

Program Complot
(Version 2018-1)

by

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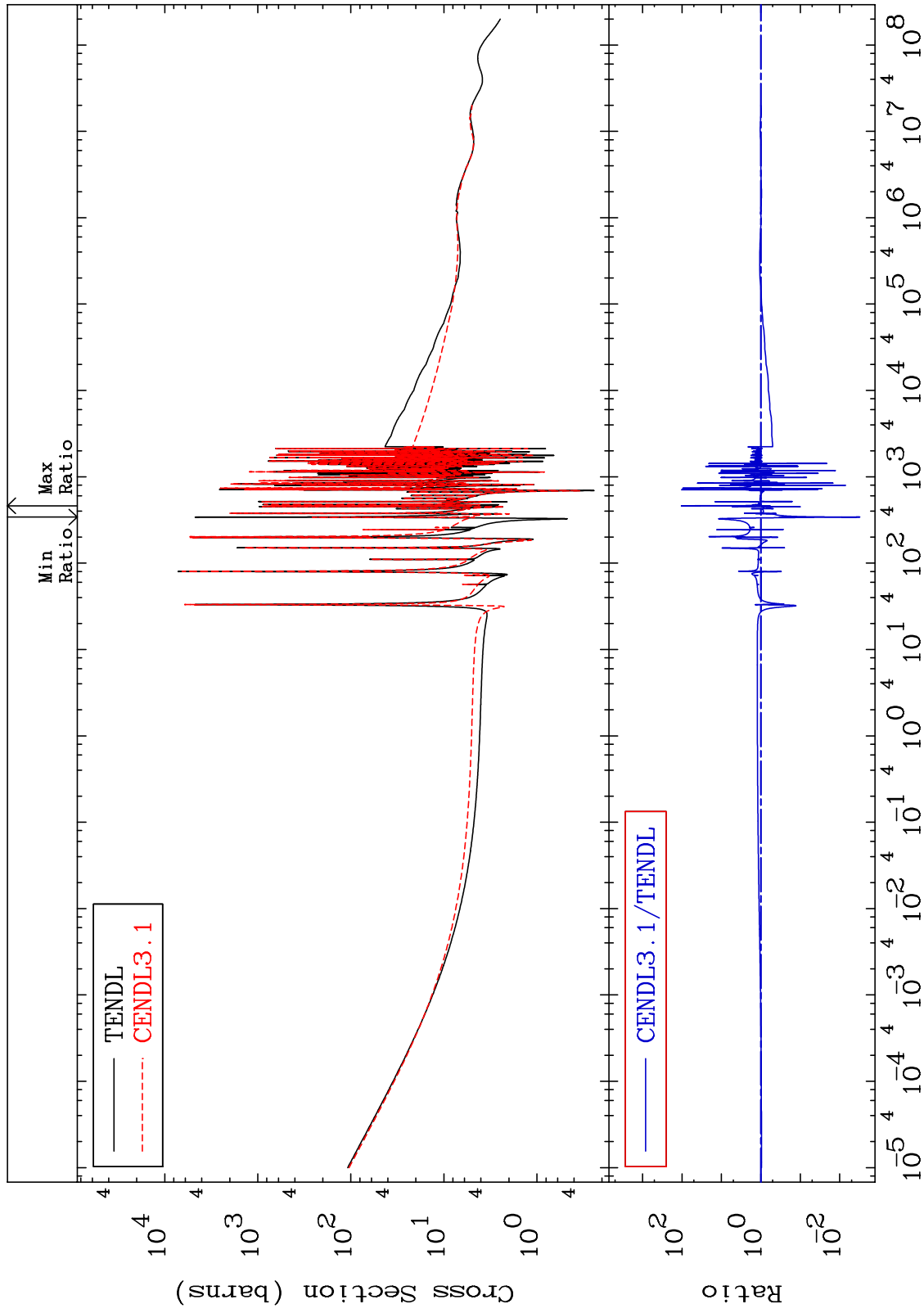
Press Mouse Button to Start

