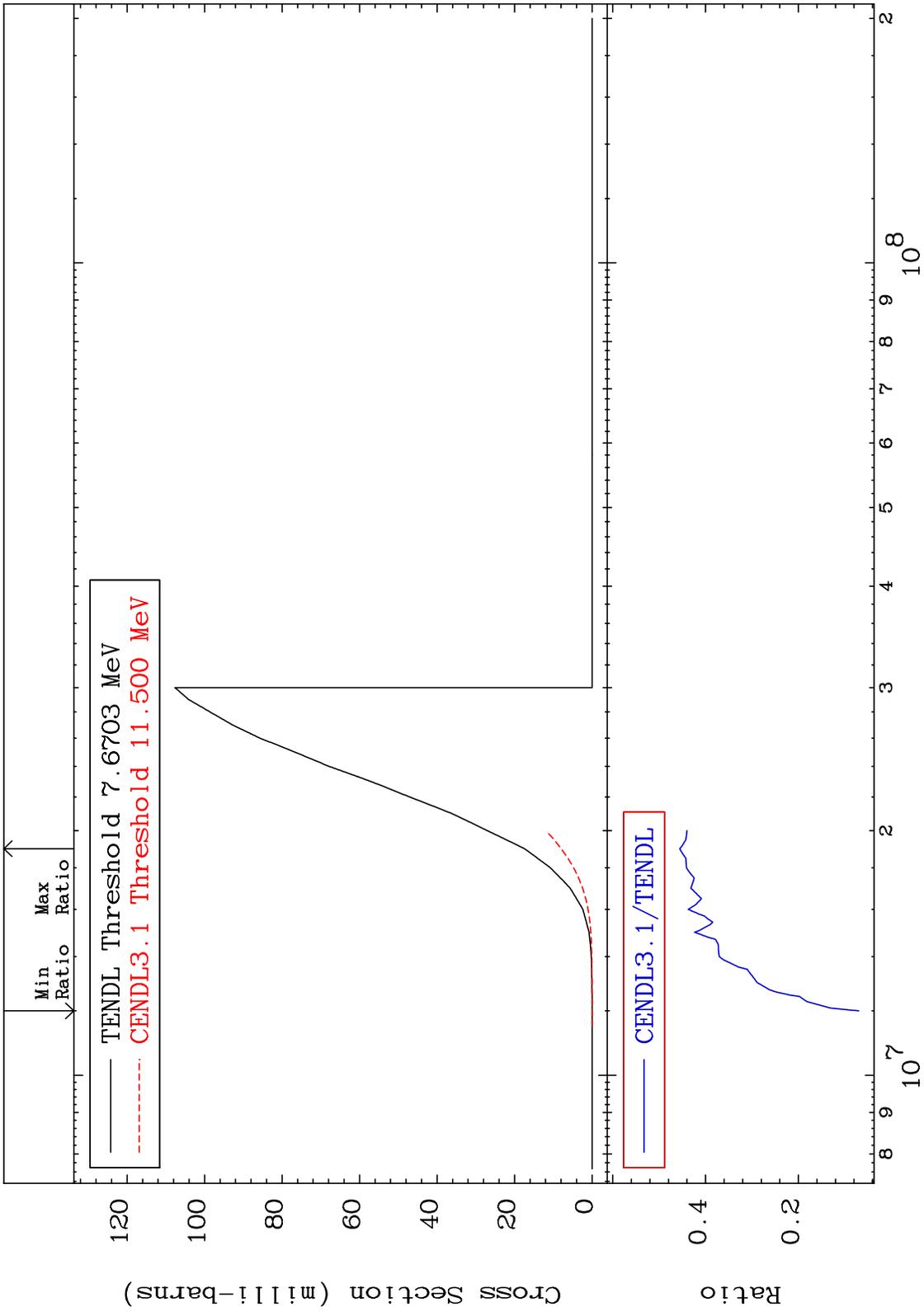


6

Incident Energy (eV)

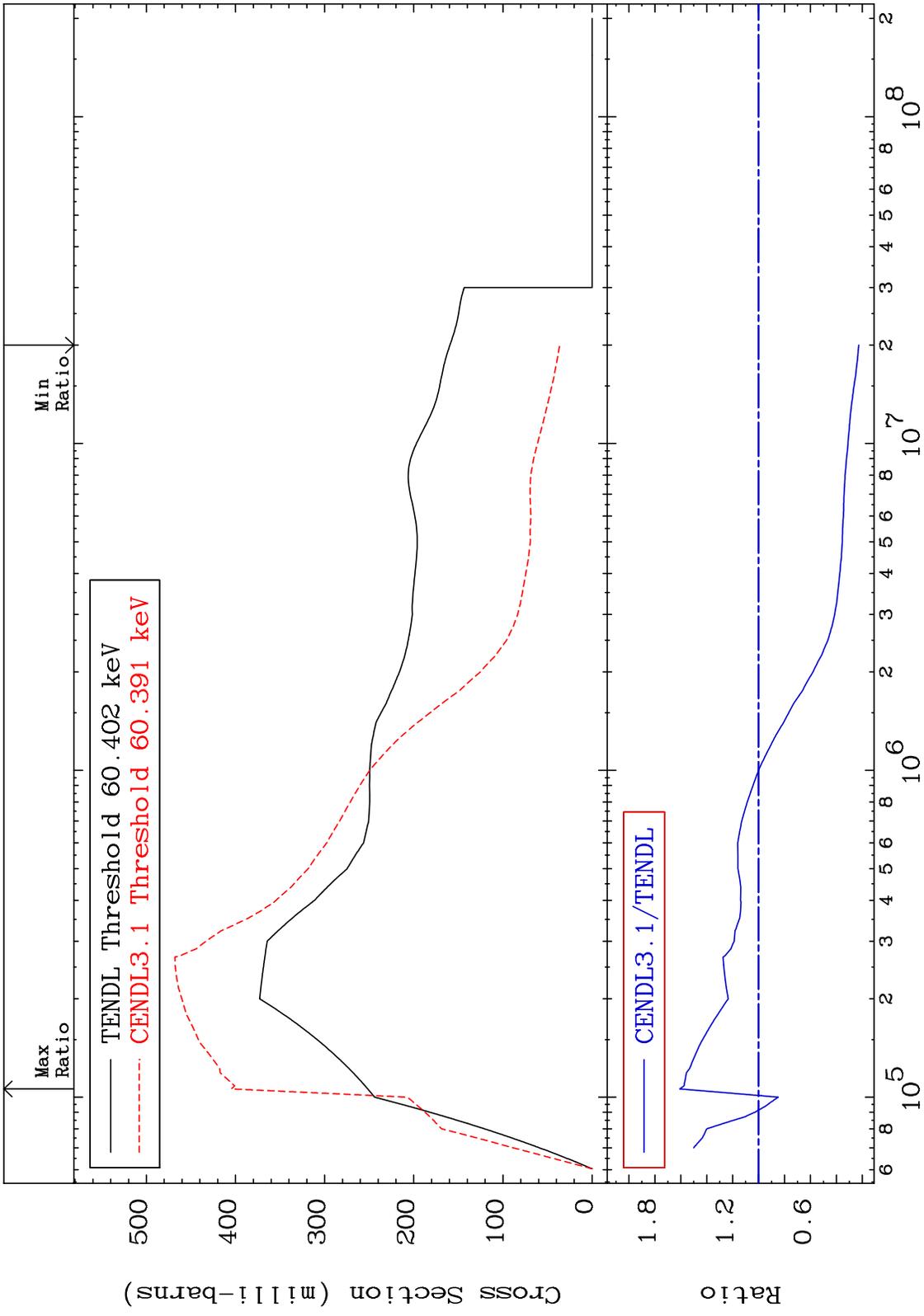
64-Gd-155

MAT 6434 (n, n') p 64-Gd-155
 Cross Section -93.03 To -54.44%



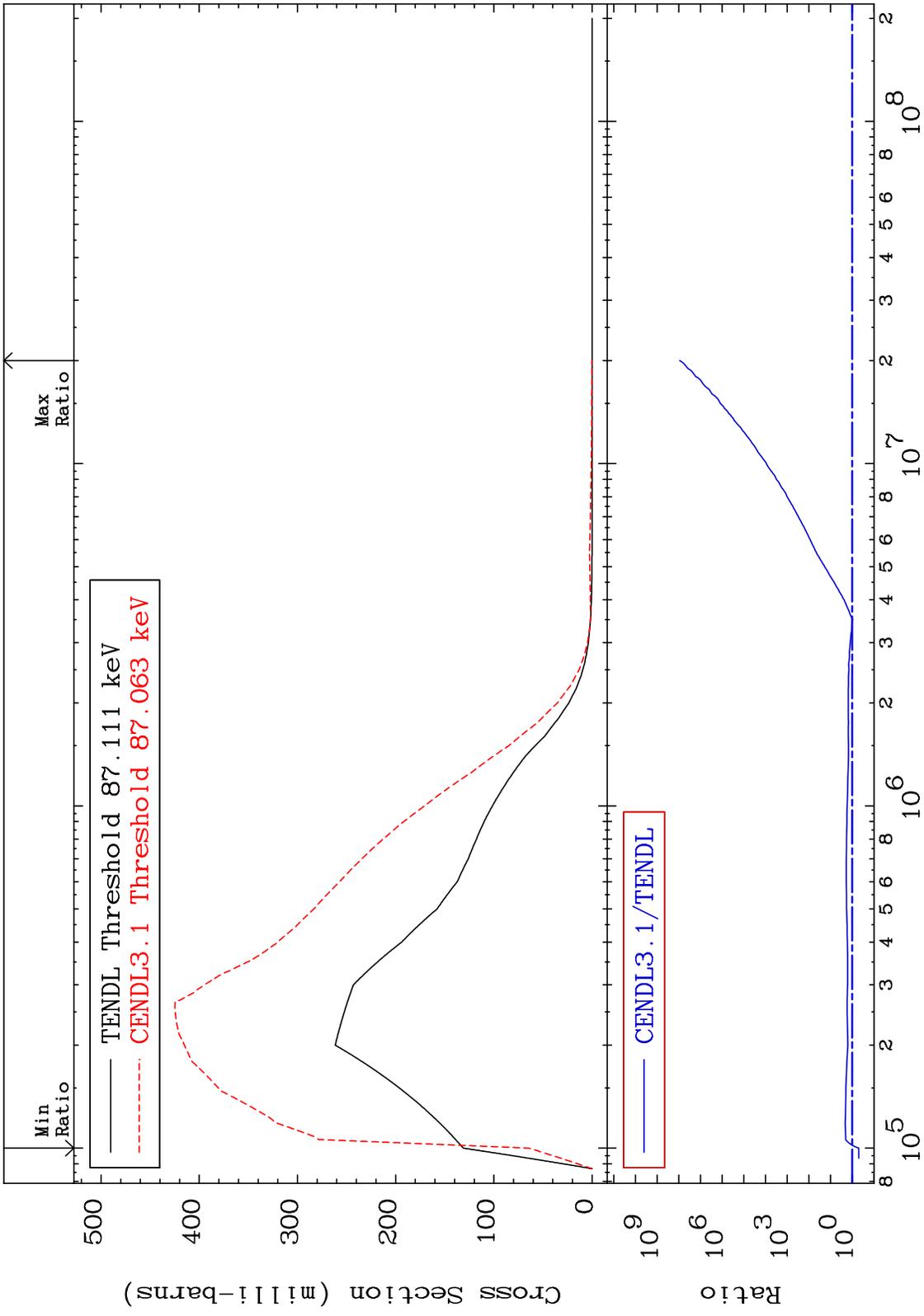
7 8 9 10⁷ 2 3 4 5 6 7 8 9 10⁸ 2 64-Gd-155

MAT 6434 MT= 51 (n,n') Level Cross Section 64-Gd-155 -77.29 To 60.82 %



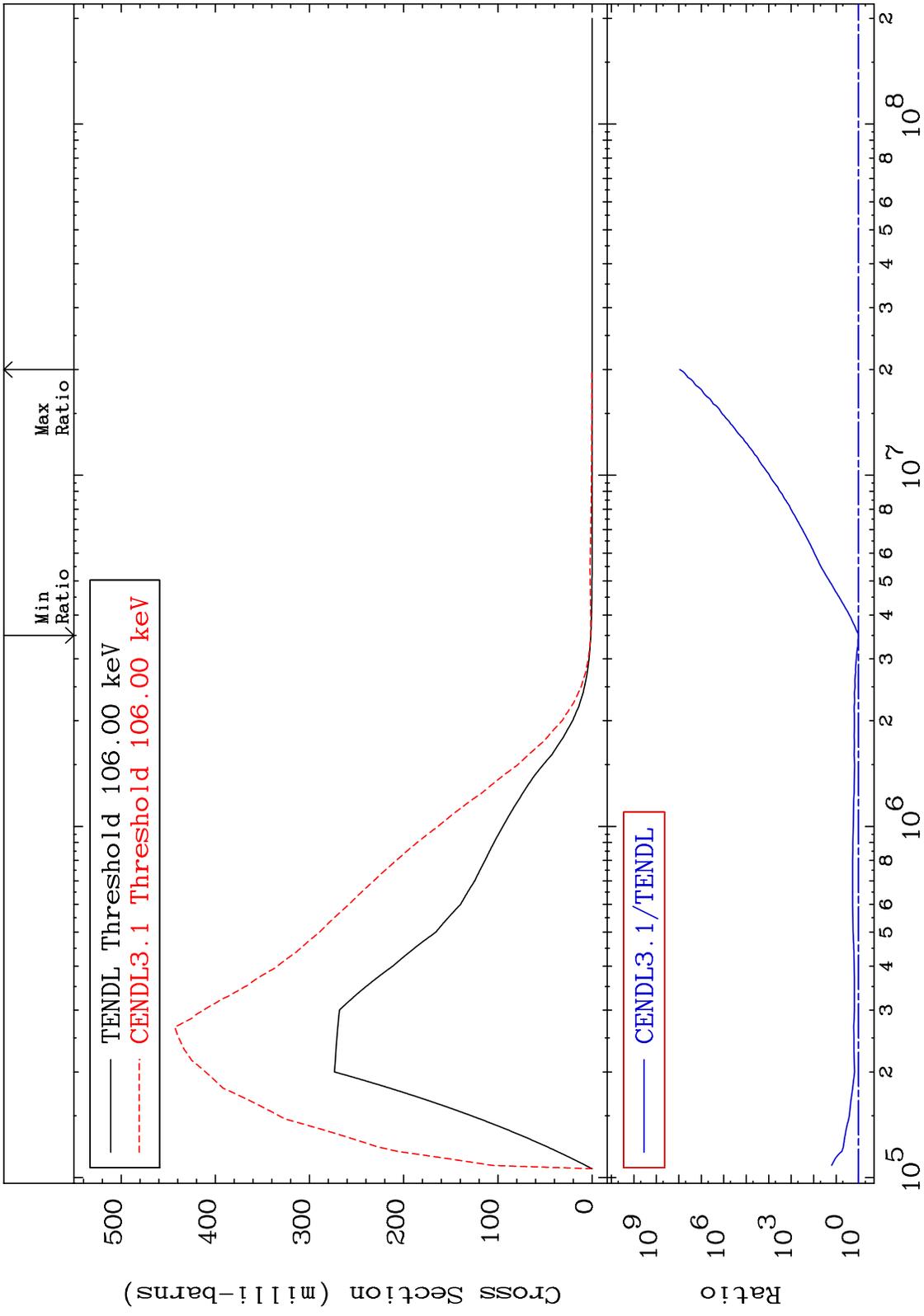
8 64-Gd-155

MAT 6434 MT= 52 (n,n') Level Cross Section 64-Gd-155
 -50.94 To 9999. %



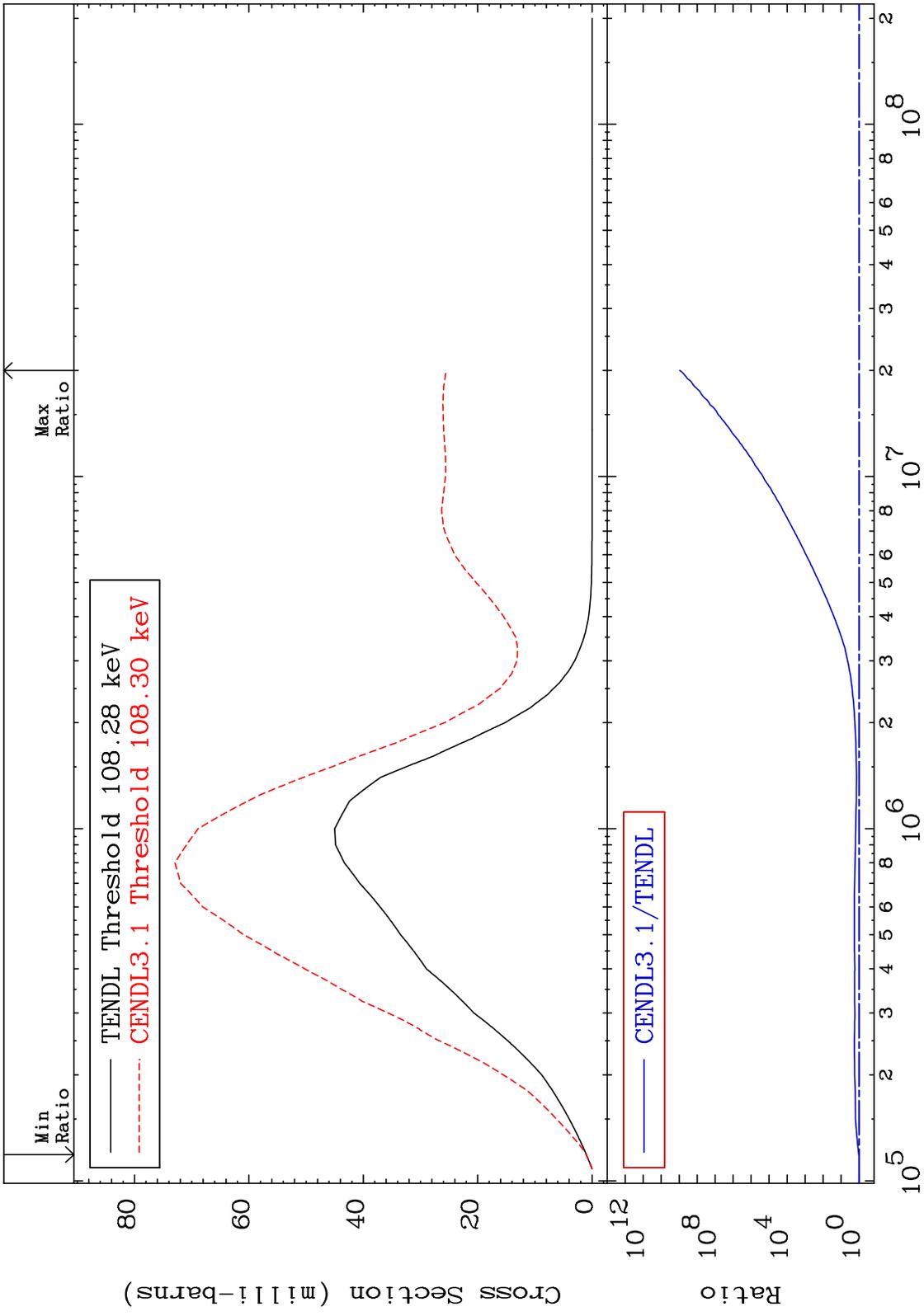
64-Gd-155

MAT 6434 MT= 53 (n,n') Level Cross Section 64-Gd-155 -2.268 To 9999. %

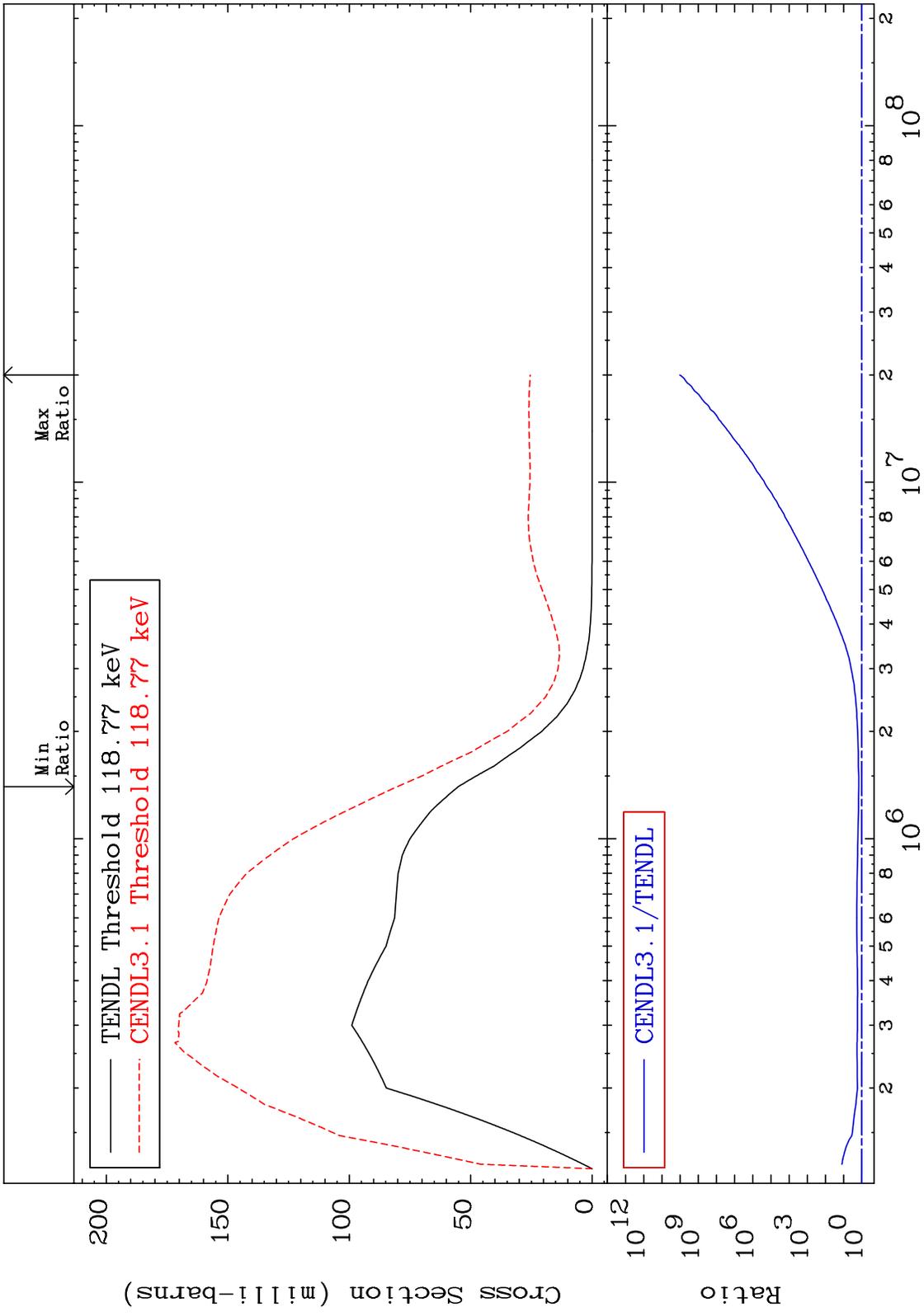


64-Gd-155 Incident Energy (eV)

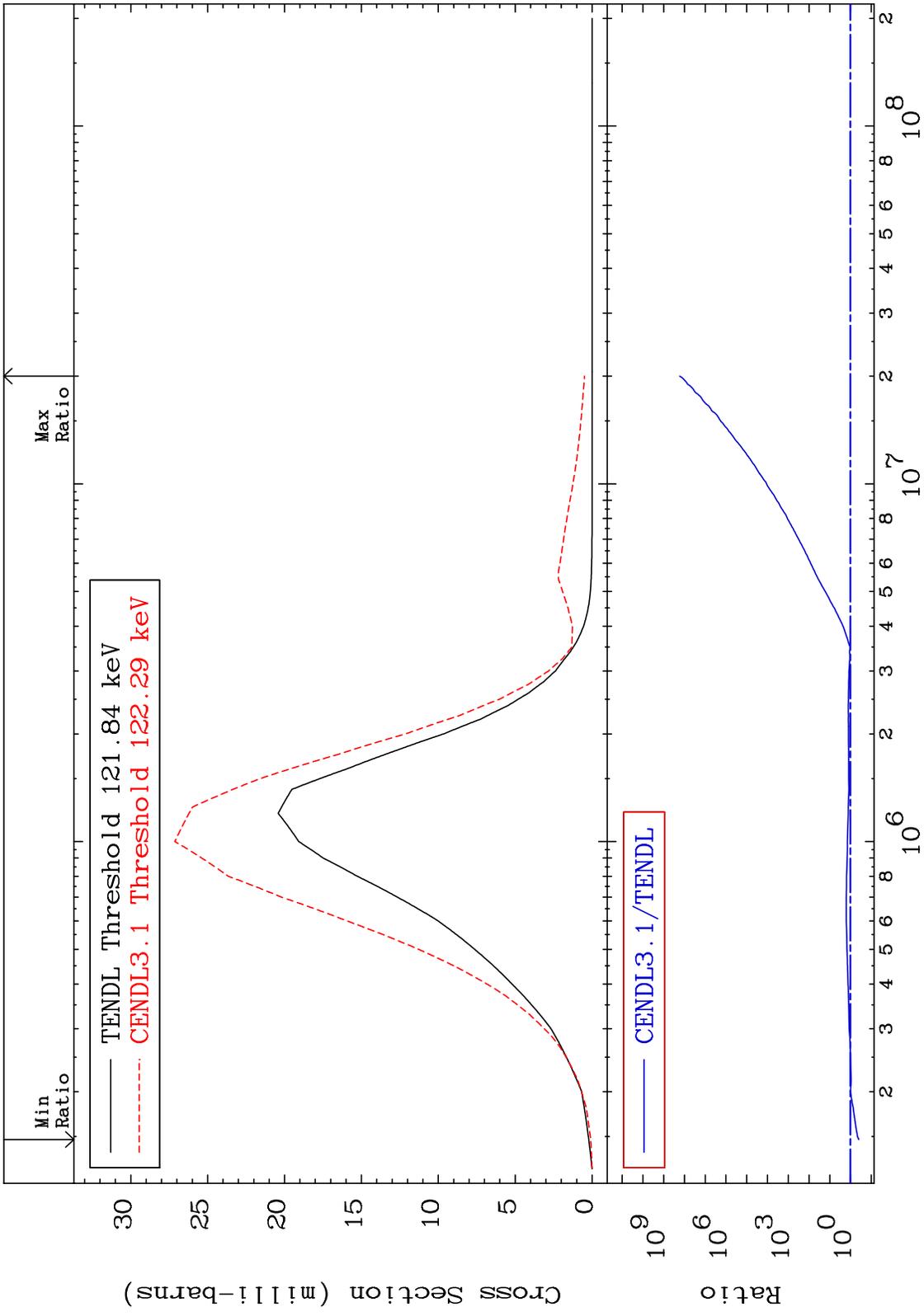
MAT 6434 MT= 54 (n,n') Level Cross Section 64-Gd-155 2.851 To 9999. %



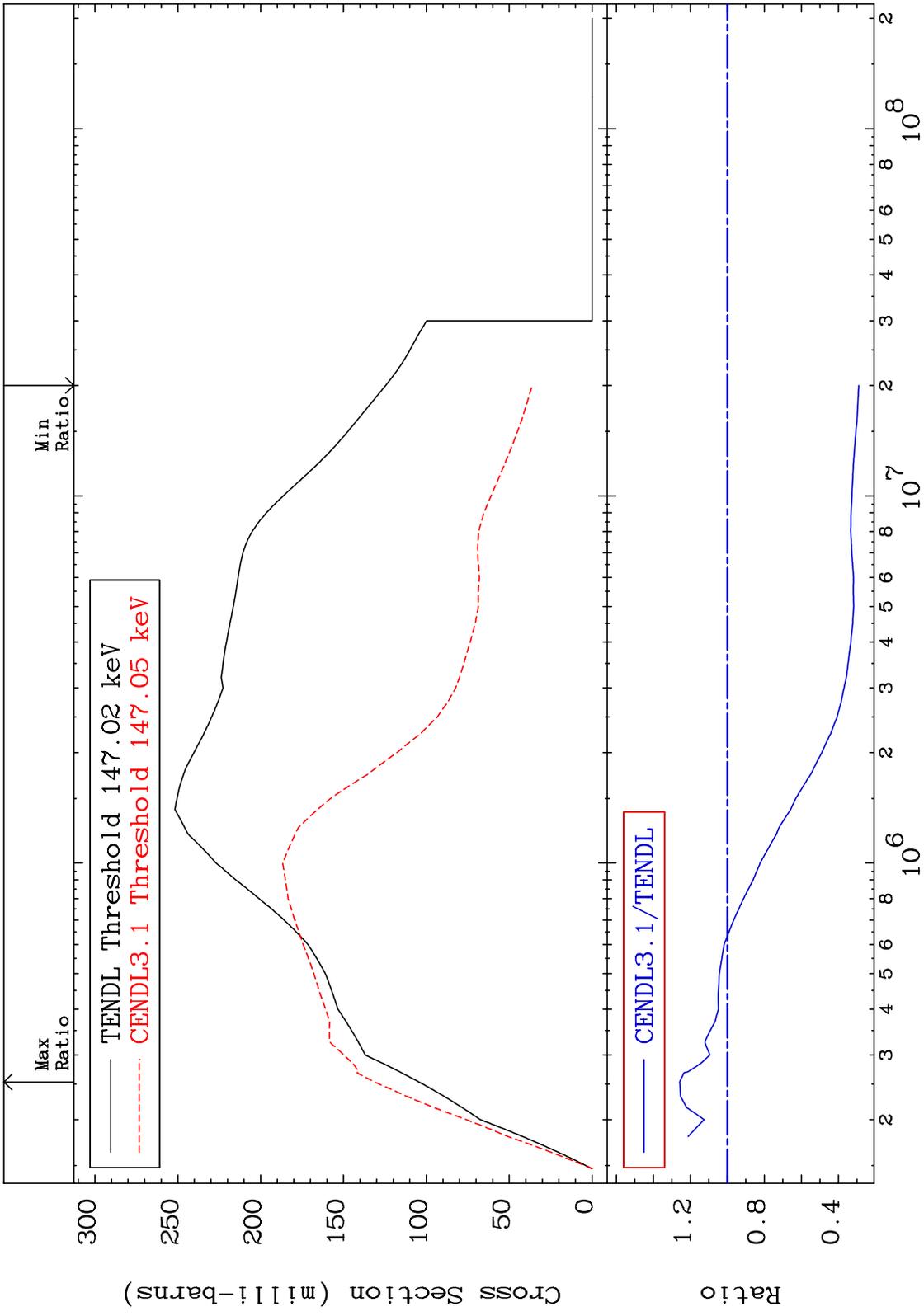
MAT 6434 MT= 55 (n,n') Level Cross Section 64-Gd-155 45.63 To 9999. %



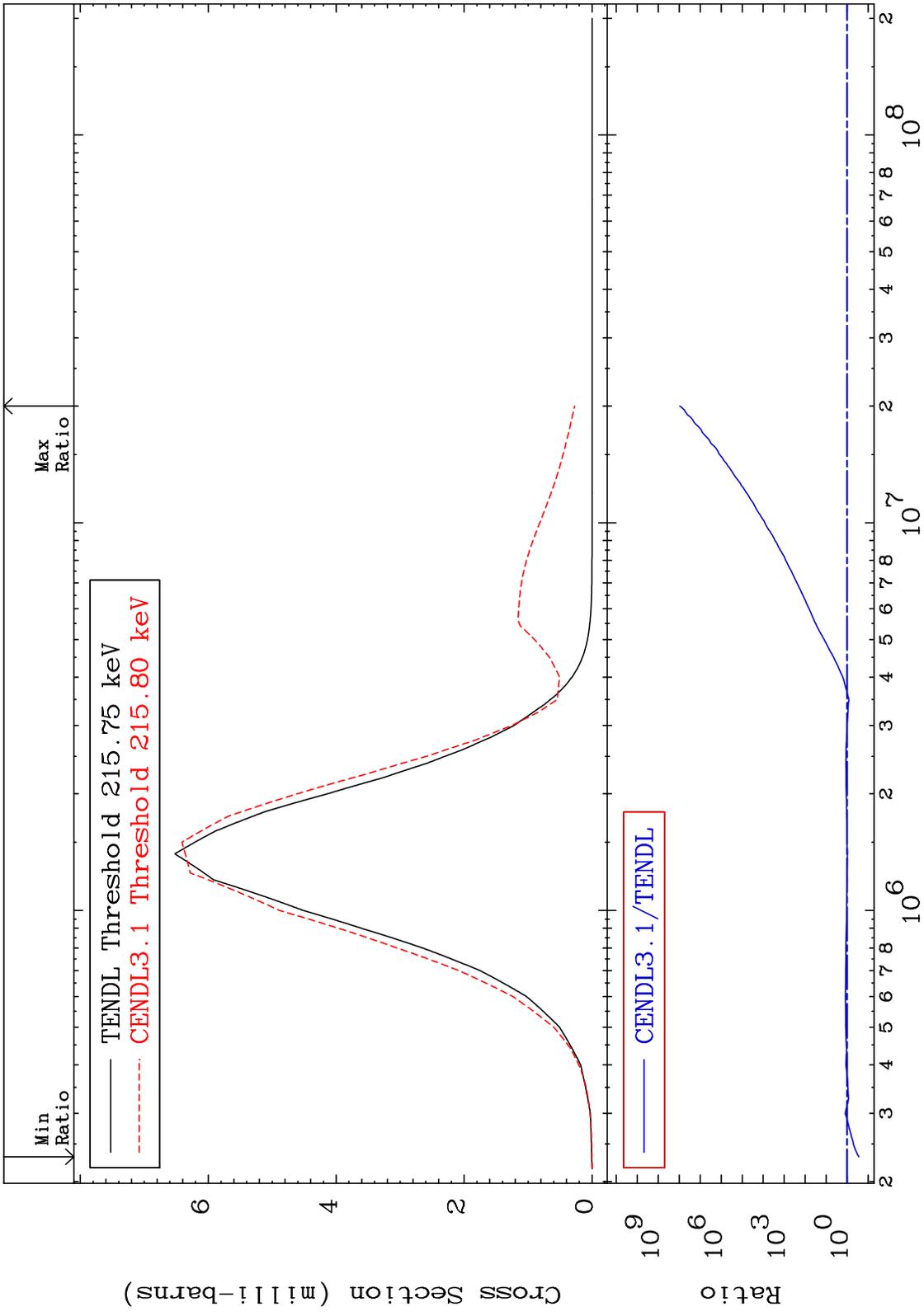
MAT 6434 MT= 56 (n,n') Level Cross Section 64-Gd-155
 -59.98 To 9999. %



MAT 6434 MT= 57 (n,n') Level Cross Section 64-Gd-155
 -71.02 To 25.72 %



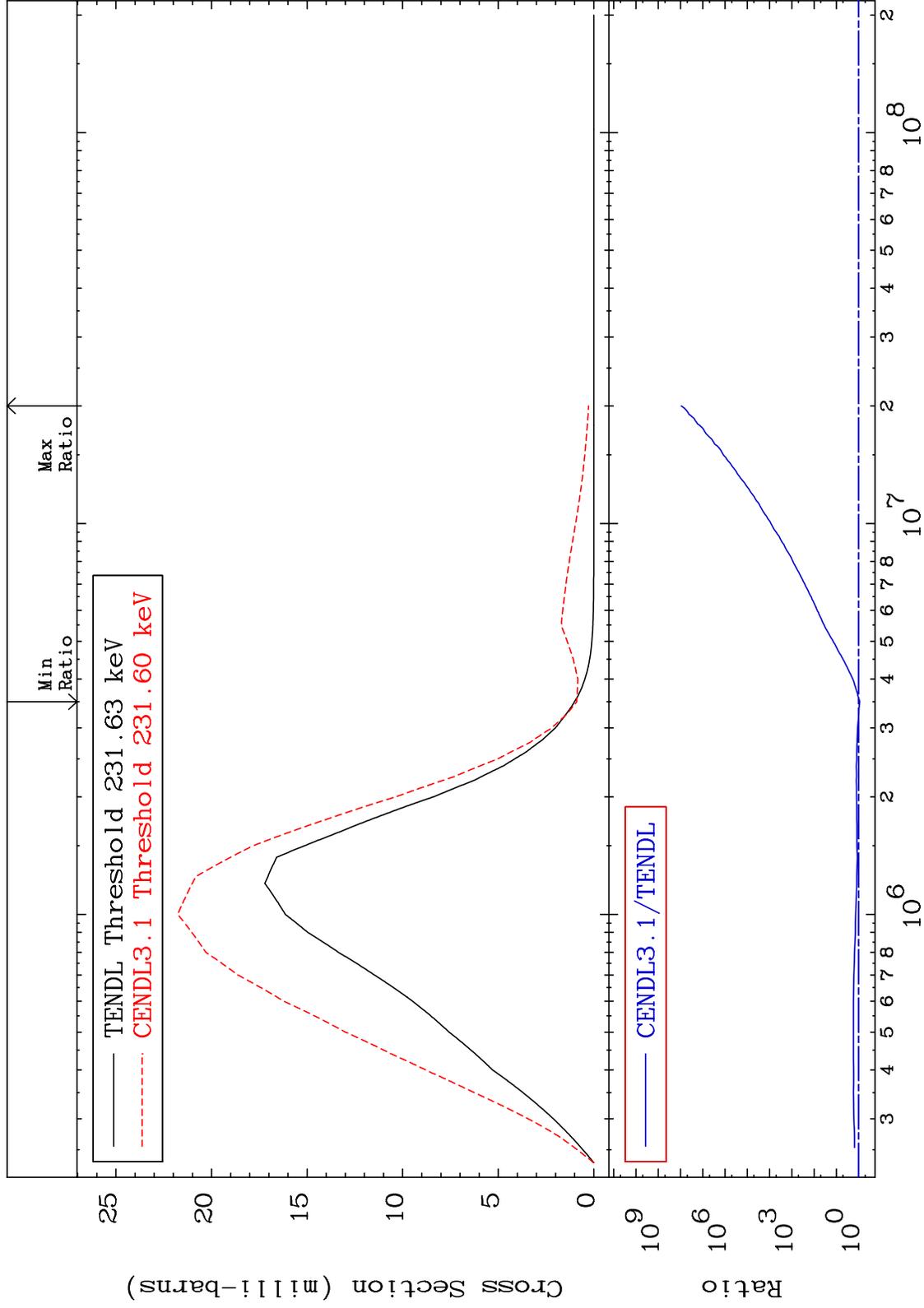
MAT 6434 MT= 58 (n,n') Level Cross Section -72.01 To 9999. % 64-Gd-155



MAT 6434

MT= 59 (n,n') Level
Cross Section

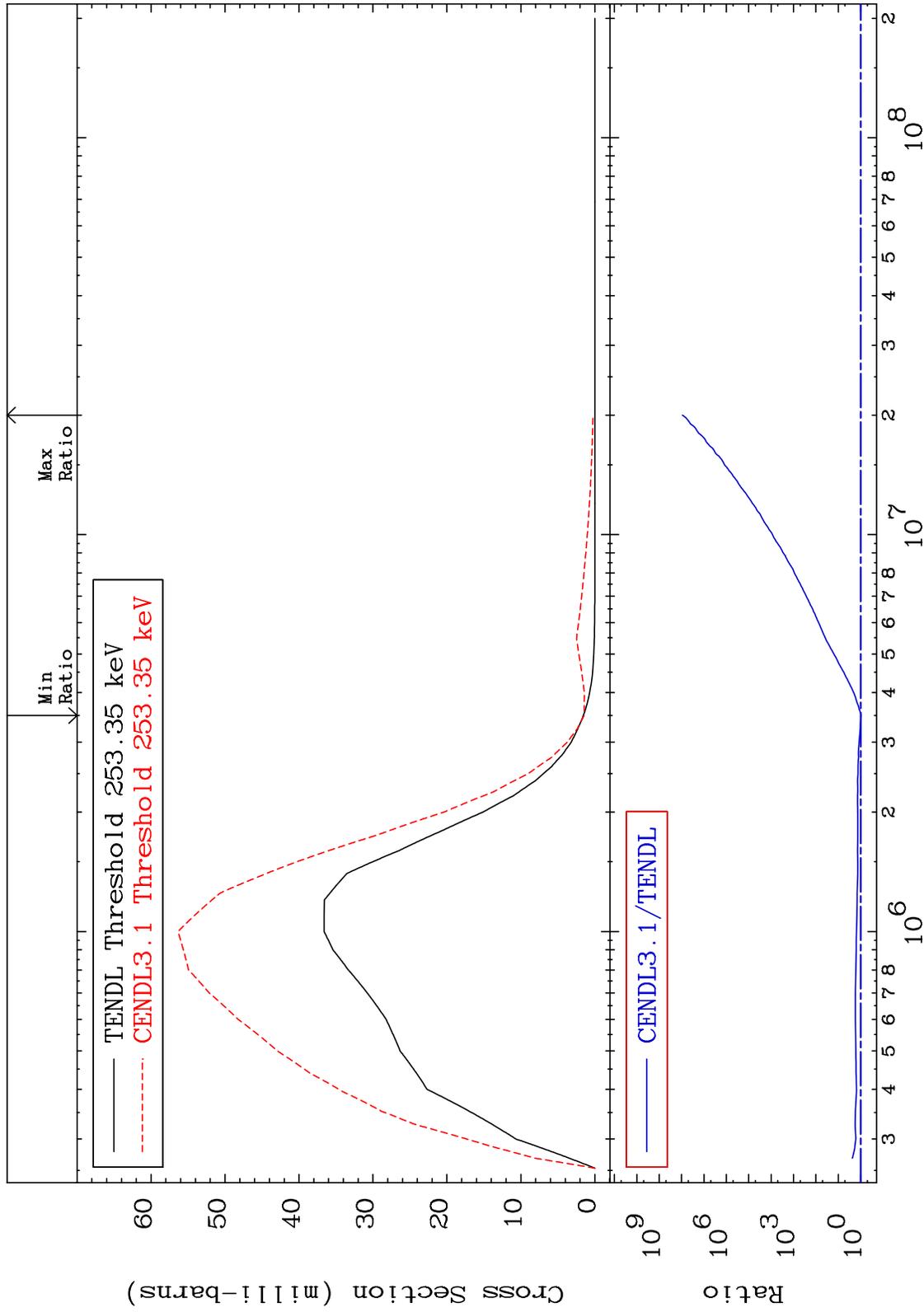
64-Gd-155
-11.96 To 9999. %



MAT 6434

MT= 60 (n,n') Level
Cross Section

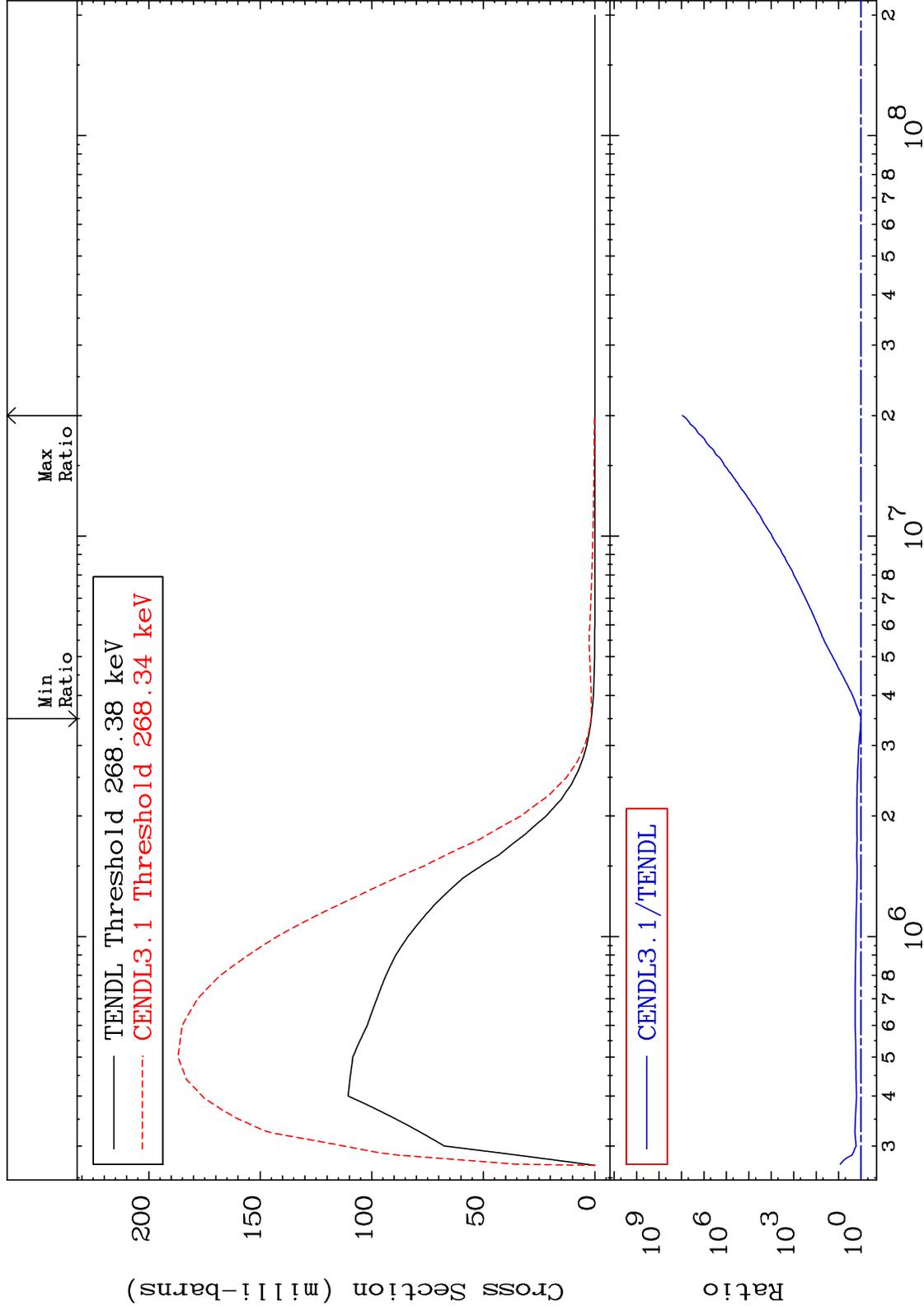
64-Gd-155
-7.285 To 9999. %



MAT 6434

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

64-Gd-155
-2.977 To 9999. %



18

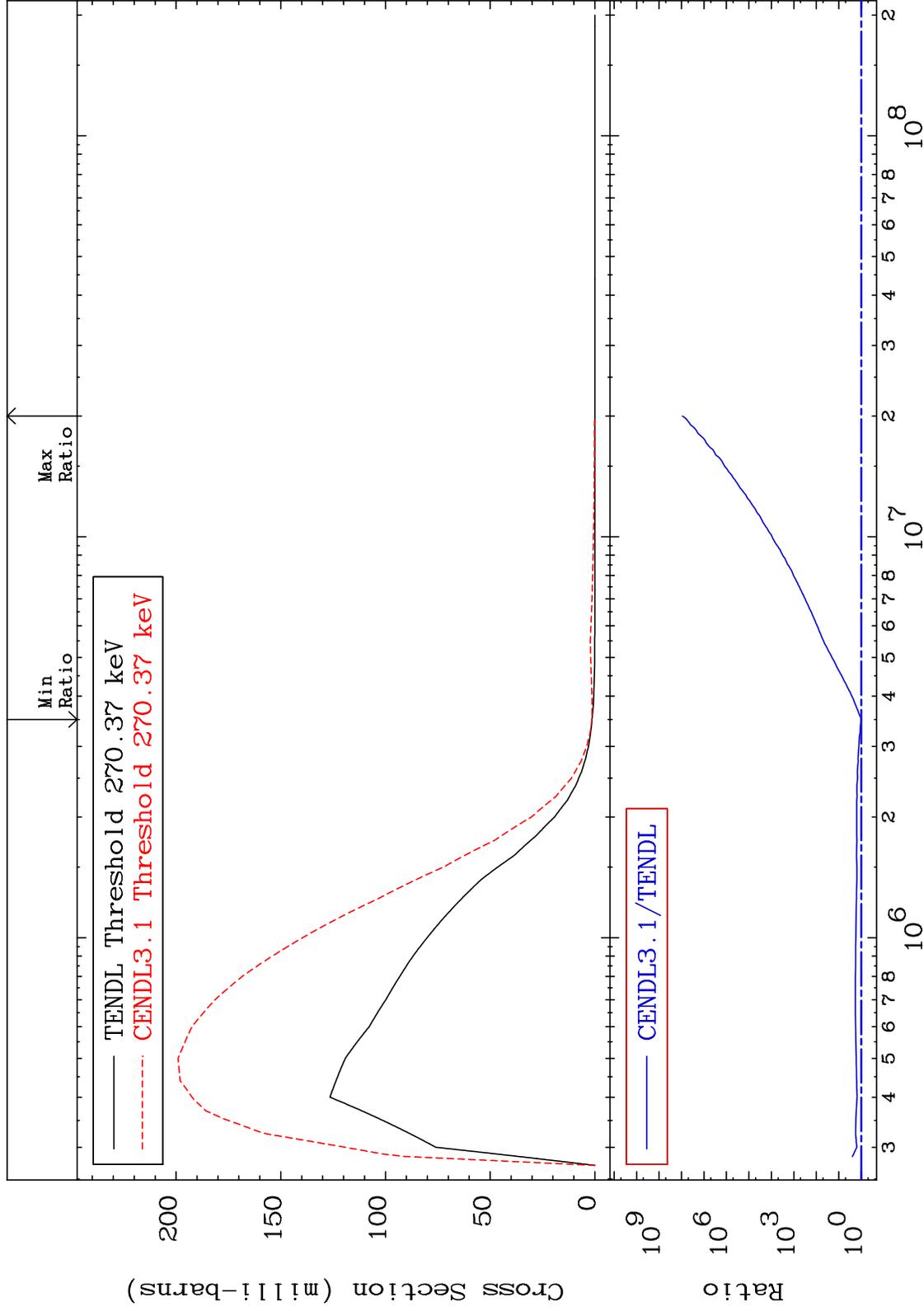
Incident Energy (eV)

64-Gd-155

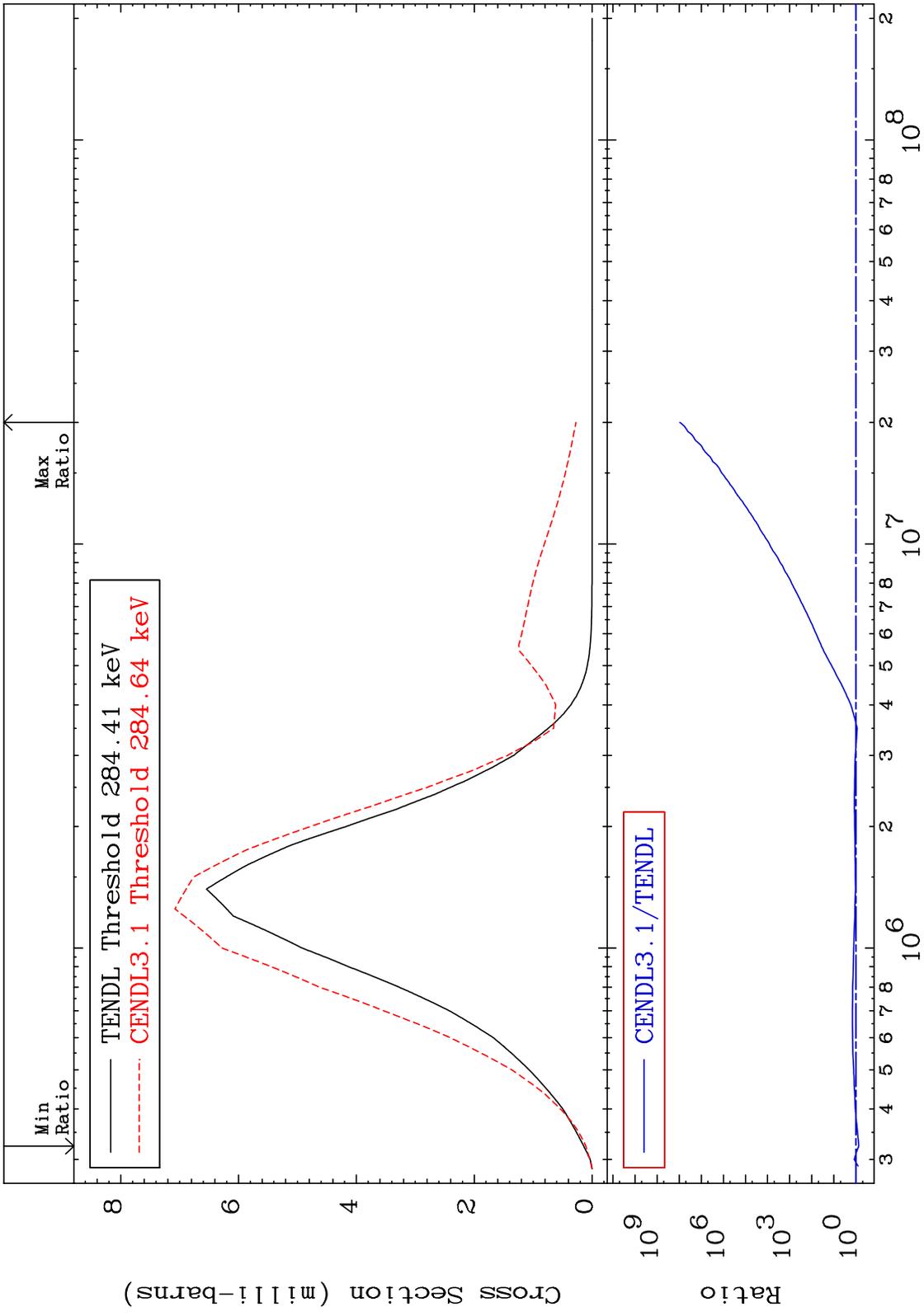
MAT 6434

MT= 62 (n,n') Level
Cross Section

64-Gd-155
-1.184 To 9999. %

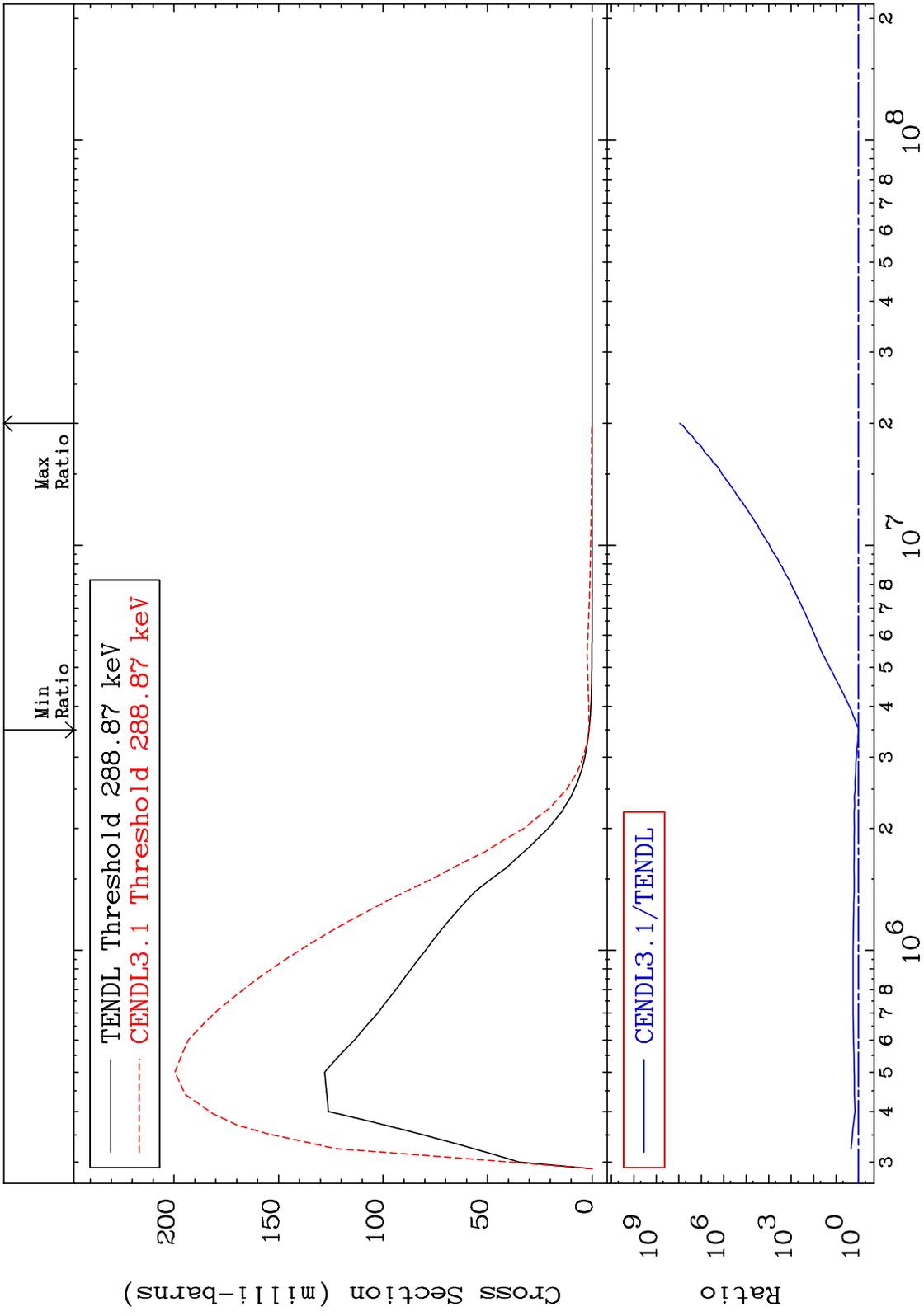


MAT 6434 MT= 63 (n,n') Level Cross Section 64-Gd-155
 -25.35 To 9999. %

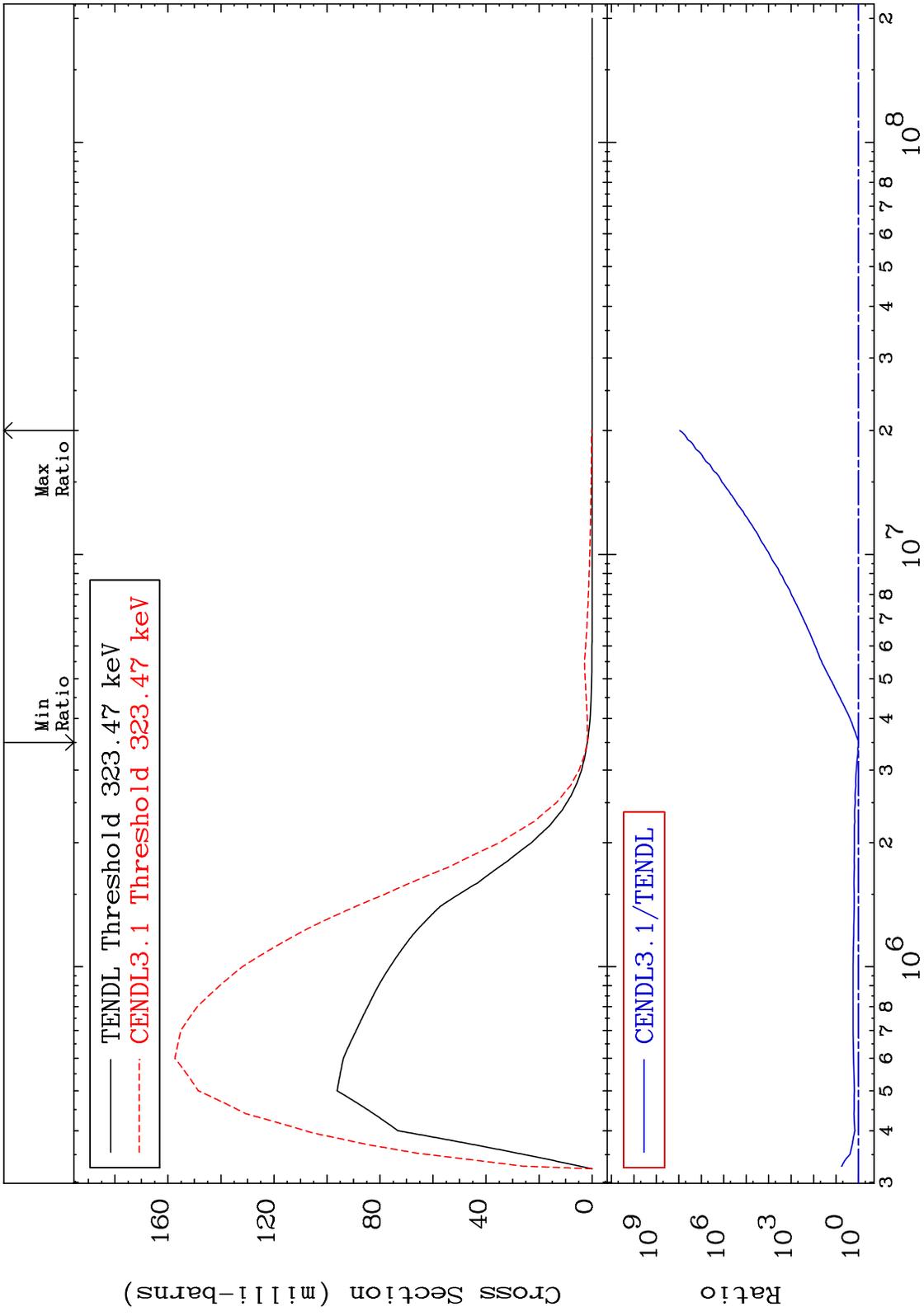


20 Incident Energy (eV) 64-Gd-155

MAT 6434 MT= 64 (n,n') Level Cross Section 64-Gd-155
 -2.038 To 9999. %

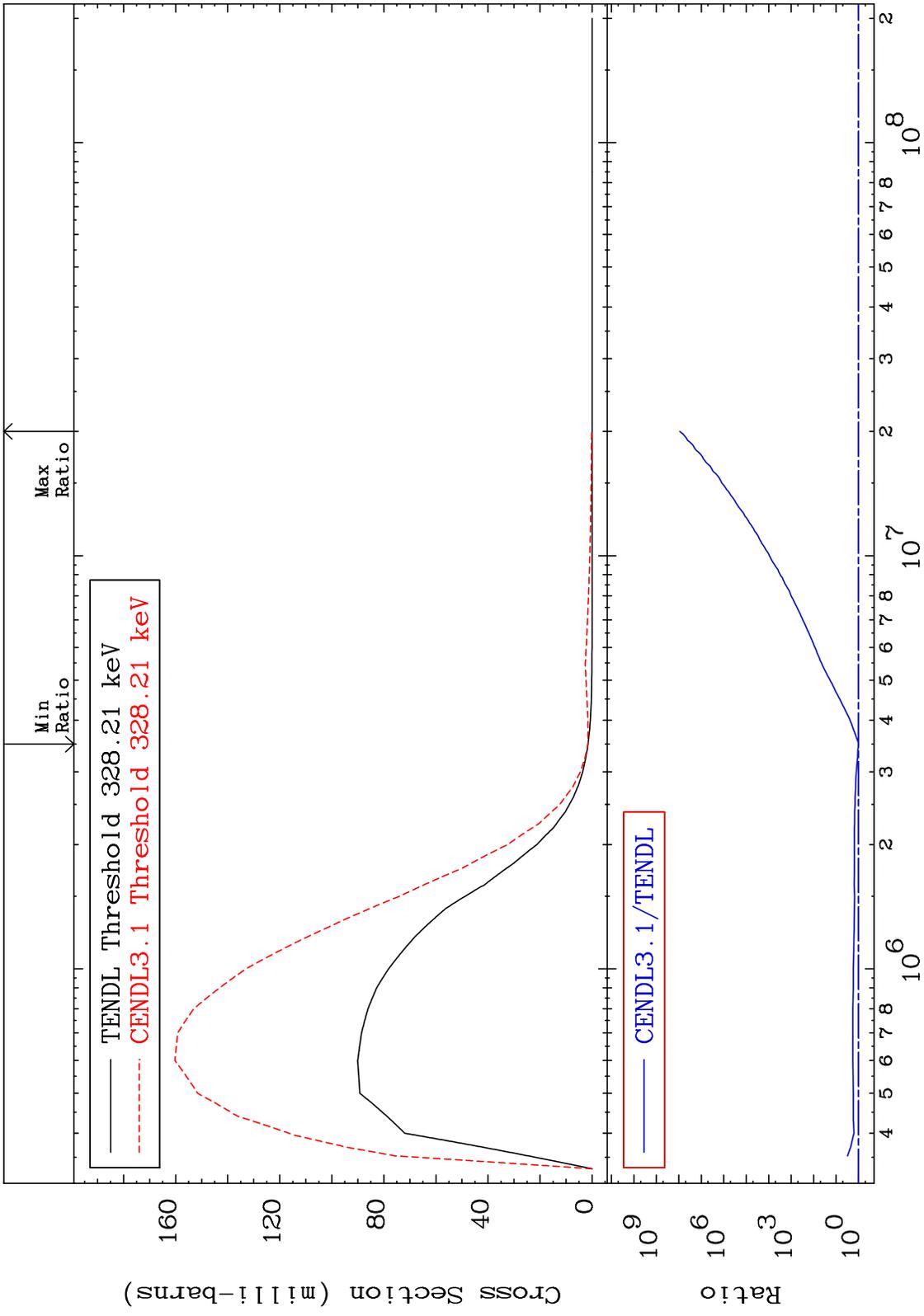


MAT 6434 MT= 65 (n,n') Level Cross Section 64-Gd-155 -2.884 To 9999. %



22 64-Gd-155 Incident Energy (eV)

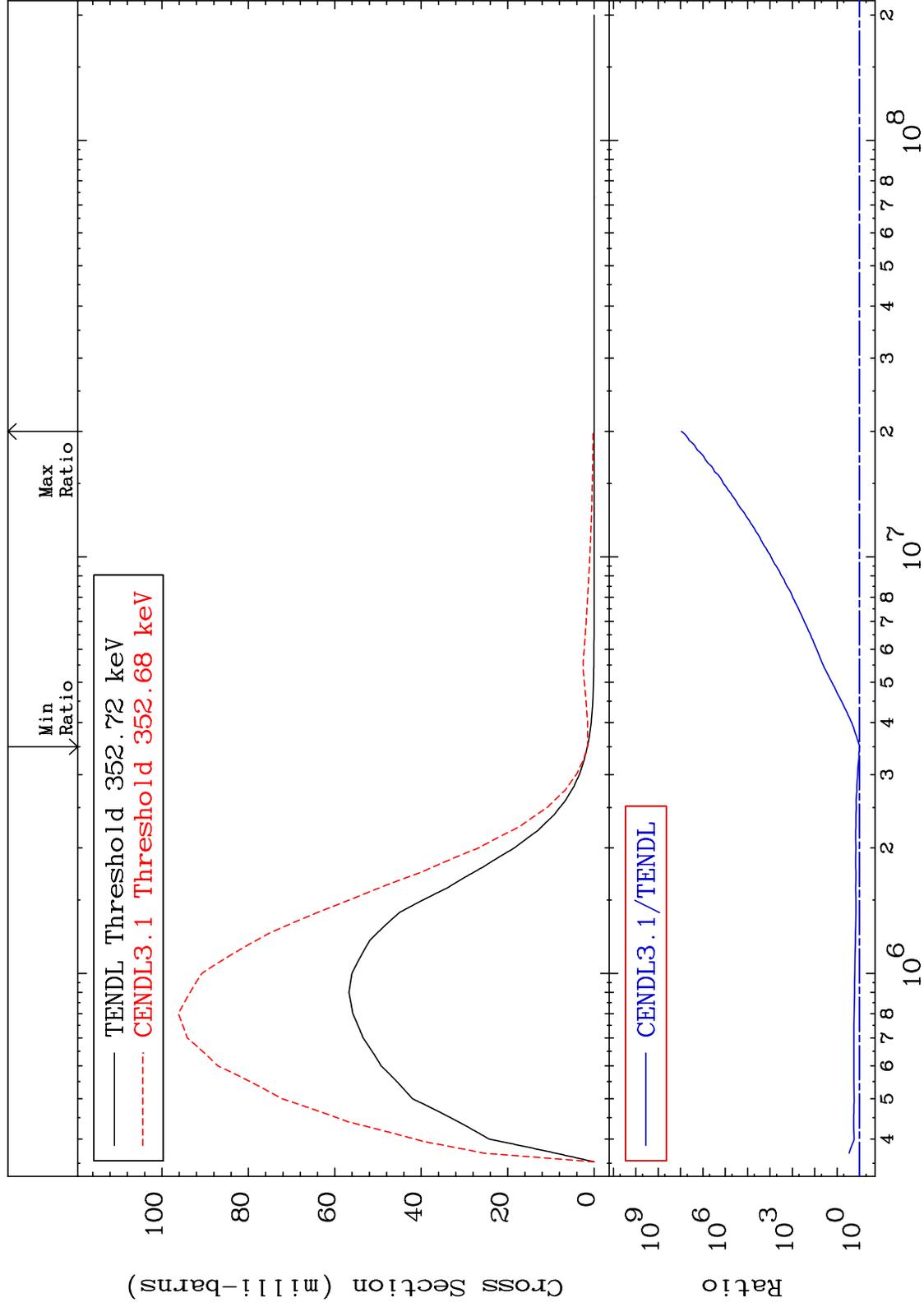
MAT 6434 MT= 66 (n,n') Level Cross Section 64-Gd-155
 -2.524 To 9999. %



MAT 6434

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

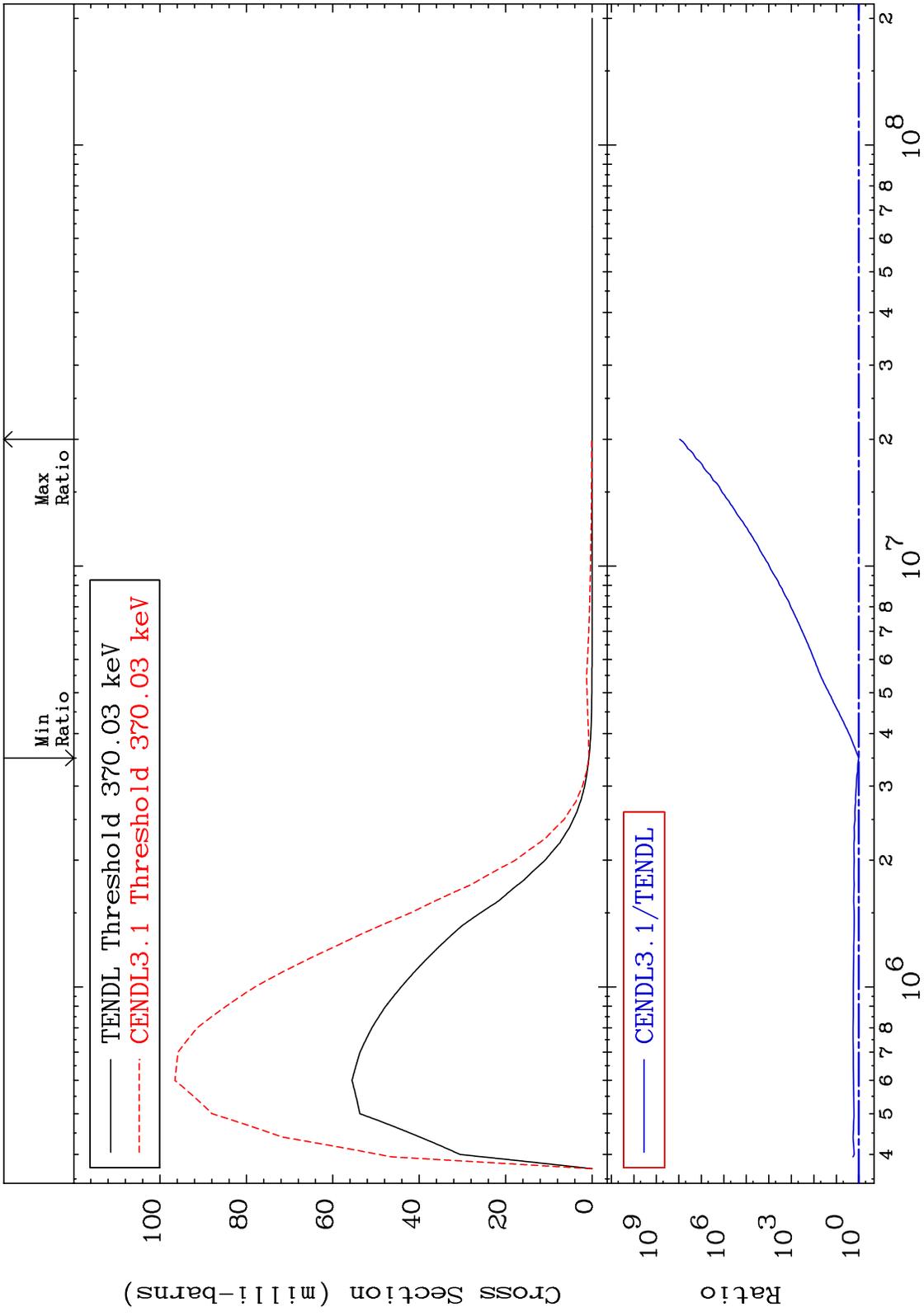
64-Gd-155
-4.825 To 9999. %



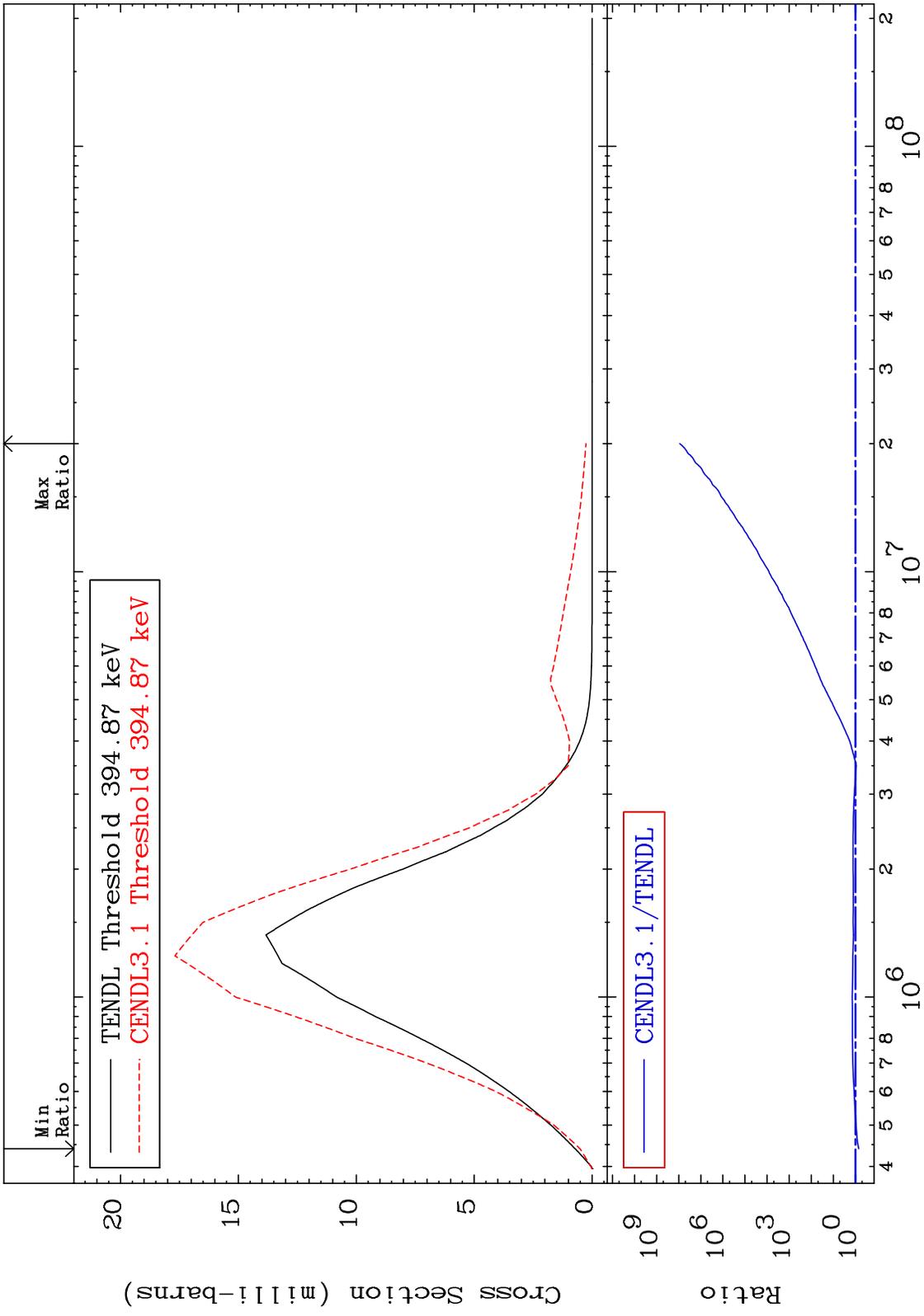
24

64-Gd-155

MAT 6434 MT= 68 (n,n') Level Cross Section 64-Gd-155 0.501 To 9999. %



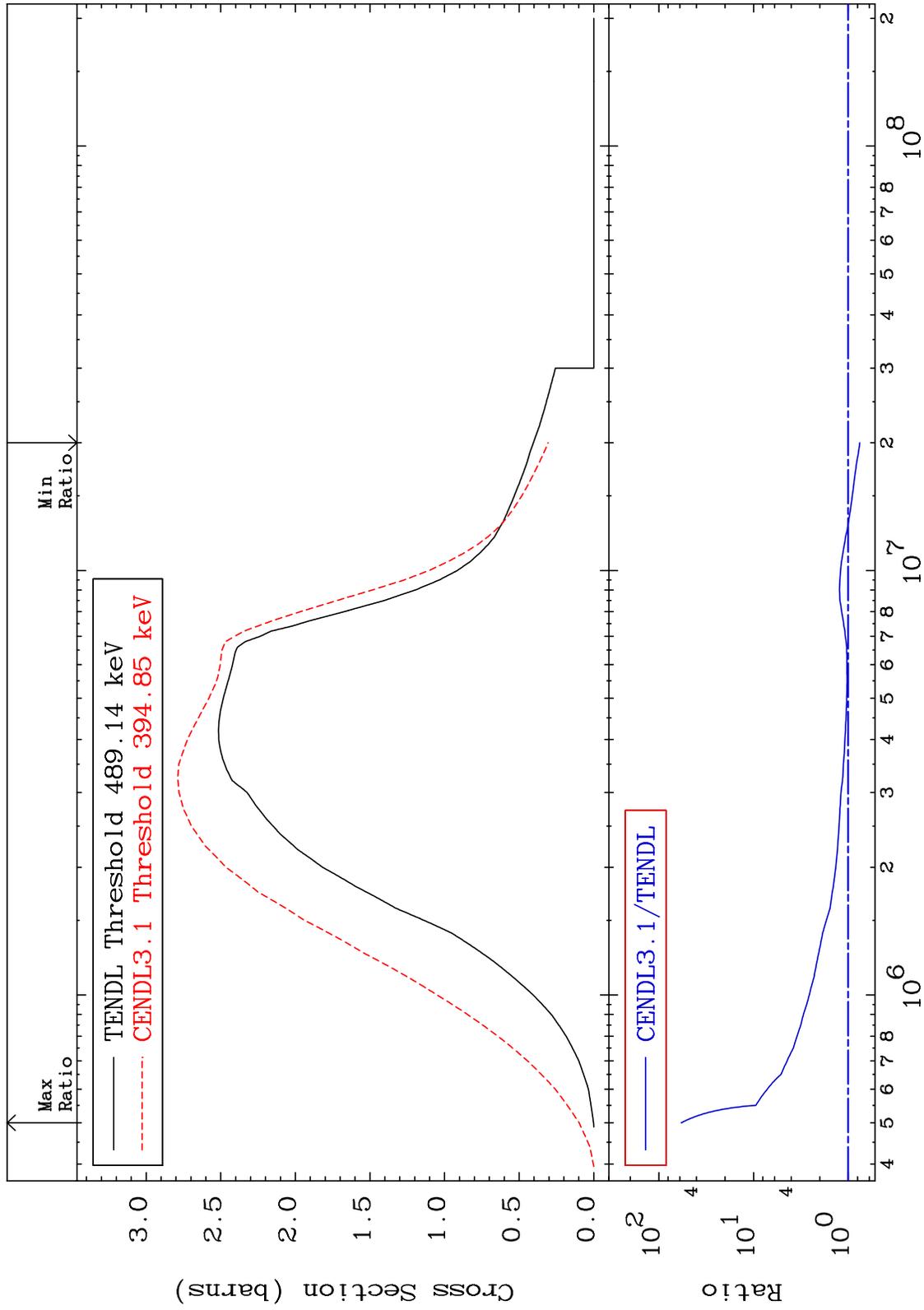
MAT 6434 MT= 69 (n,n') Level Cross Section 64-Gd-155 -29.29 To 9999. %



MAT 6434

(n,n') Continuum
Cross Section

64-Gd-155
-24.42 To 5703. %



MAT 6434

(n, γ)

64-Gd-155

-94.48 To 9999. %

Cross Section

Min Ratio

Max Ratio

— TENDL
- - - CENDL3.1

Cross Section (barns)
 10^6
 10^4
 10^2
 10^0
 10^{-2}

— CENDL3.1/TENDL

Ratio
 10^2
 10^1
 10^0
 10^{-1}

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

Incident Energy (eV)

64-Gd-155

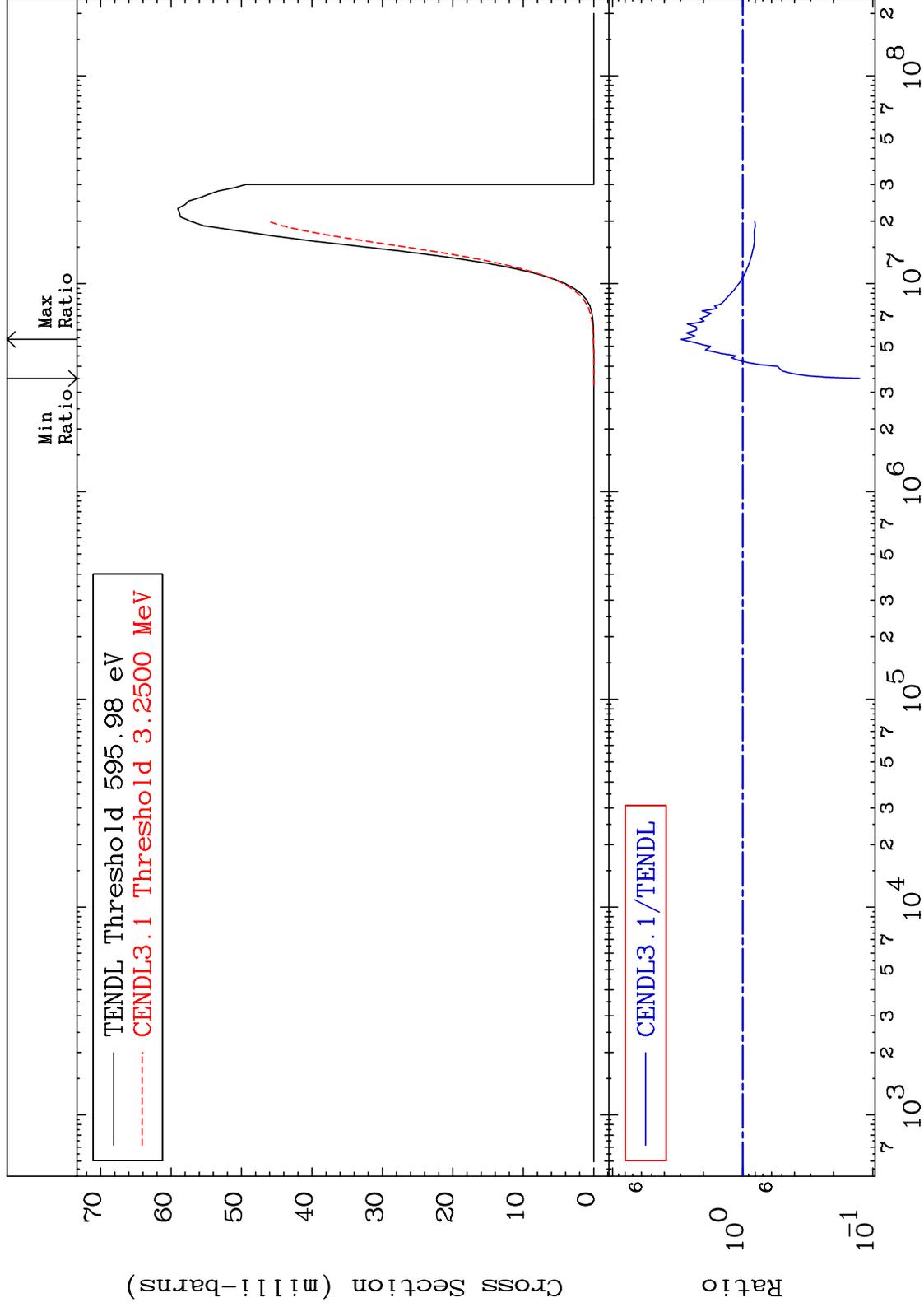
MAT 6434

(n,p)

64-Gd-155

Cross Section

-87.42 To 196.4 %

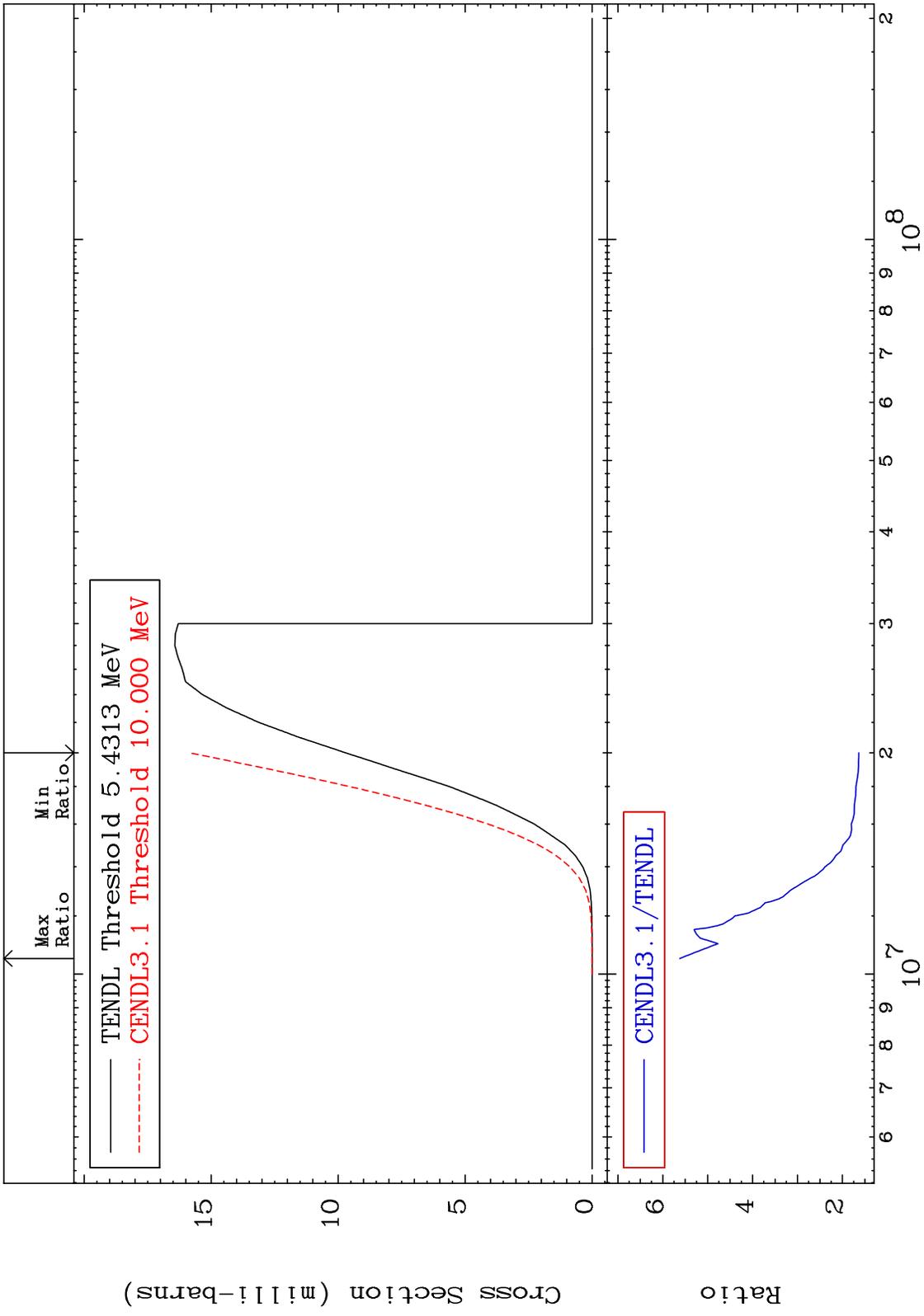


29

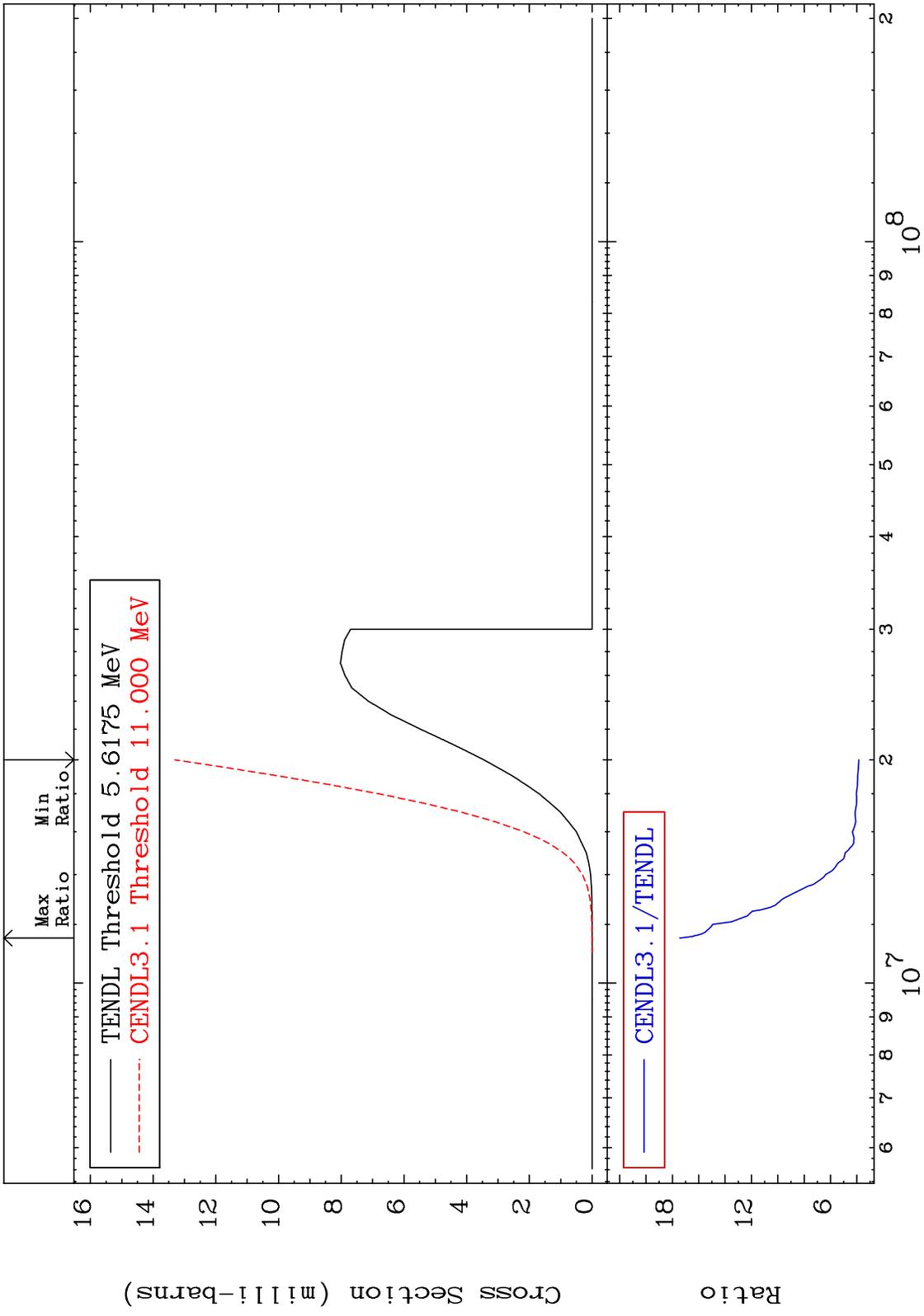
Incident Energy (eV)

64-Gd-155

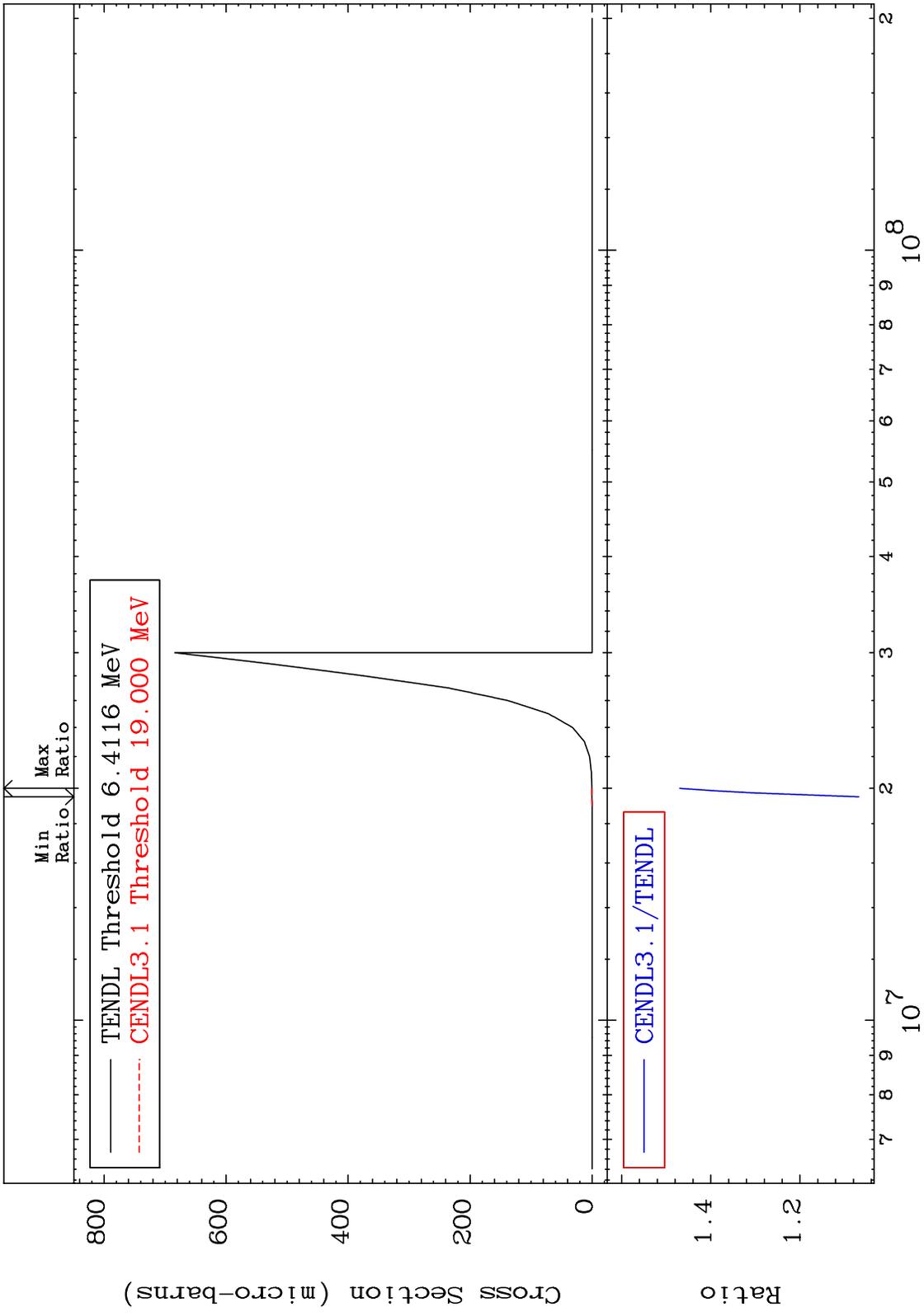
MAT 6434 (n,d) Cross Section 64-Gd-155 63.44 To 462.2 %



MAT 6434 (n,t) Cross Section 64-Gd-155 285.3 To 1644. %



MAT 6434 (n, He-3) Cross Section 64-Gd-155 To 46.97 %
6.804

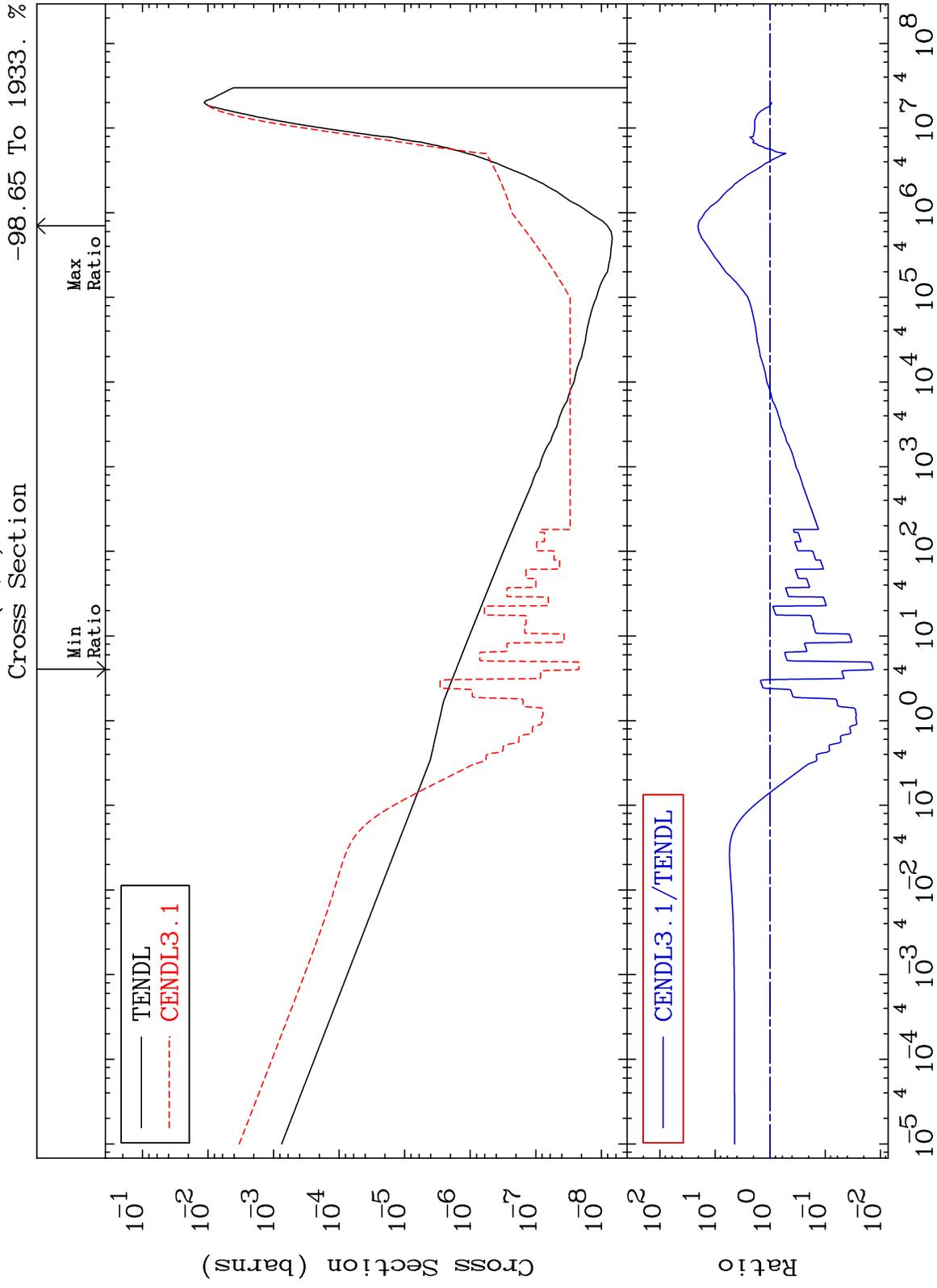


64-Gd-155 Incident Energy (eV) 32

MAT 6434

(n, α)

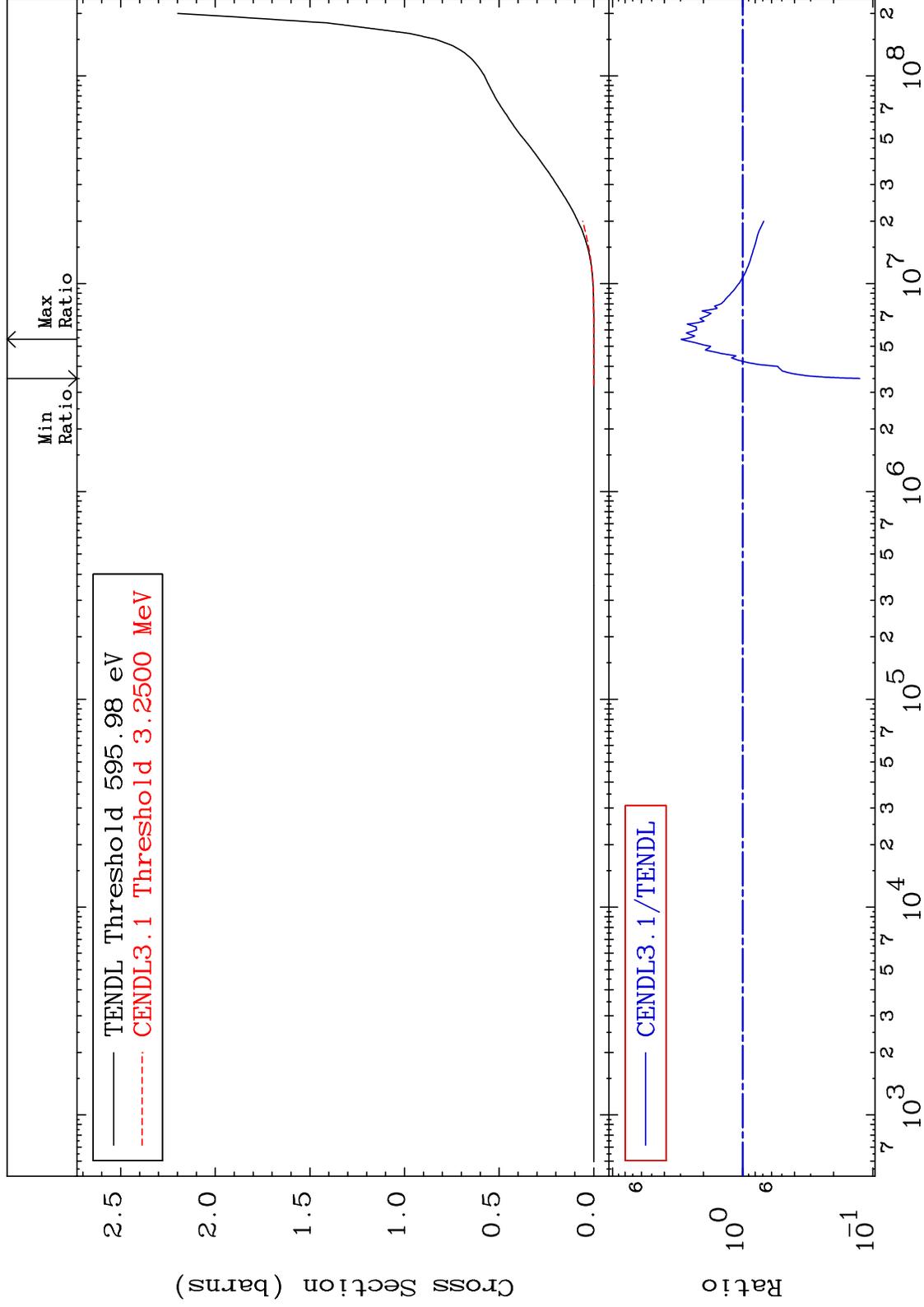
64-Gd-155
-98.65 To 1933. %



MAT 6434

Hydrogen Production
Cross Section

64-Gd-155
-87.42 To 196.4 %

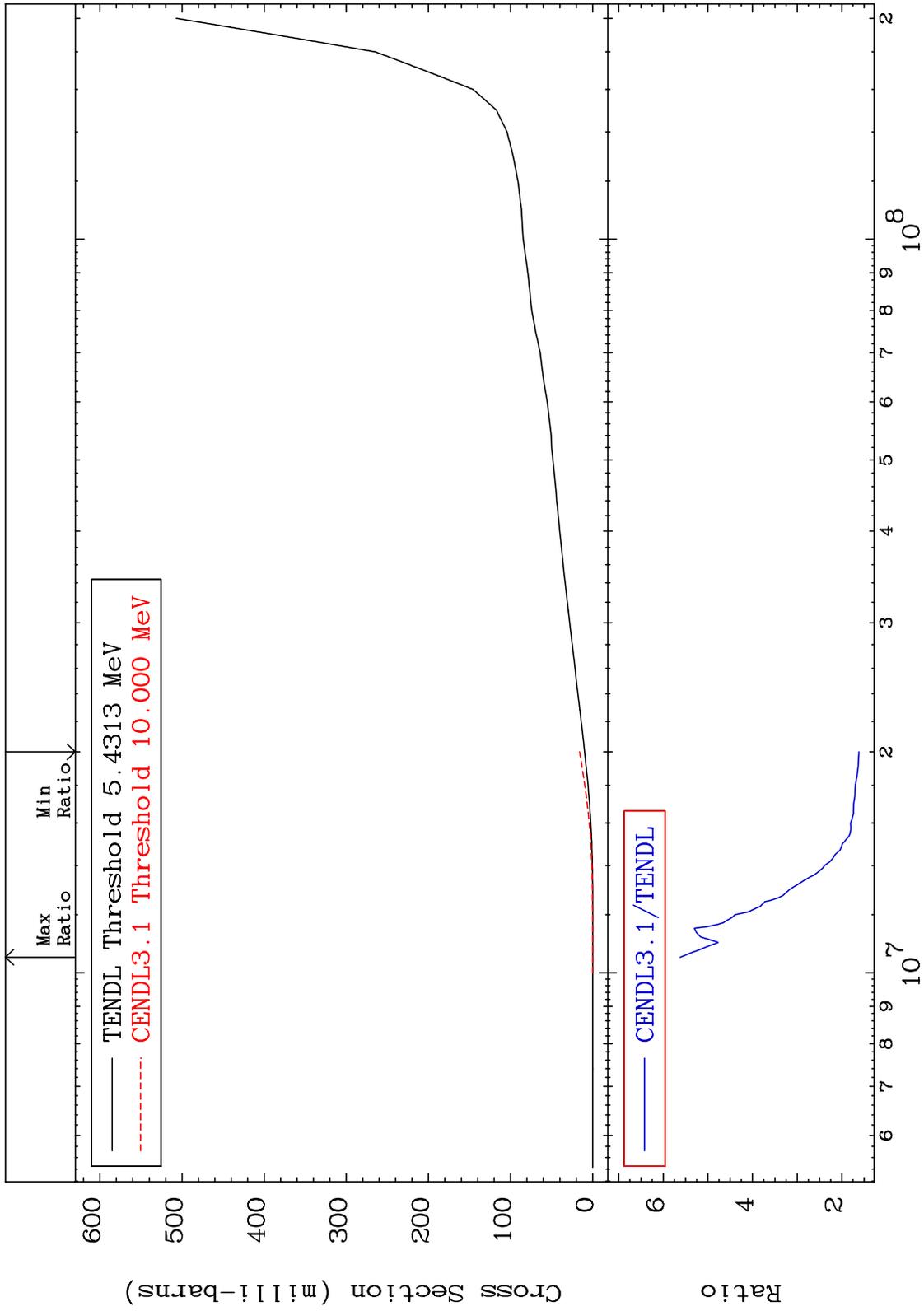


34

Incident Energy (eV)

64-Gd-155

MAT 6434 Deuterium Production Cross Section 64-Gd-155 61.62 To 462.2 %

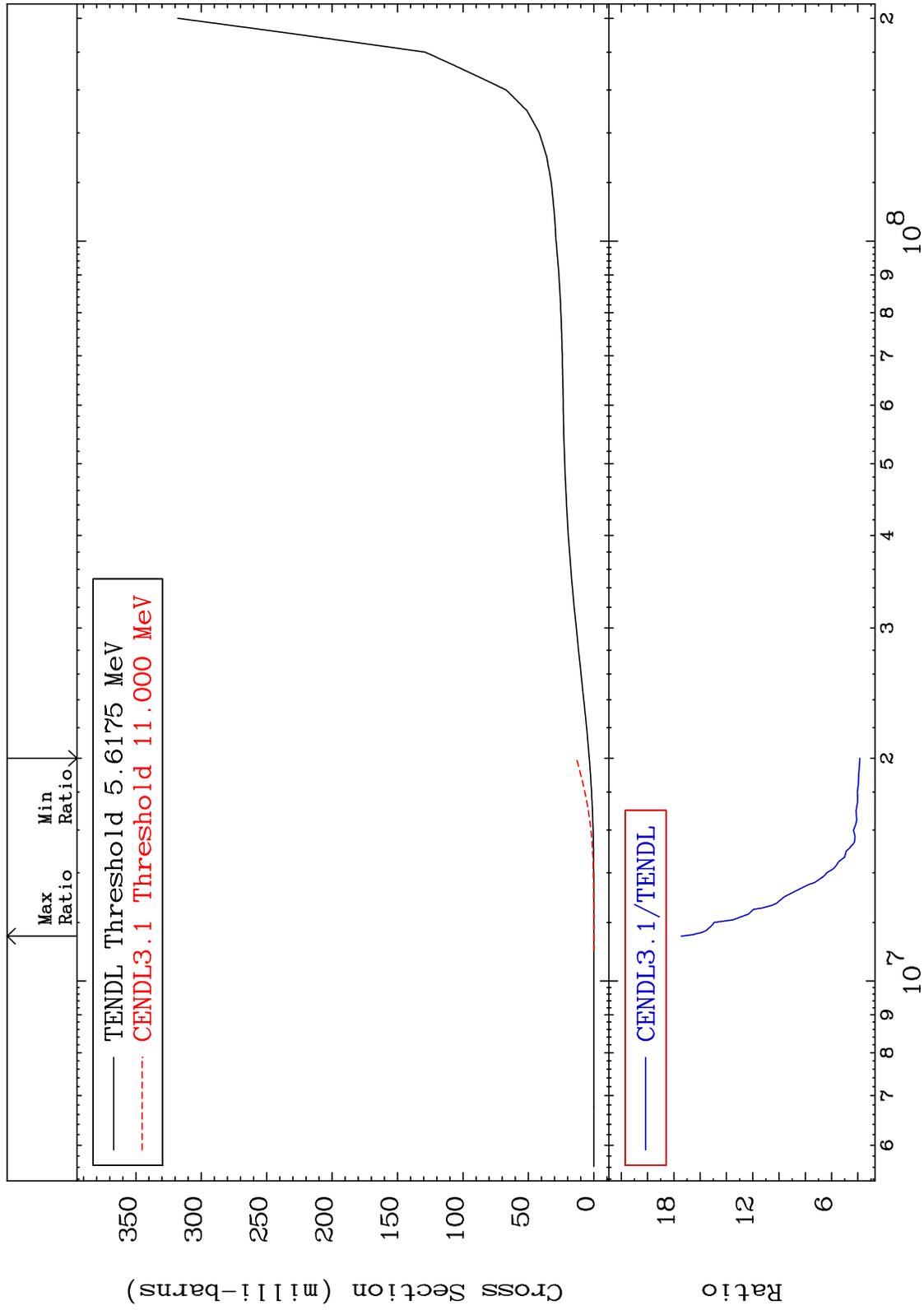


64-Gd-155 Incident Energy (eV) 35

MAT 6434

Tritium Production
Cross Section

64-Gd-155
285.3 To 1644. %



36

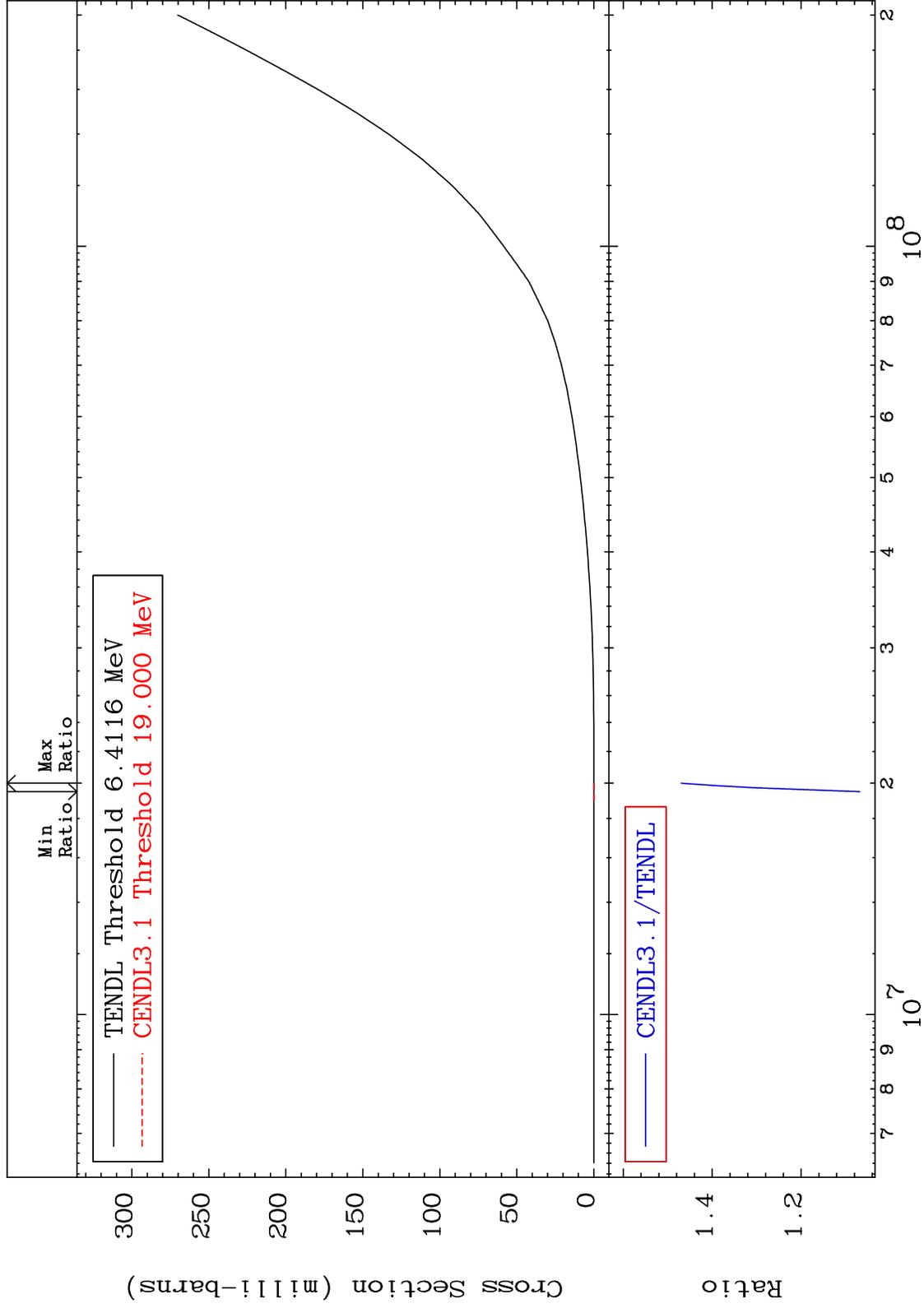
Incident Energy (eV)

64-Gd-155

MAT 6434

He-3 Production
Cross Section

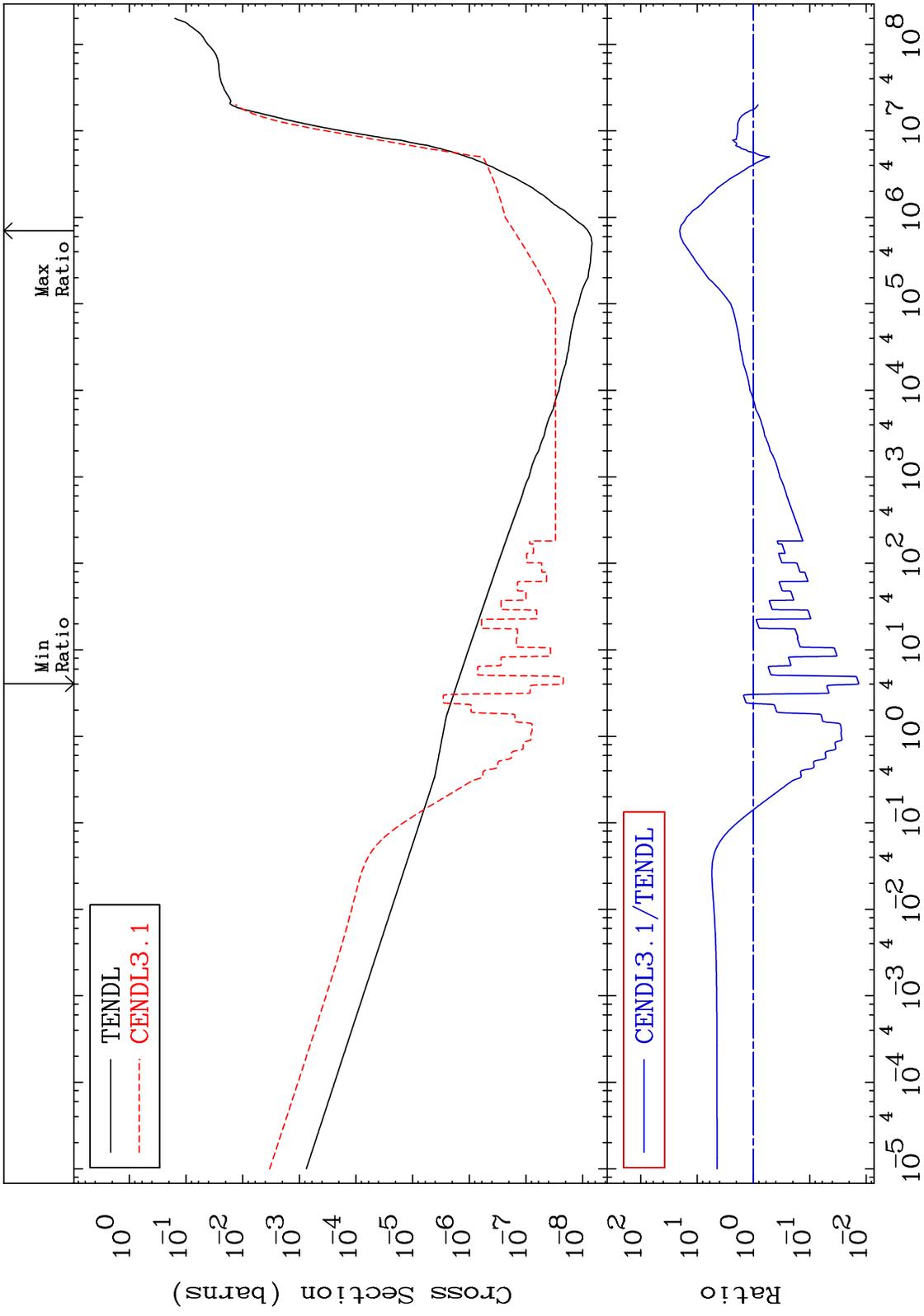
64-Gd-155
To 46.97 %



37

64-Gd-155

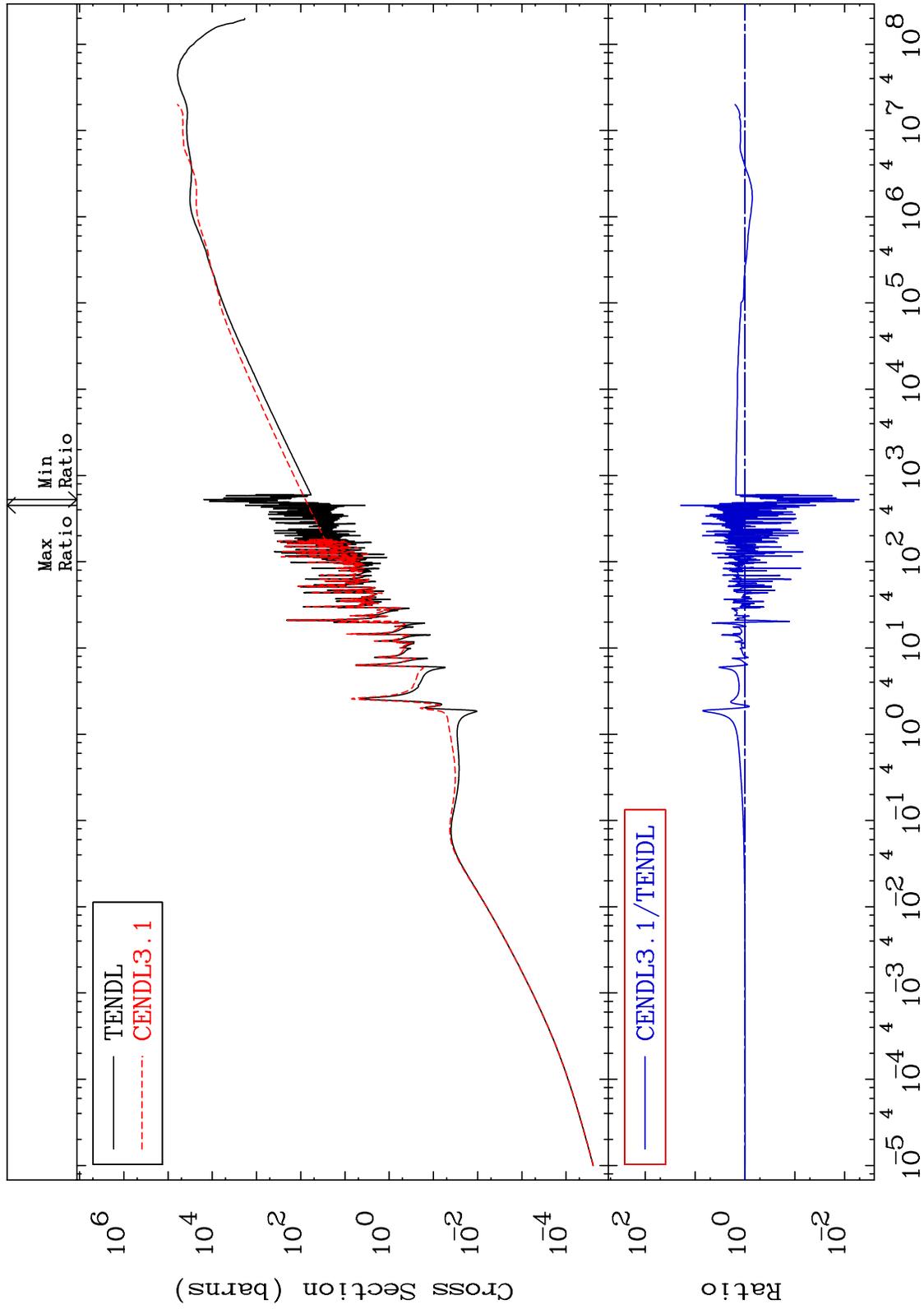
MAT 6434 He-4 Production Cross Section 64-Gd-155 -98.65 To 1933. %



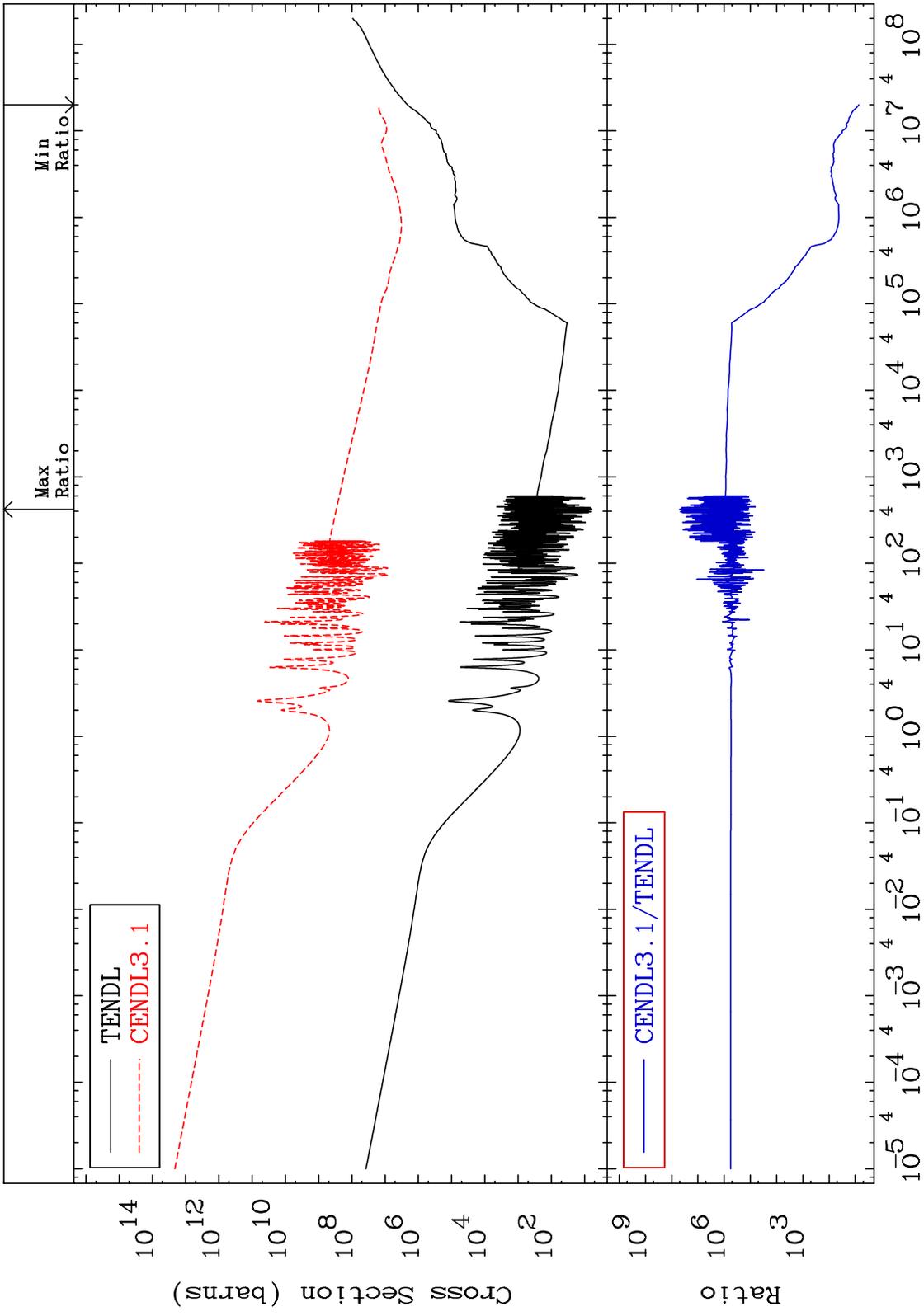
MAT 6434

Kerma elastic
Cross Section

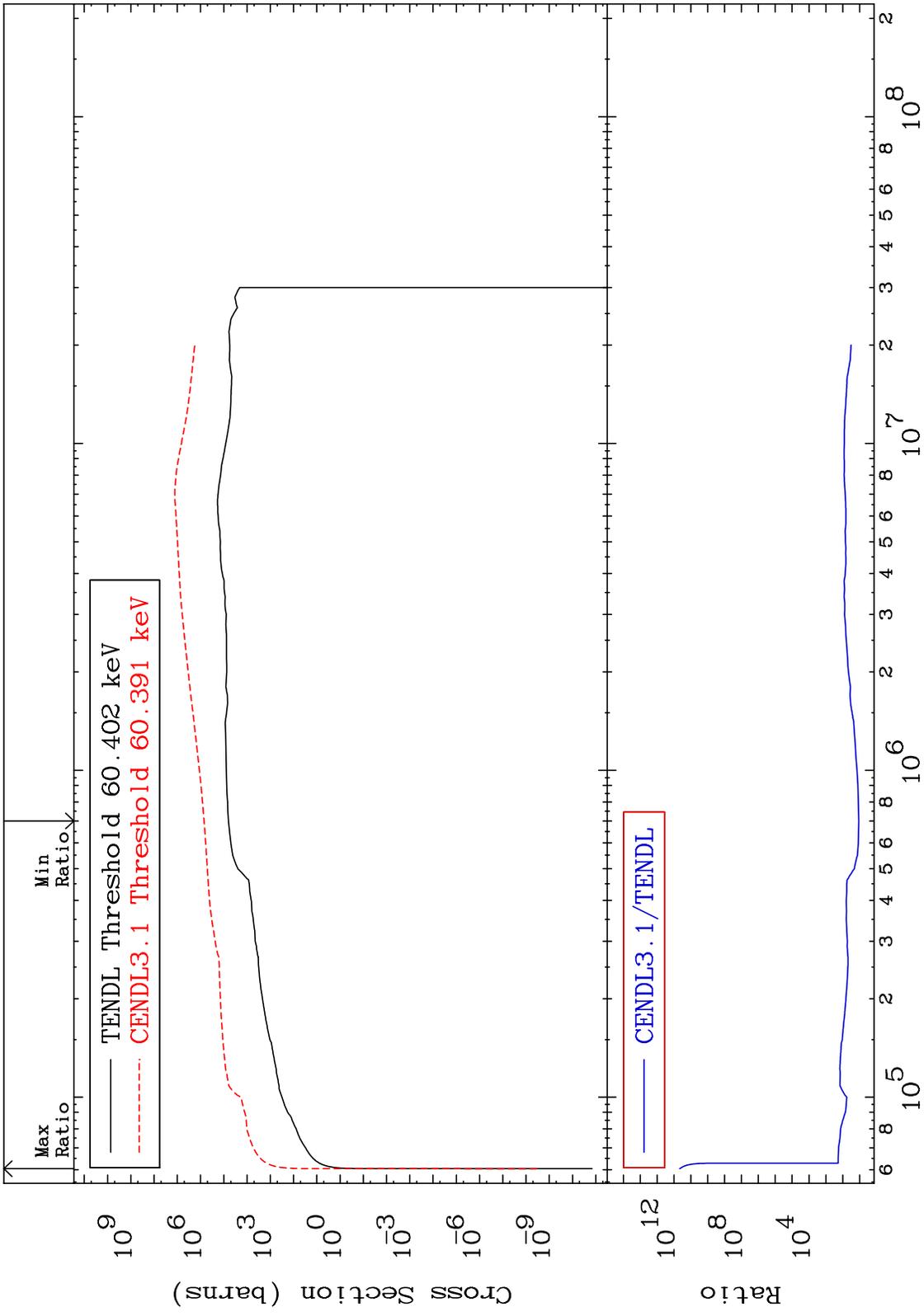
64-Gd-155
-99.48 To 1856. %



MAT 6434 Kerma non-elastic (all but mt2) Cross Section 64-Gd-155 639.4 To 9999. %



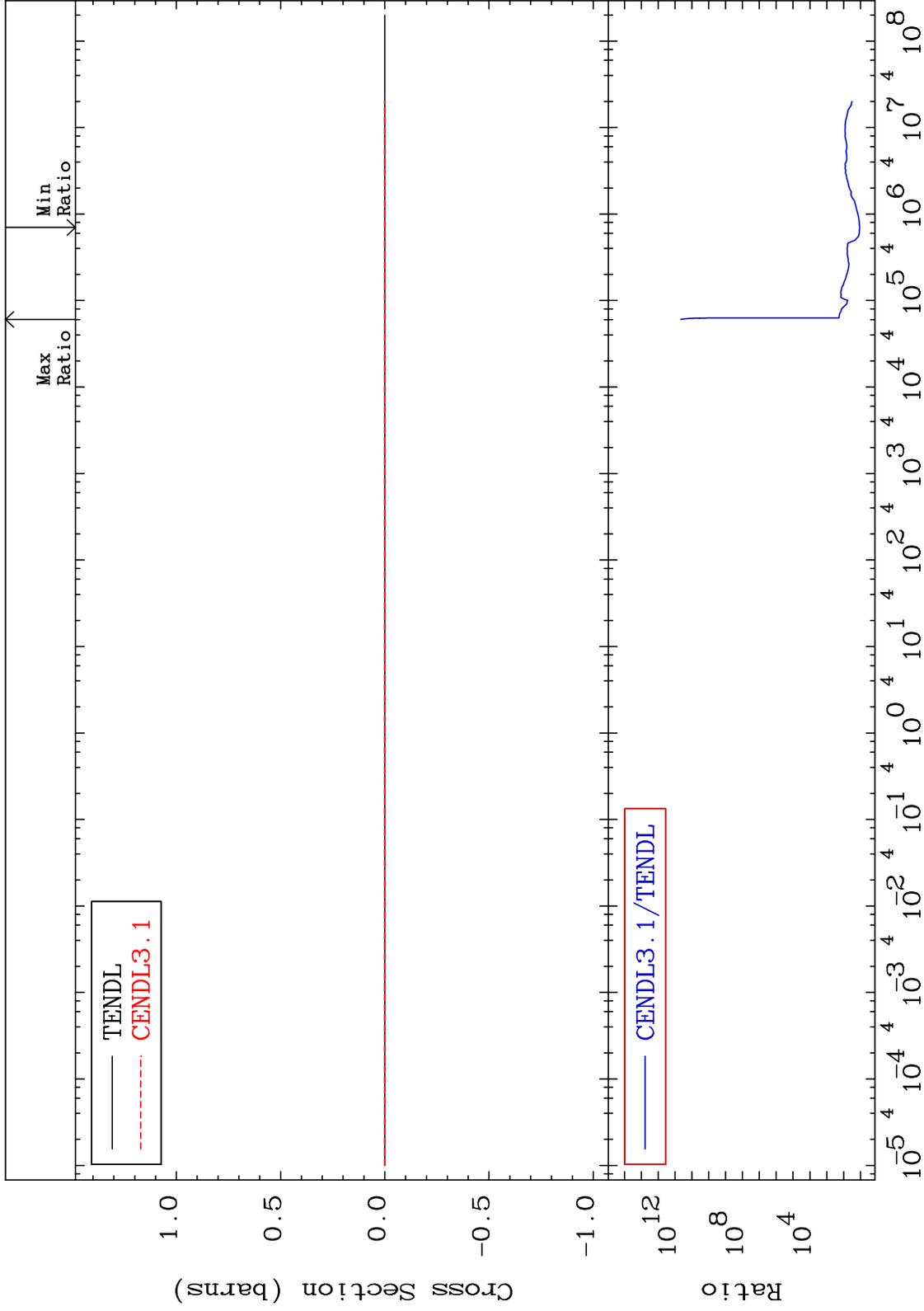
MAT 6434 Kerma inelastic (mt51-91) 64-Gd-155
 Cross Section 1015. To 9999. %

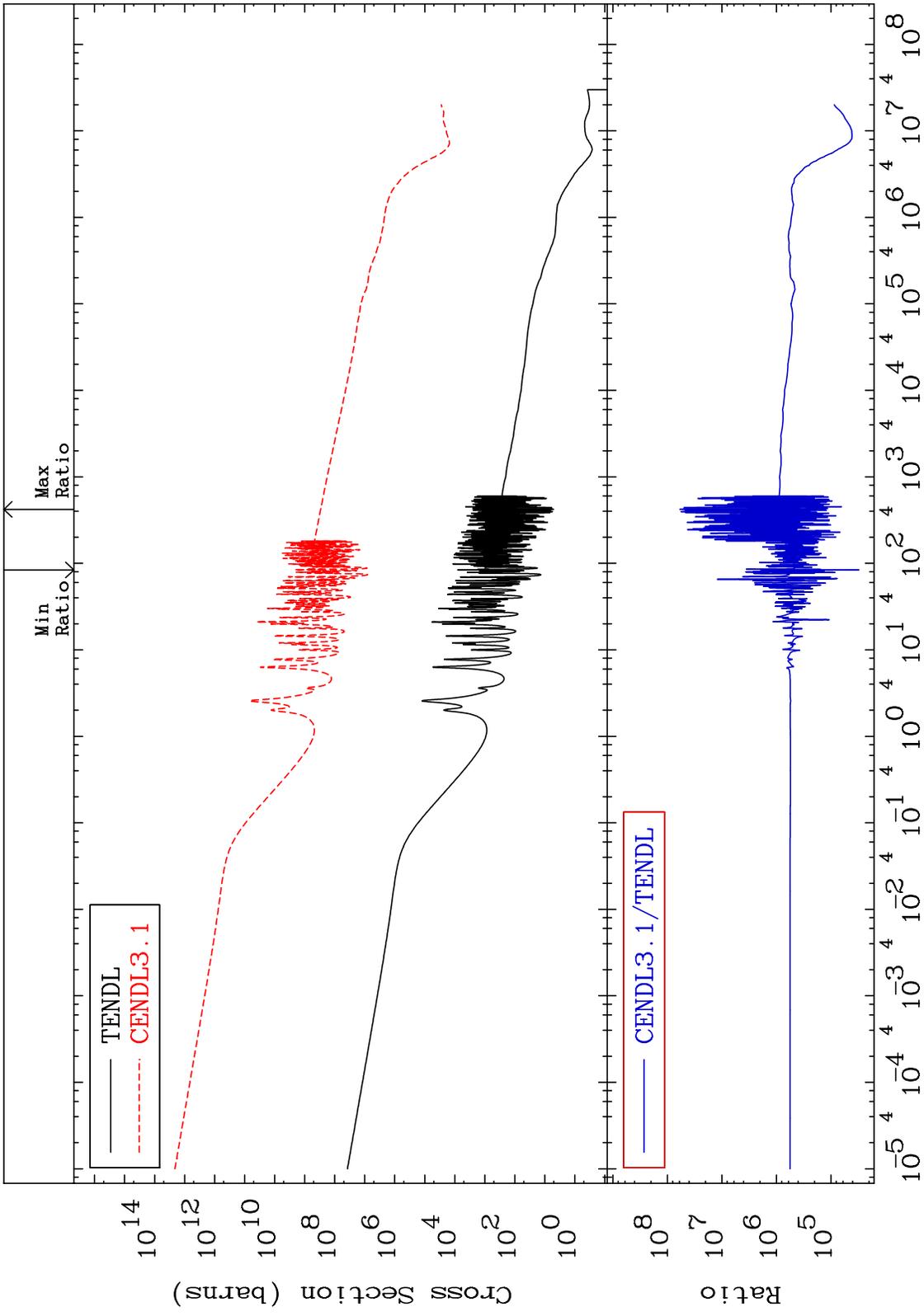


MAT 6434

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

64-Gd-155
1015. To 9999. %

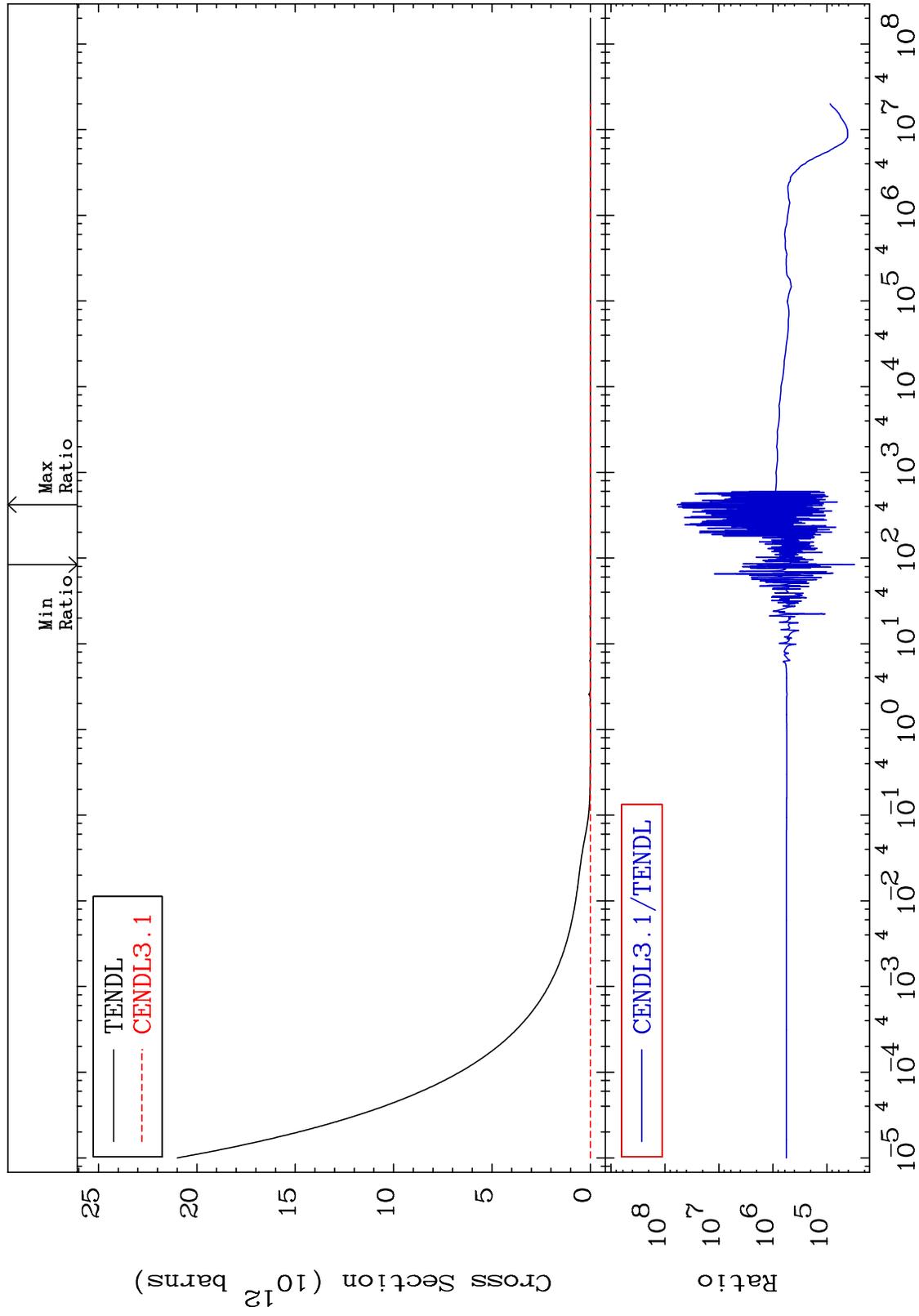




MAT 6434

Total photon (eV-barns)
Cross Section

64-Gd-155
9999. To 9999. %

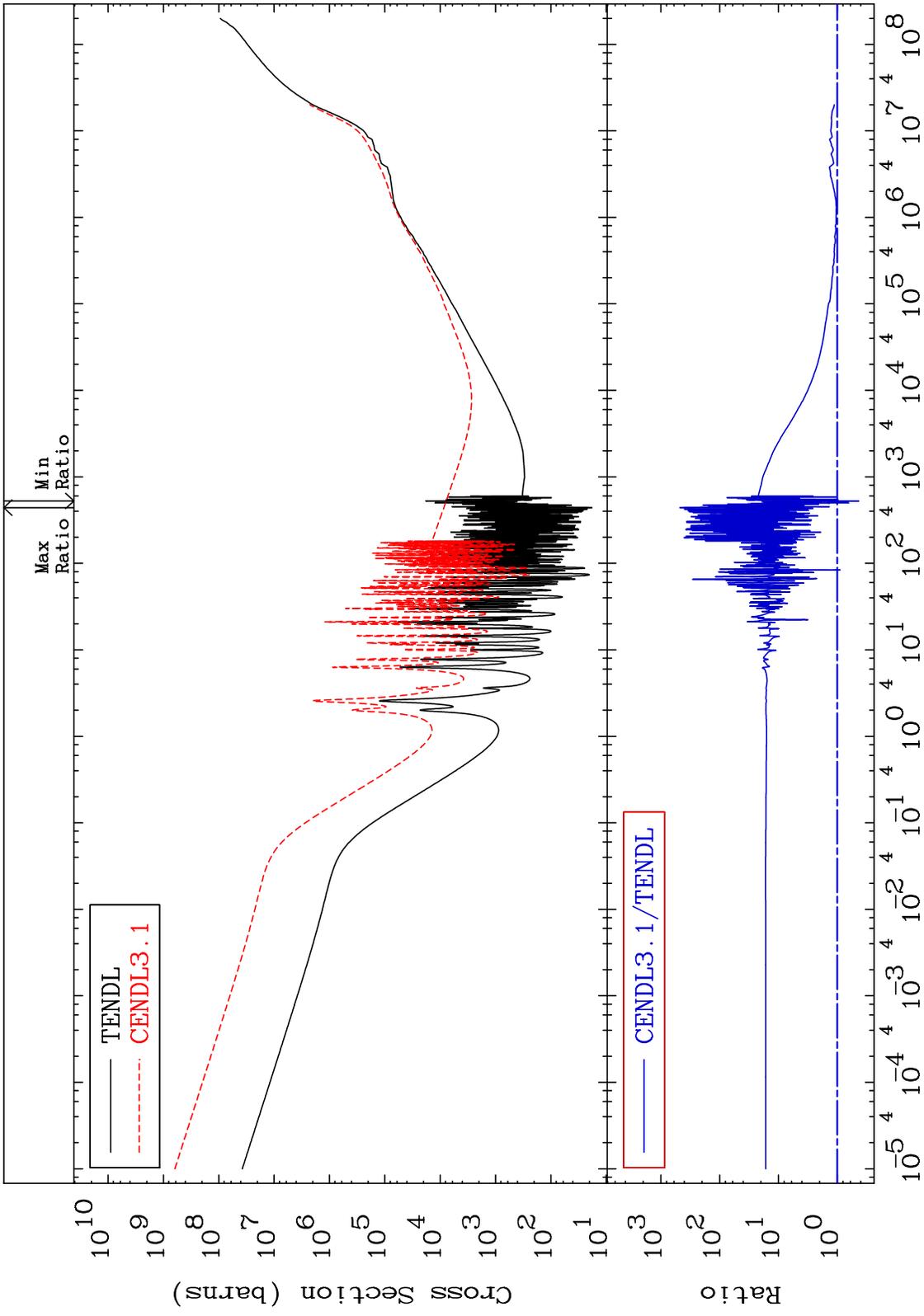


45

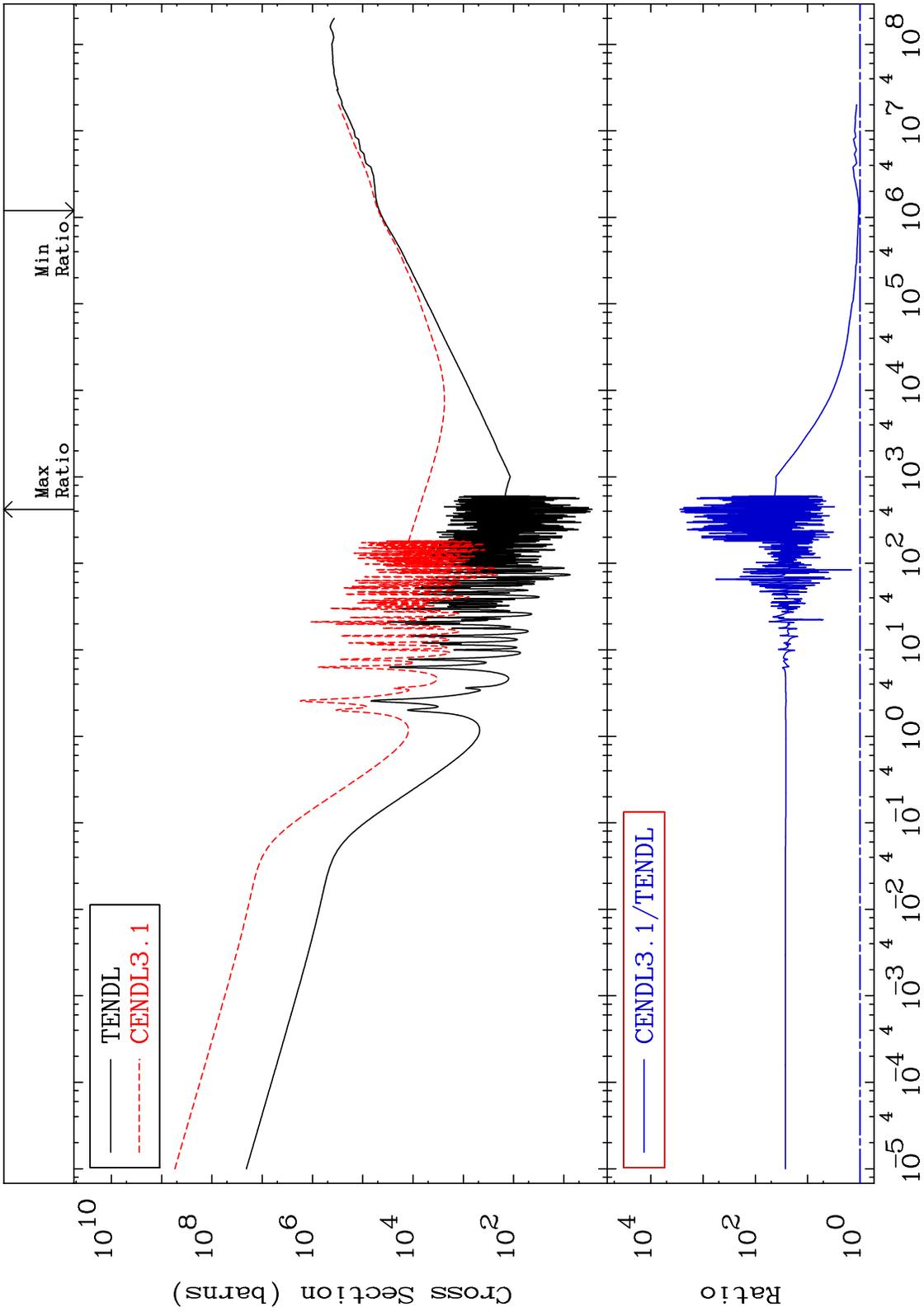
Incident Energy (eV)

64-Gd-155

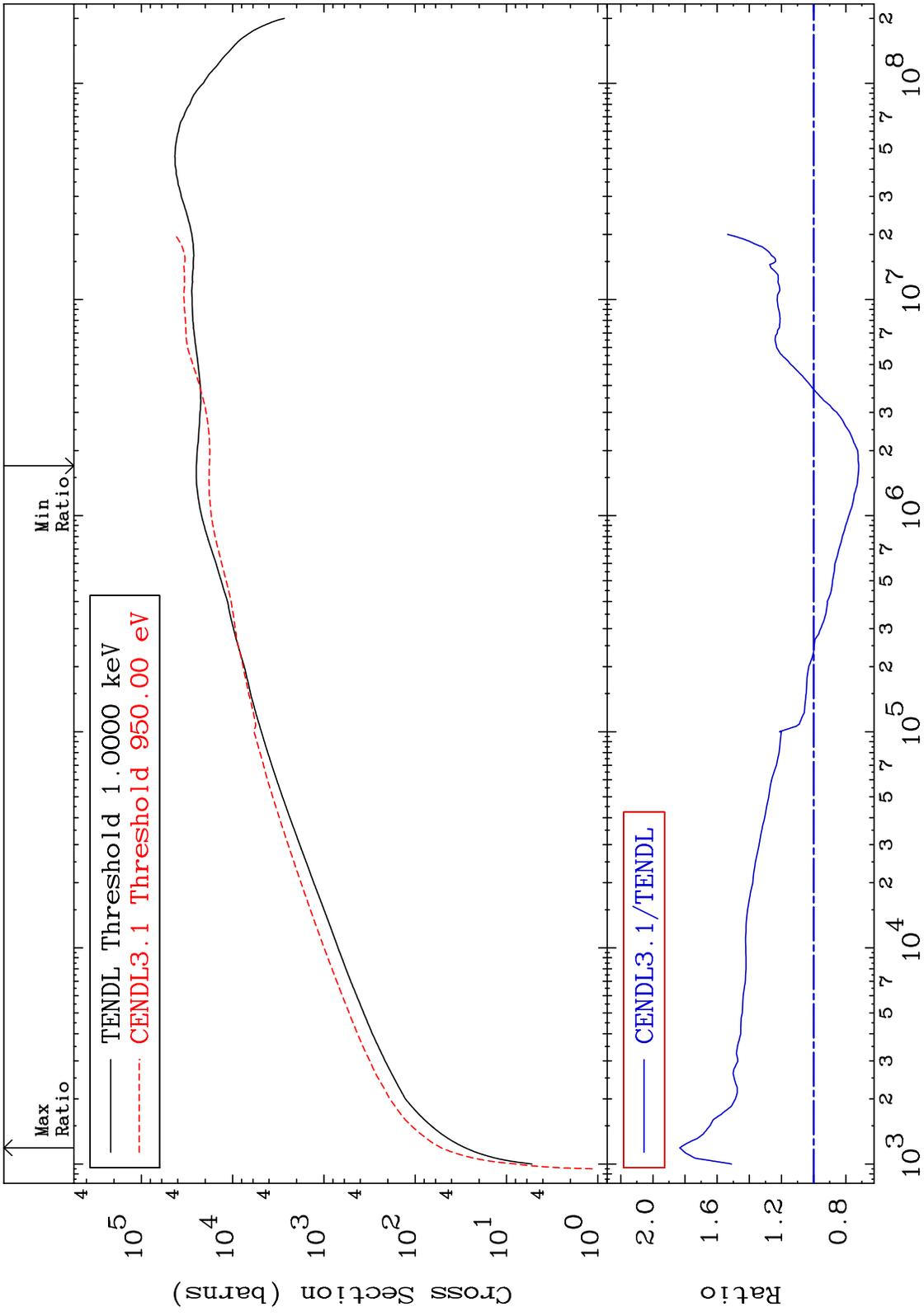
MAT 6434 Total kinematic kerma (high limit) 64-Gd-155
 Cross Section -56.83 To 9999. %



MAT 6434 Dpa total (eV-barns) 64-Gd-155 To 9999. %
Cross Section 4.866

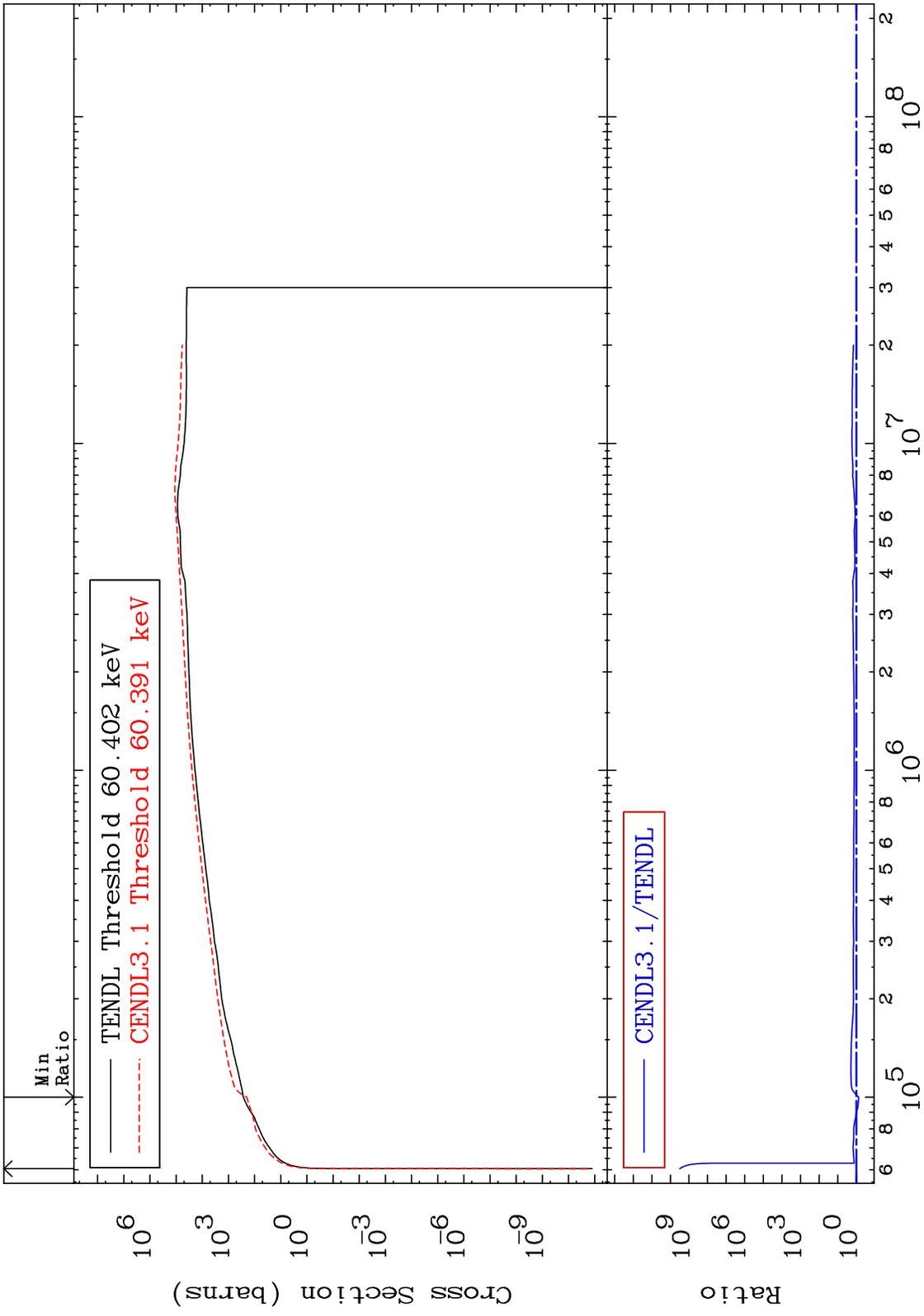


MAT 6434 Dpa elastic (mt2) 64-Gd-155
 Cross Section -28.09 To 83.29 %

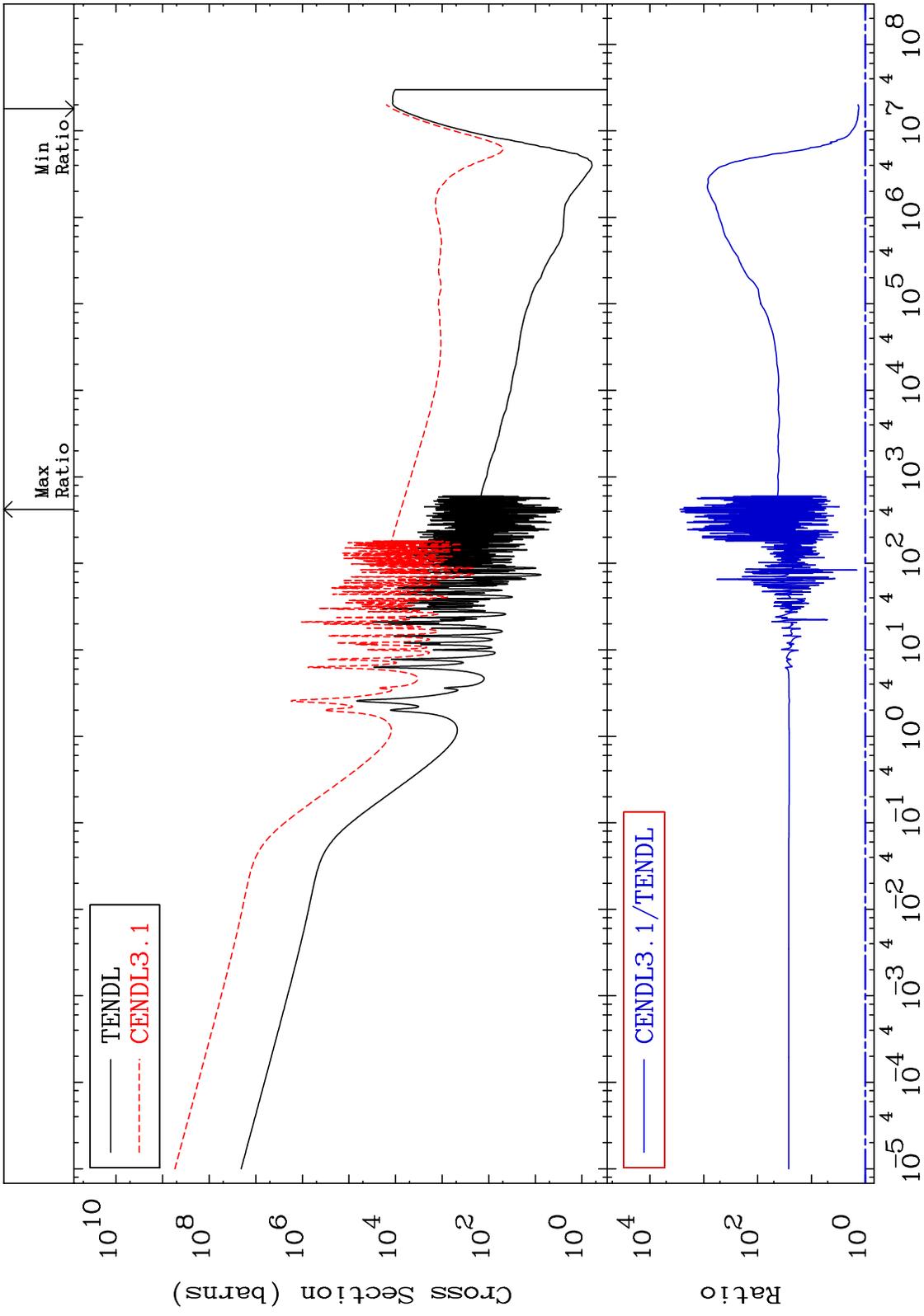


48 Incident Energy (eV) 64-Gd-155

MAT 6434 Dpa inelastic (mt51-91) 64-Gd-155
 Cross Section -26.34 To 9999. %



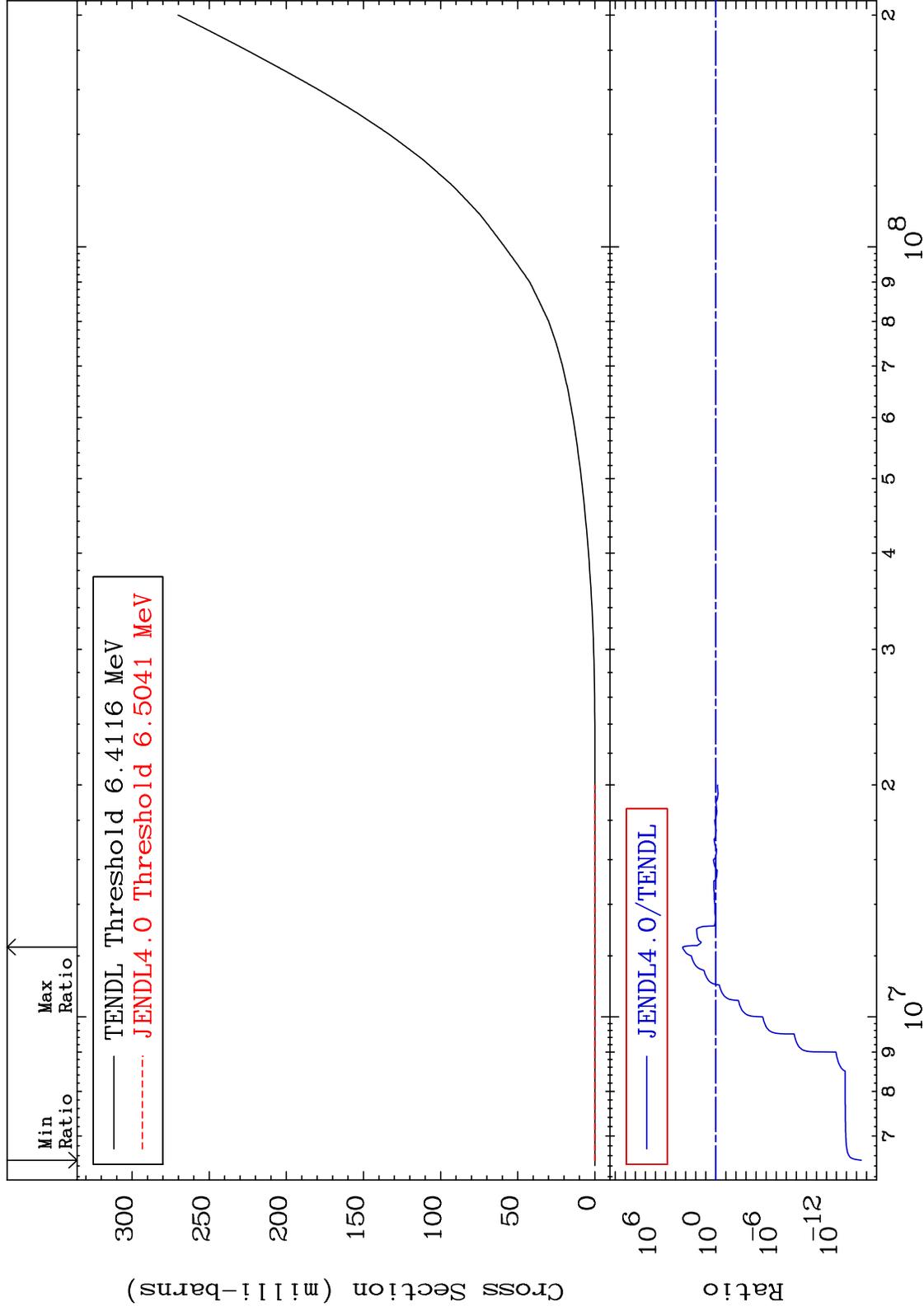
MAT 6434 Dpa disappearance (mt102 -120) 64-Gd-155
 Cross Section 32.34 To 9999. %



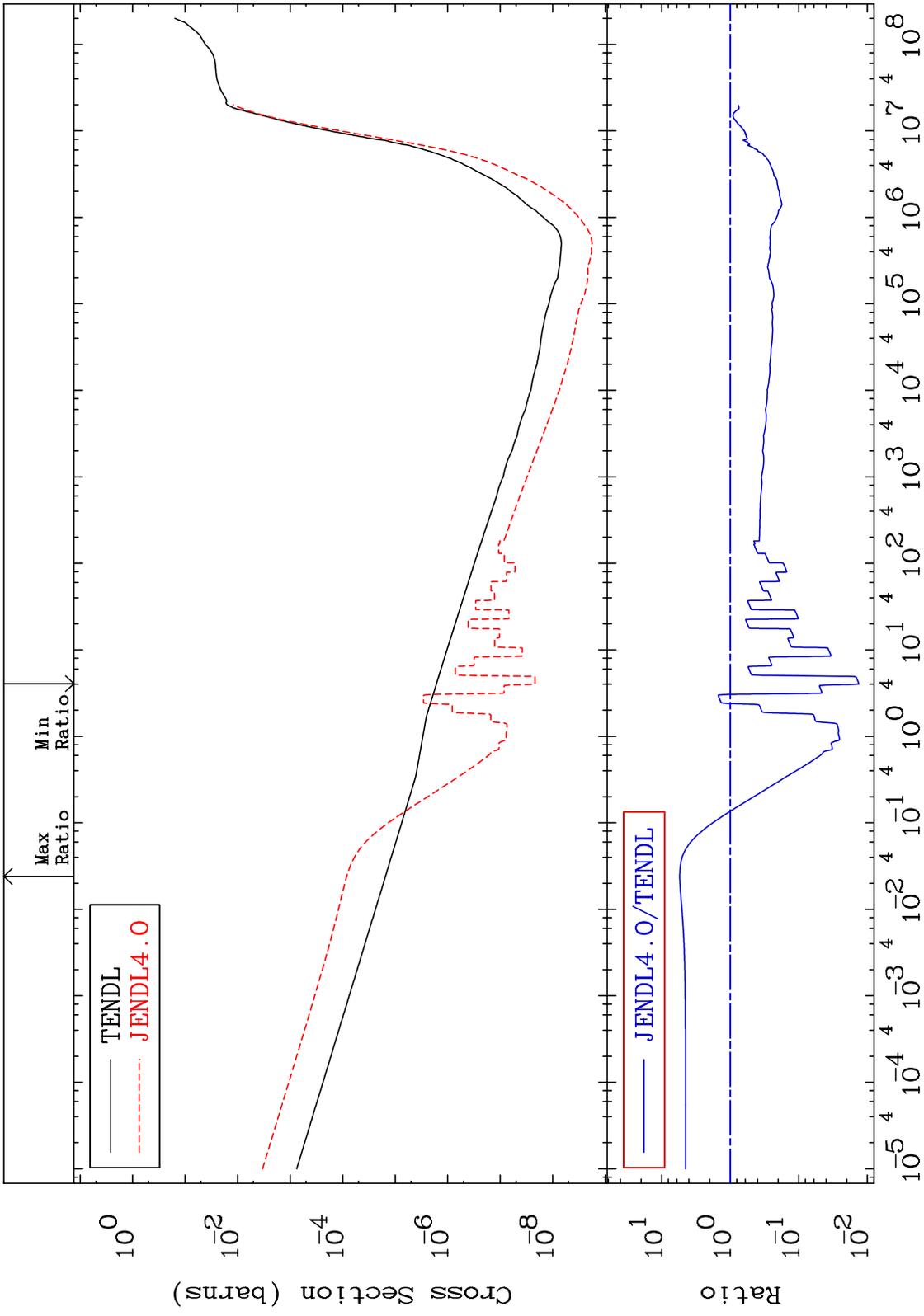
MAT 6434

He-3 Production
Cross Section

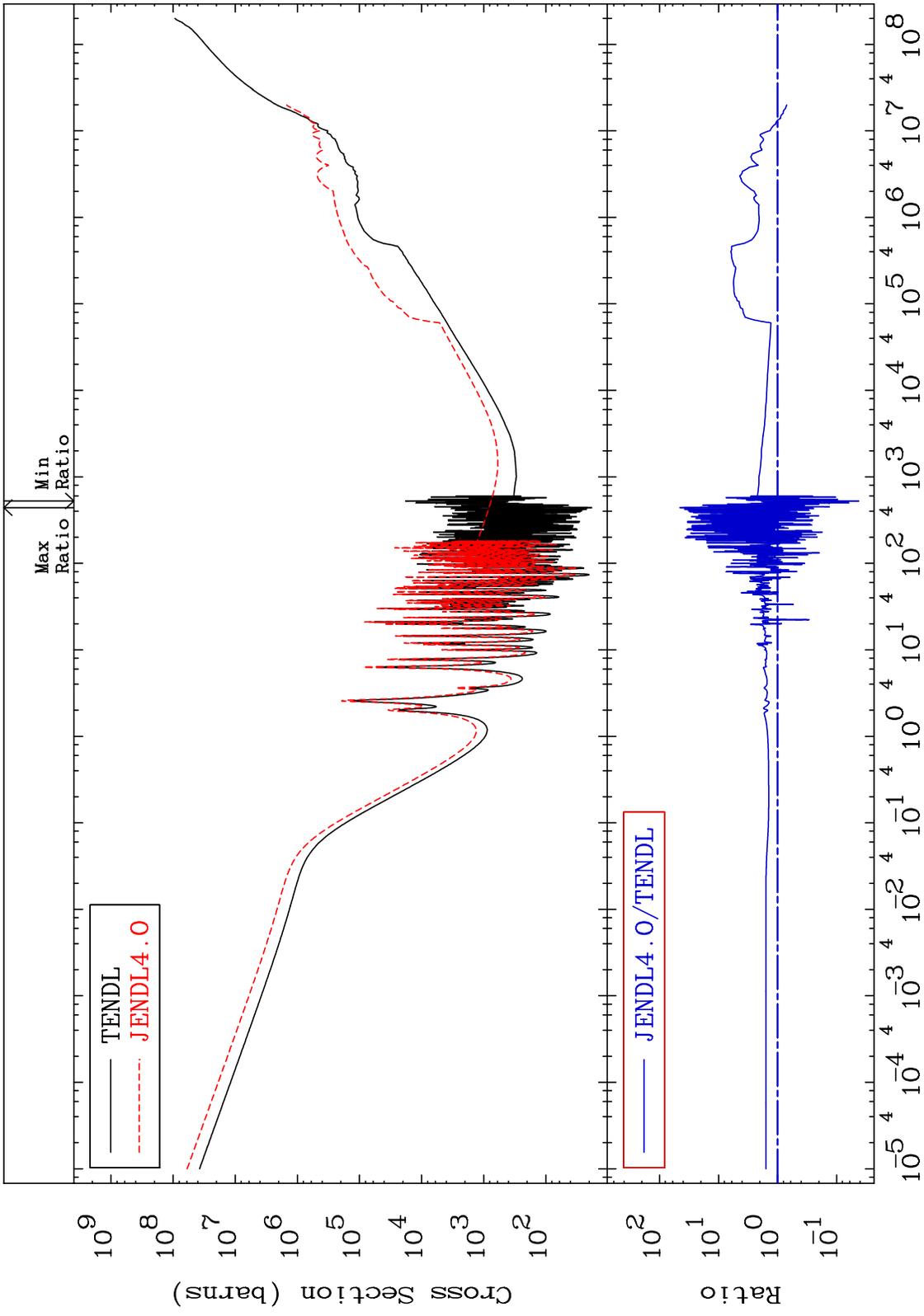
64-Gd-155
-100.0 To 9999. %



MAT 6434 He-4 Production Cross Section 64-Gd-155
 -98.67 To 445.5 %



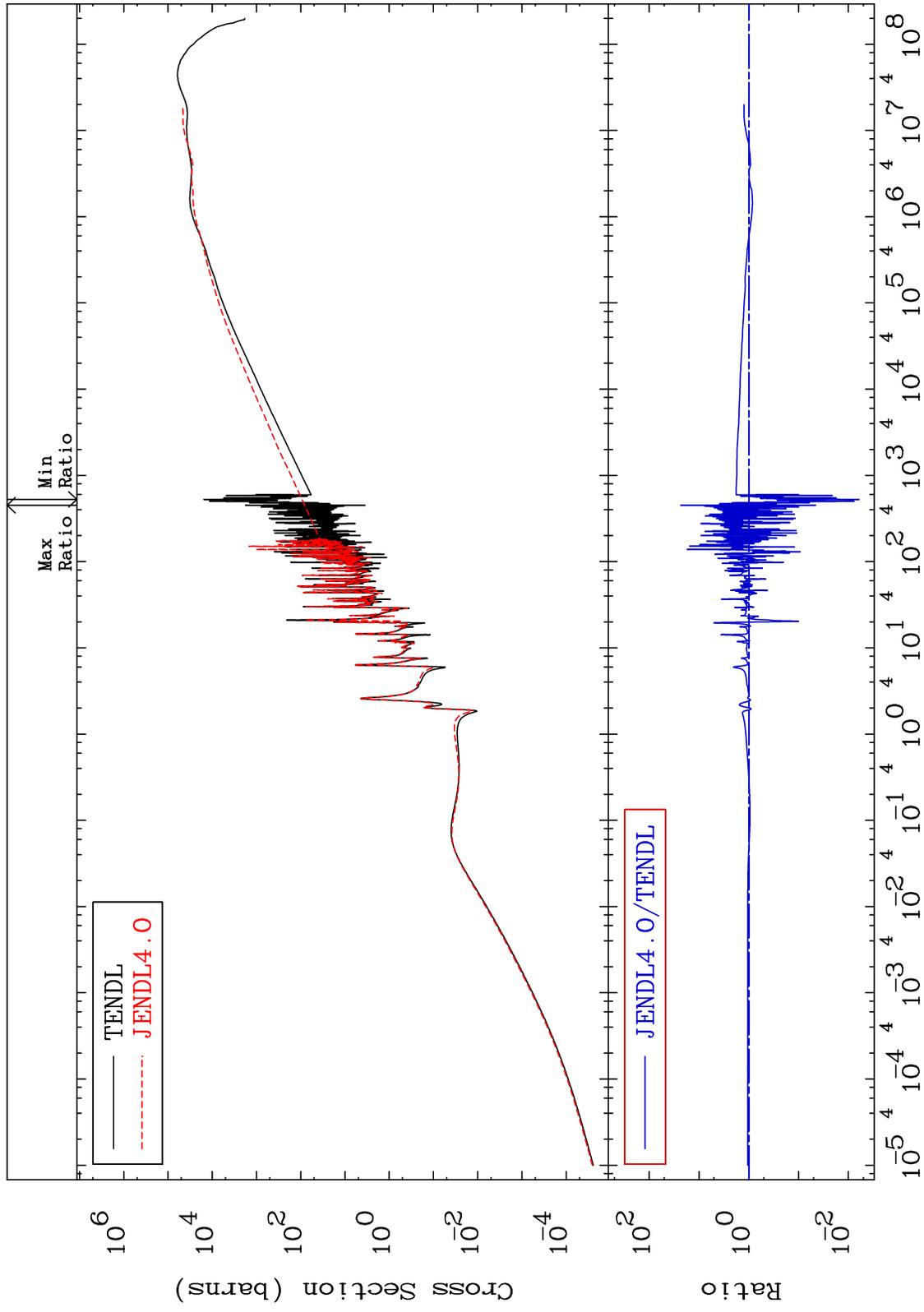
MAT 6434 Kerma total (eV-barns) 64-Gd-155
 Cross Section -95.79 To 4459. %



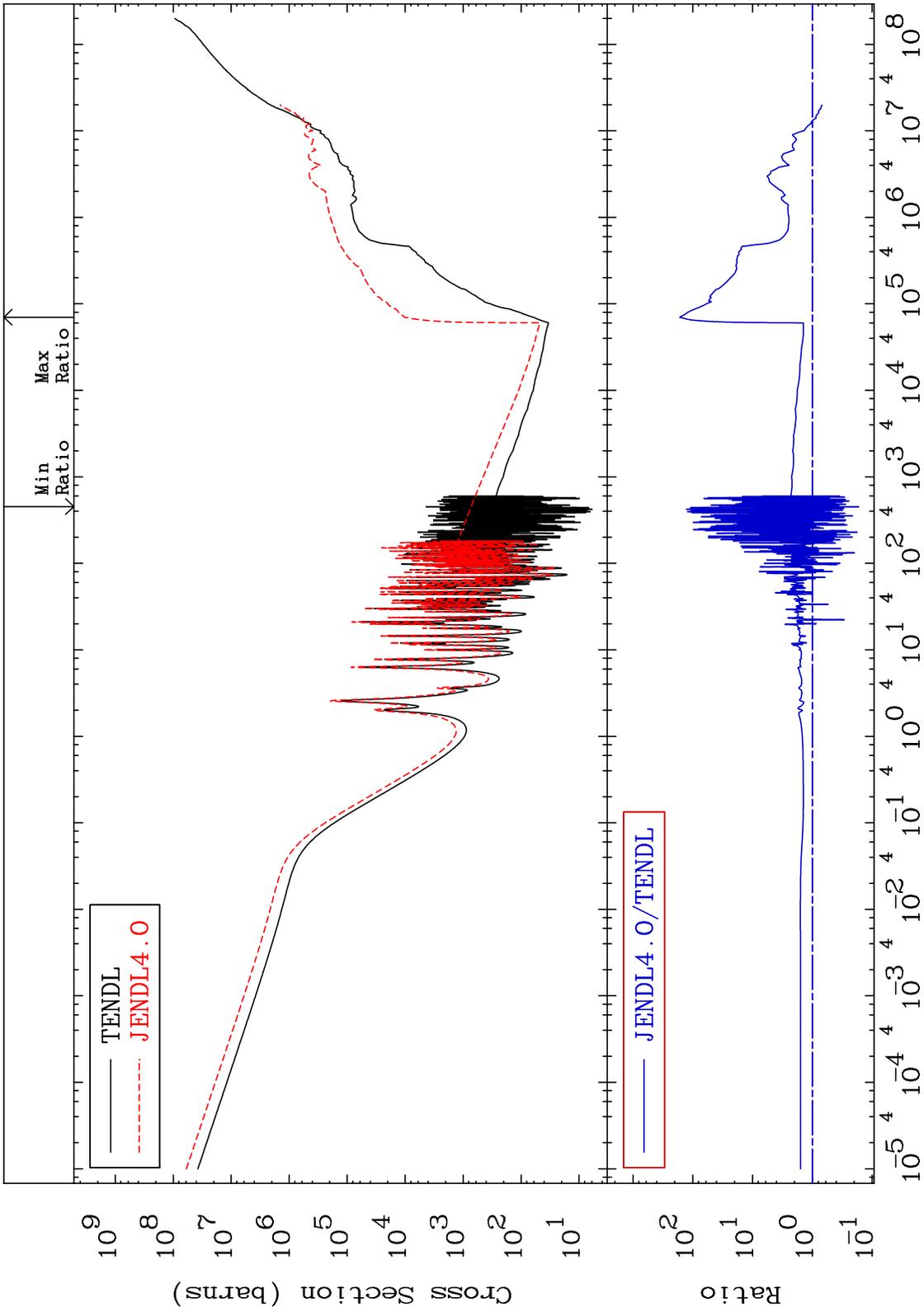
MAT 6434

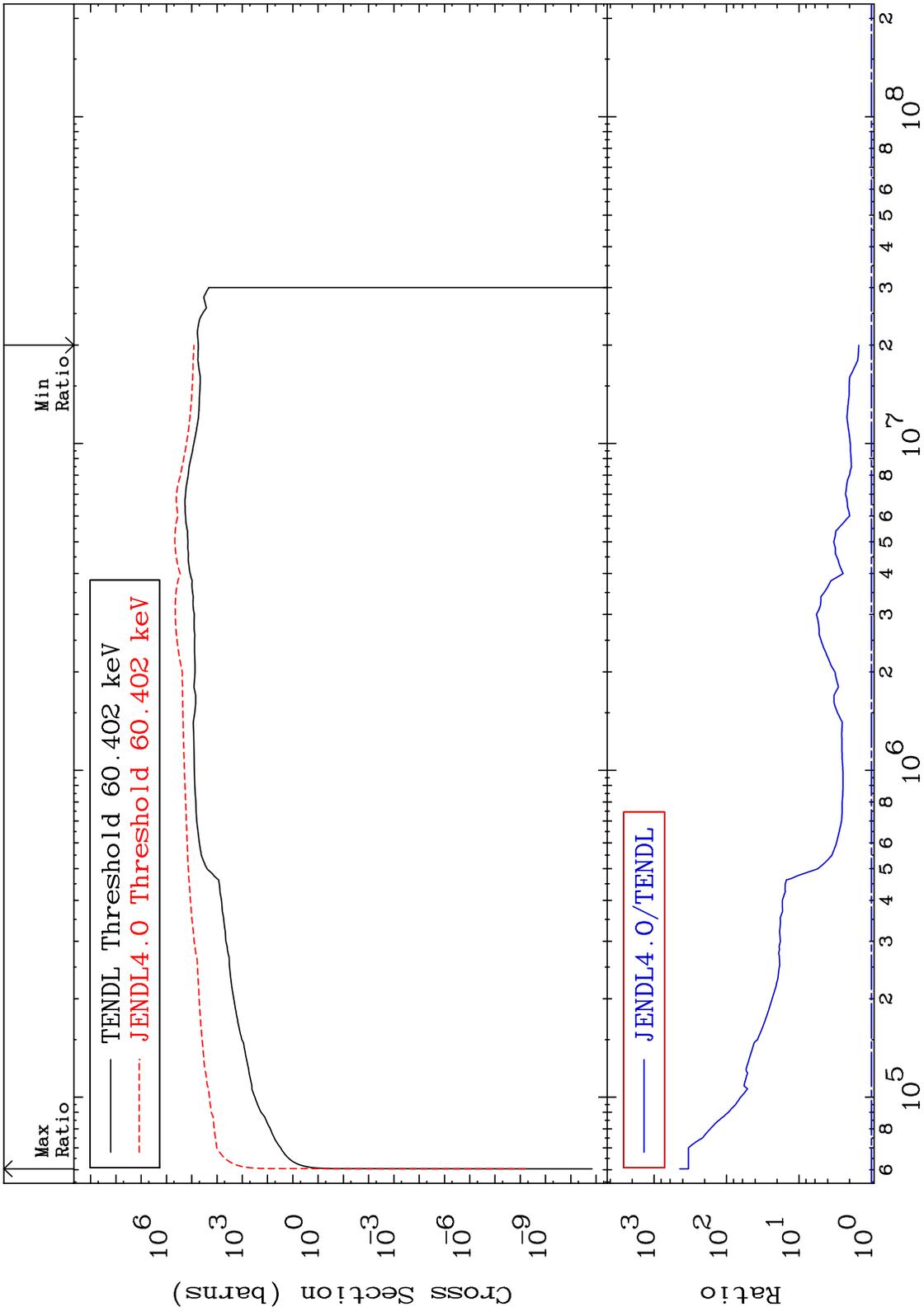
Kerma elastic
Cross Section

64-Gd-155
-99.39 To 2239. %



MAT 6434 Kerma non-elastic (all but mt2) 64-Gd-155
 Cross Section -83.28 To 9999. %

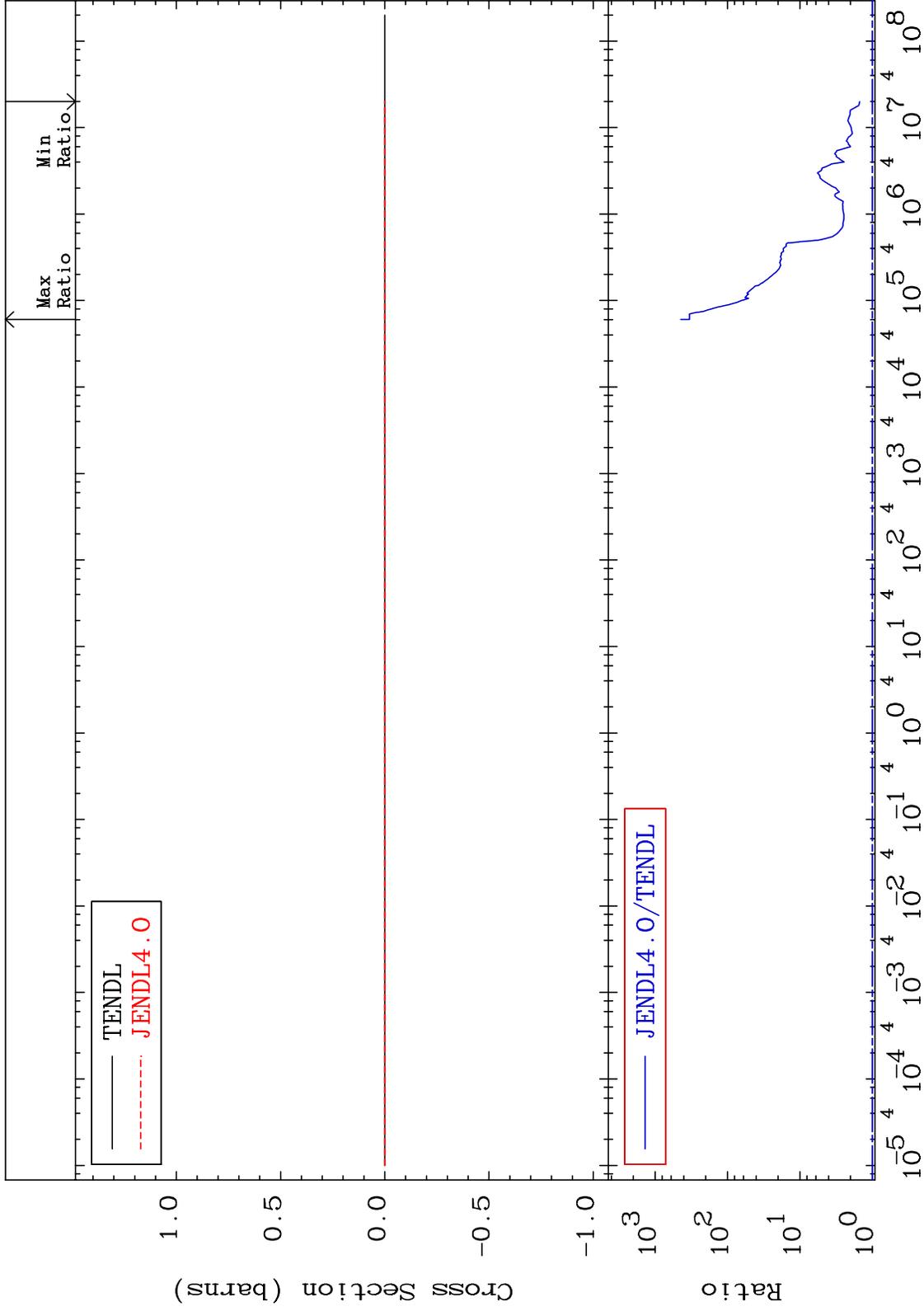




MAT 6434

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

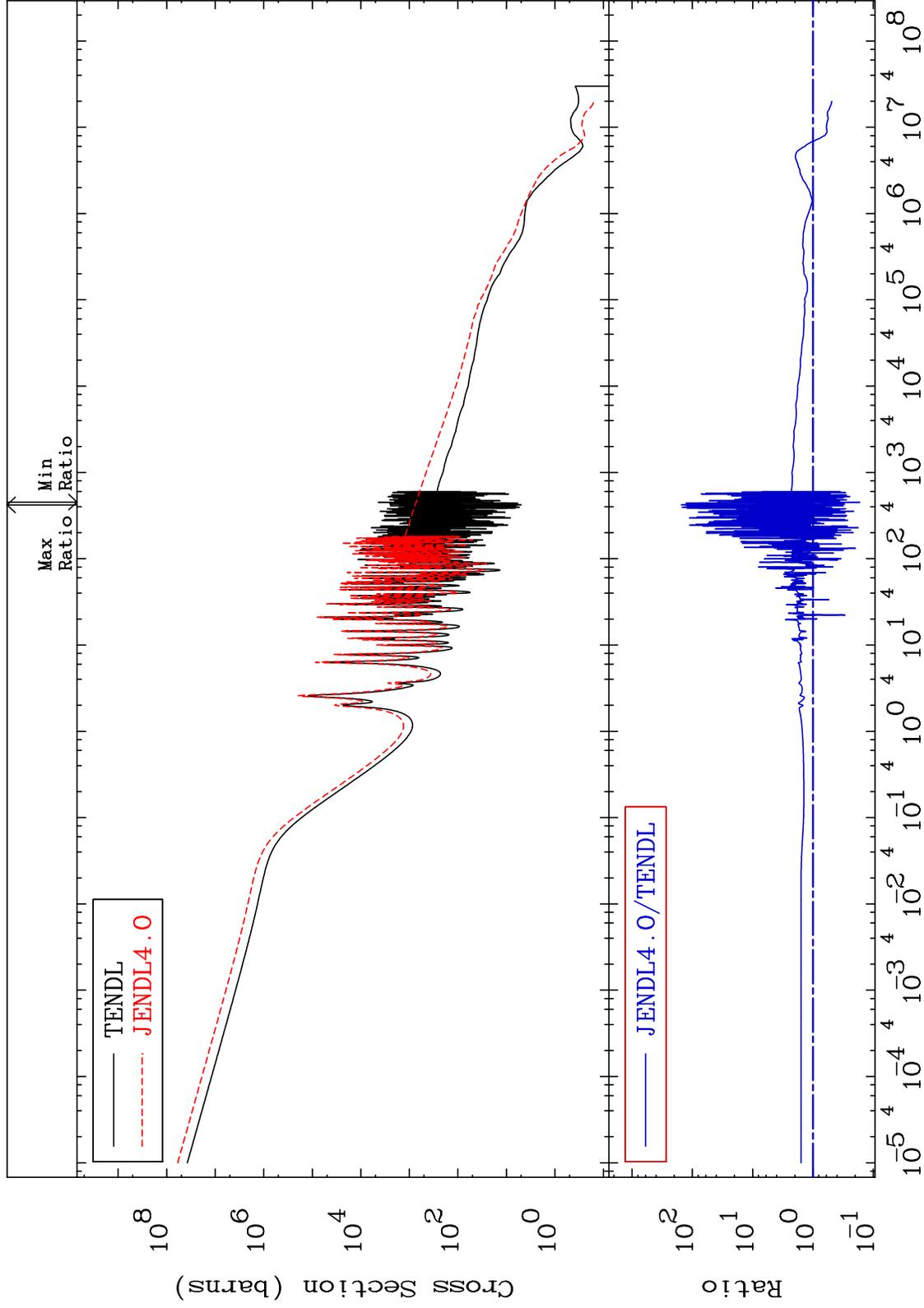
64-Gd-155
49.13 To 9999. %



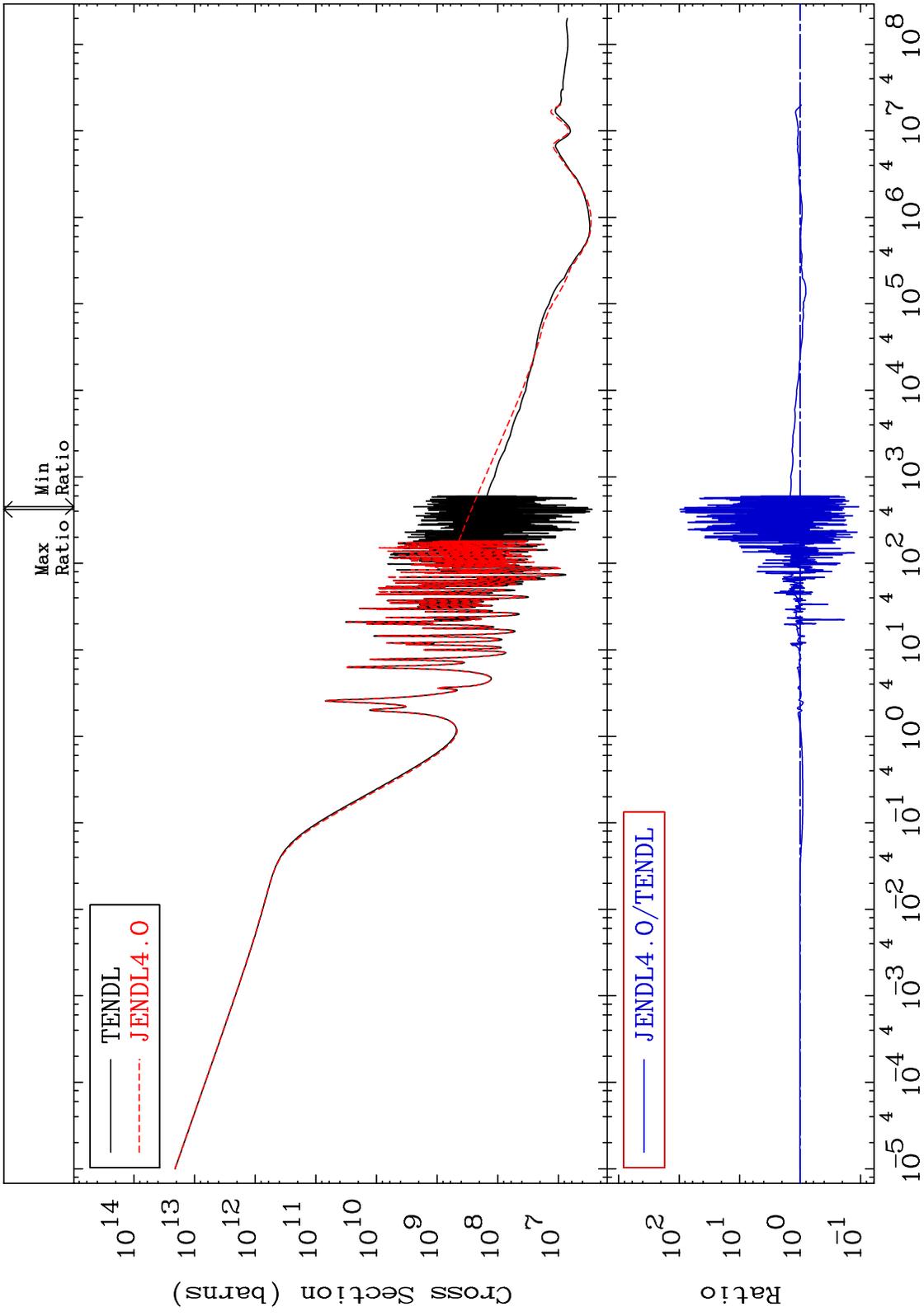
MAT 6434

Kerma capture (mt102)
Cross Section

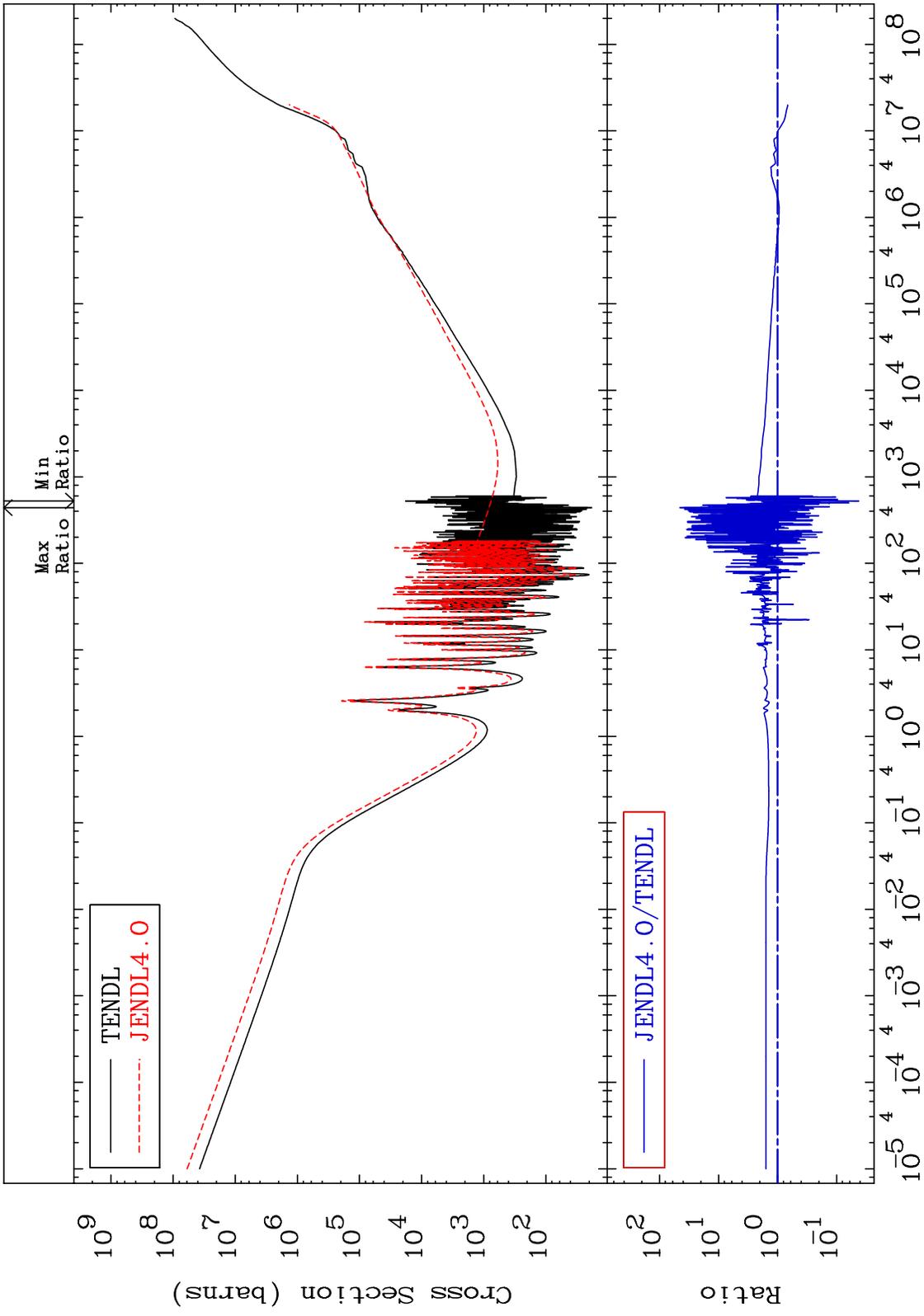
64-Gd-155
-83.28 To 9999. %



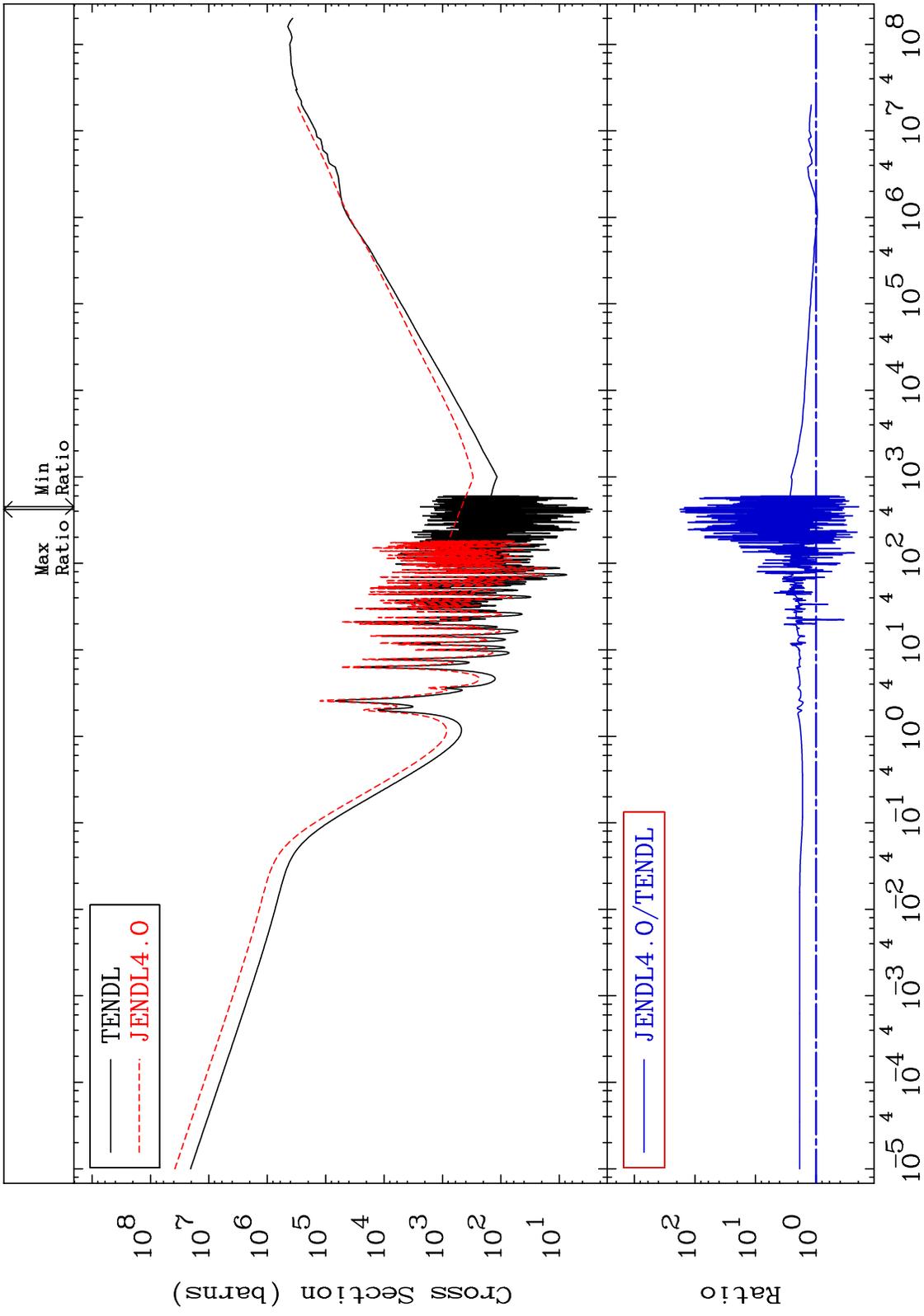
MAT 6434 64-Gd-155
-89.34 To 9670. %
 Total photon (eV-barns)
 Cross Section



MAT 6434 Total kinematic kerma (high limit) 64-Gd-155
Cross Section -95.79 To 4458. %

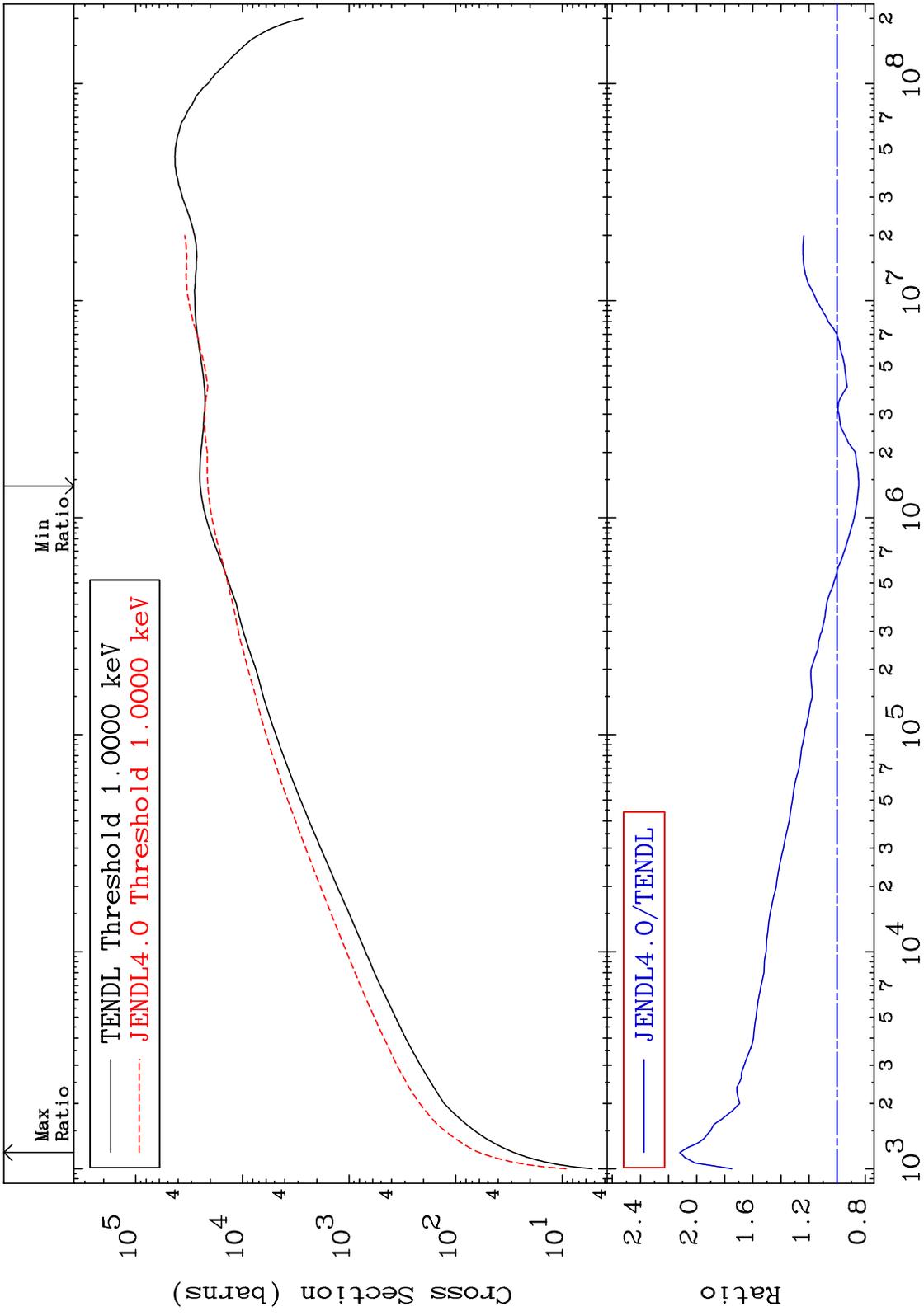


MAT 6434 Dpa total (eV-barns) 64-Gd-155
 -80.38 To 9999. %
 Cross Section



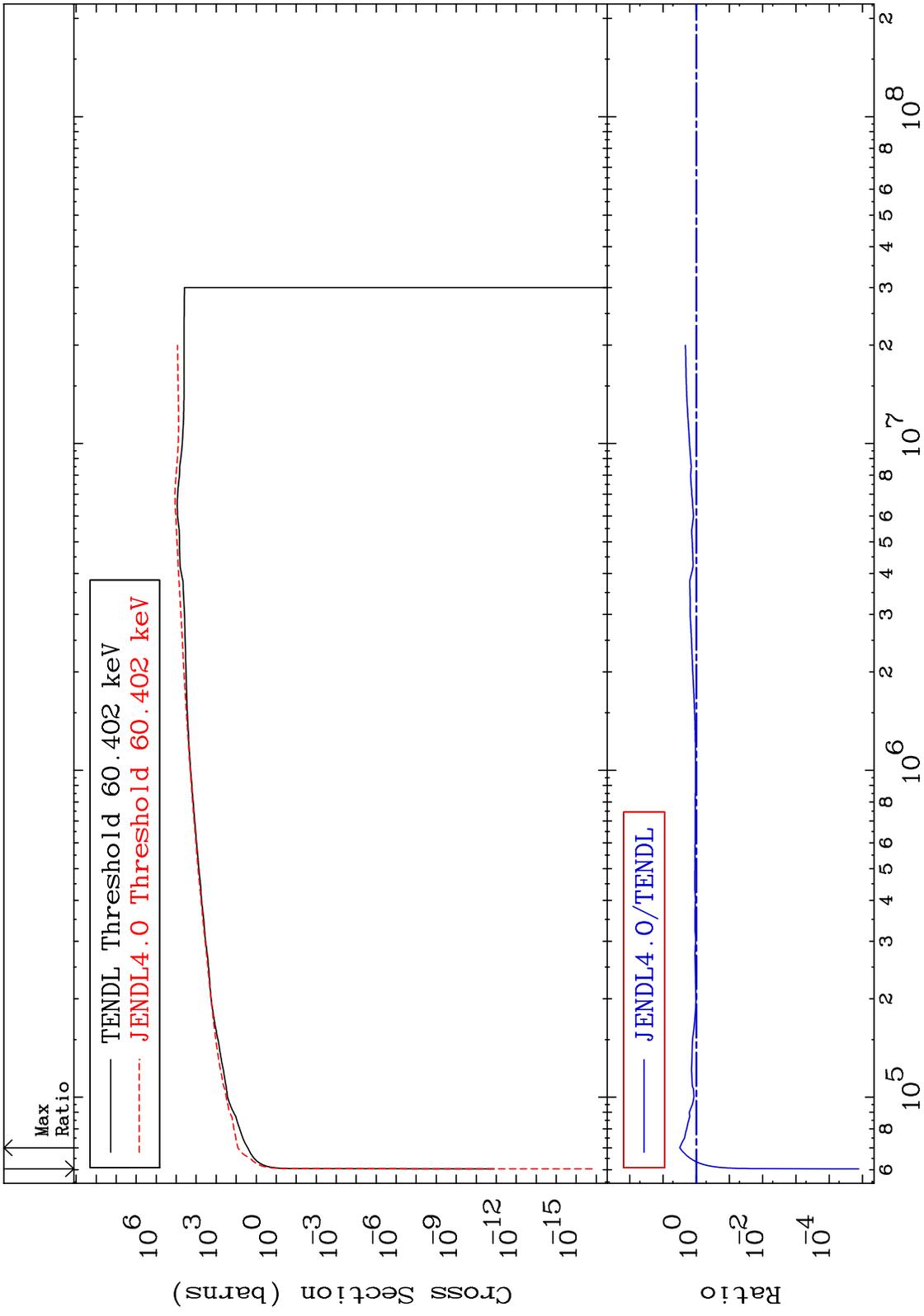
61 Incident Energy (eV) 64-Gd-155

MAT 6434 Dpa elastic (mt2) 64-Gd-155
Cross Section -15.39 To 112.0 %

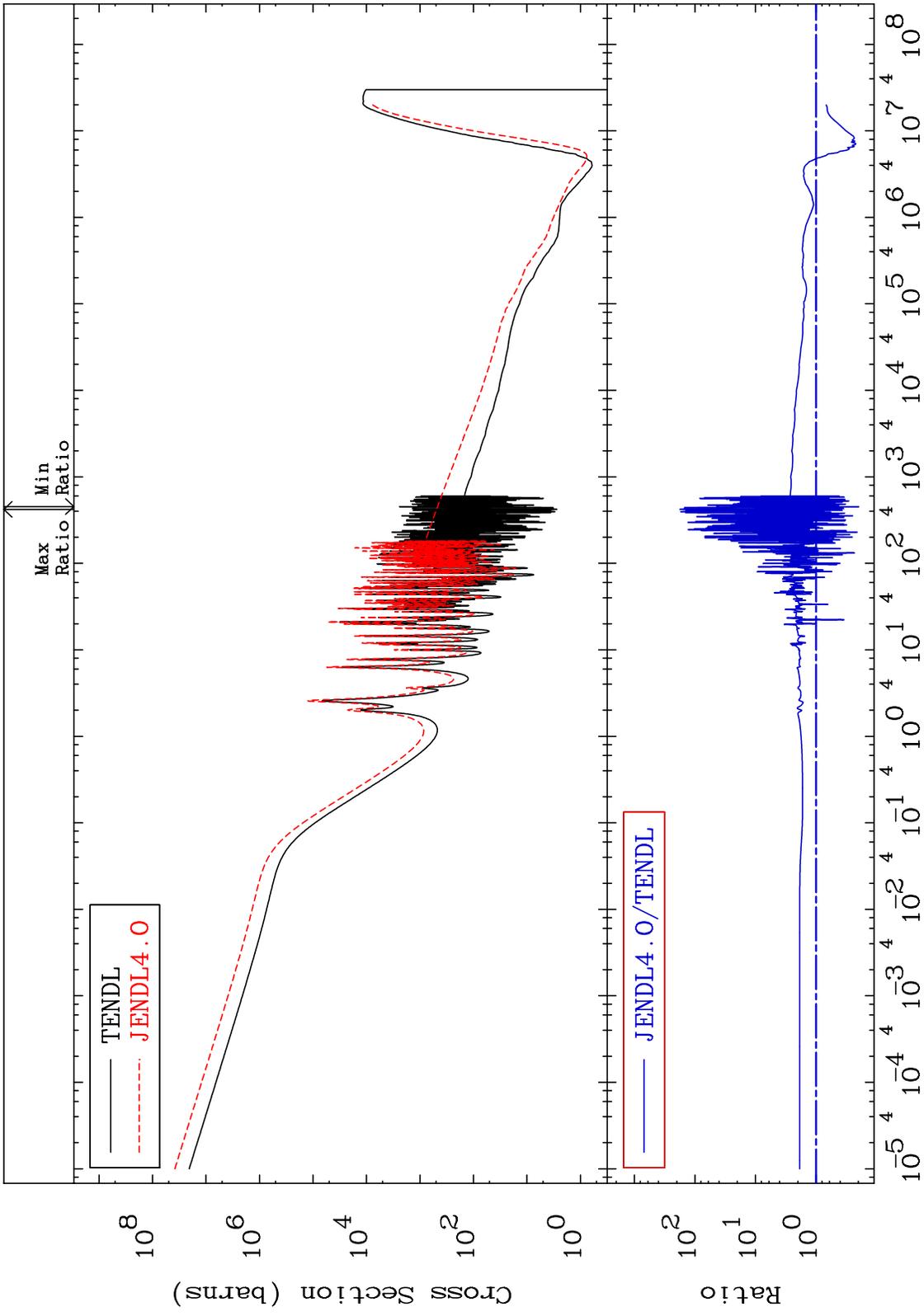


62 Incident Energy (eV) 64-Gd-155

MAT 6434 Dpa inelastic (mt51-91) 64-Gd-155
 Cross Section -100.0 To 213.2 %



MAT 6434 Dpa disappearance (mt102 -120) 64-Gd-155
 Cross Section -80.38 To 9999. %



64 Incident Energy (eV) 64-Gd-155