MAT 6437

Total
Cross Section

64-Gd-156

-99.69 To 9999. %



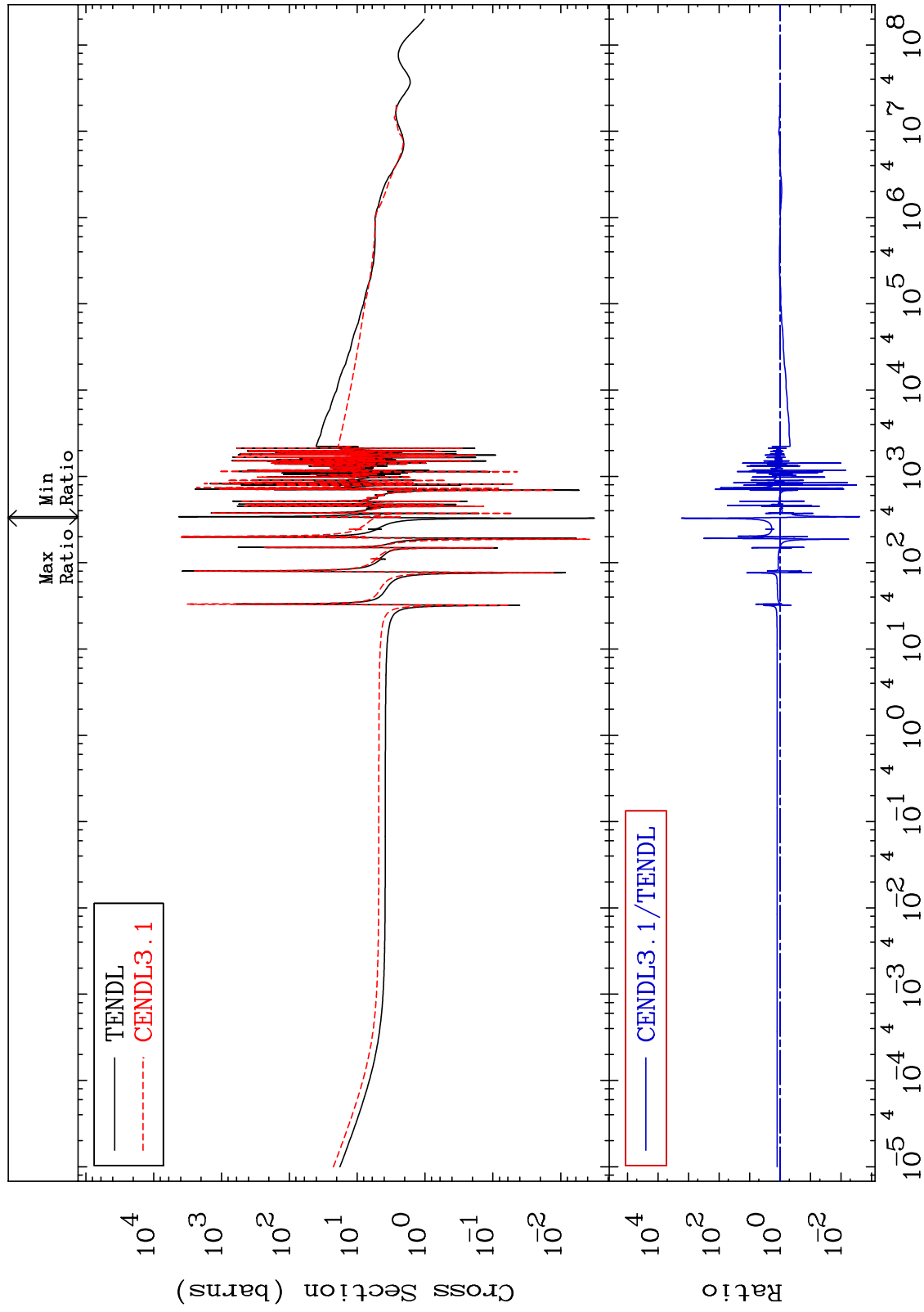
Incident Energy (eV)

64-Gd-156

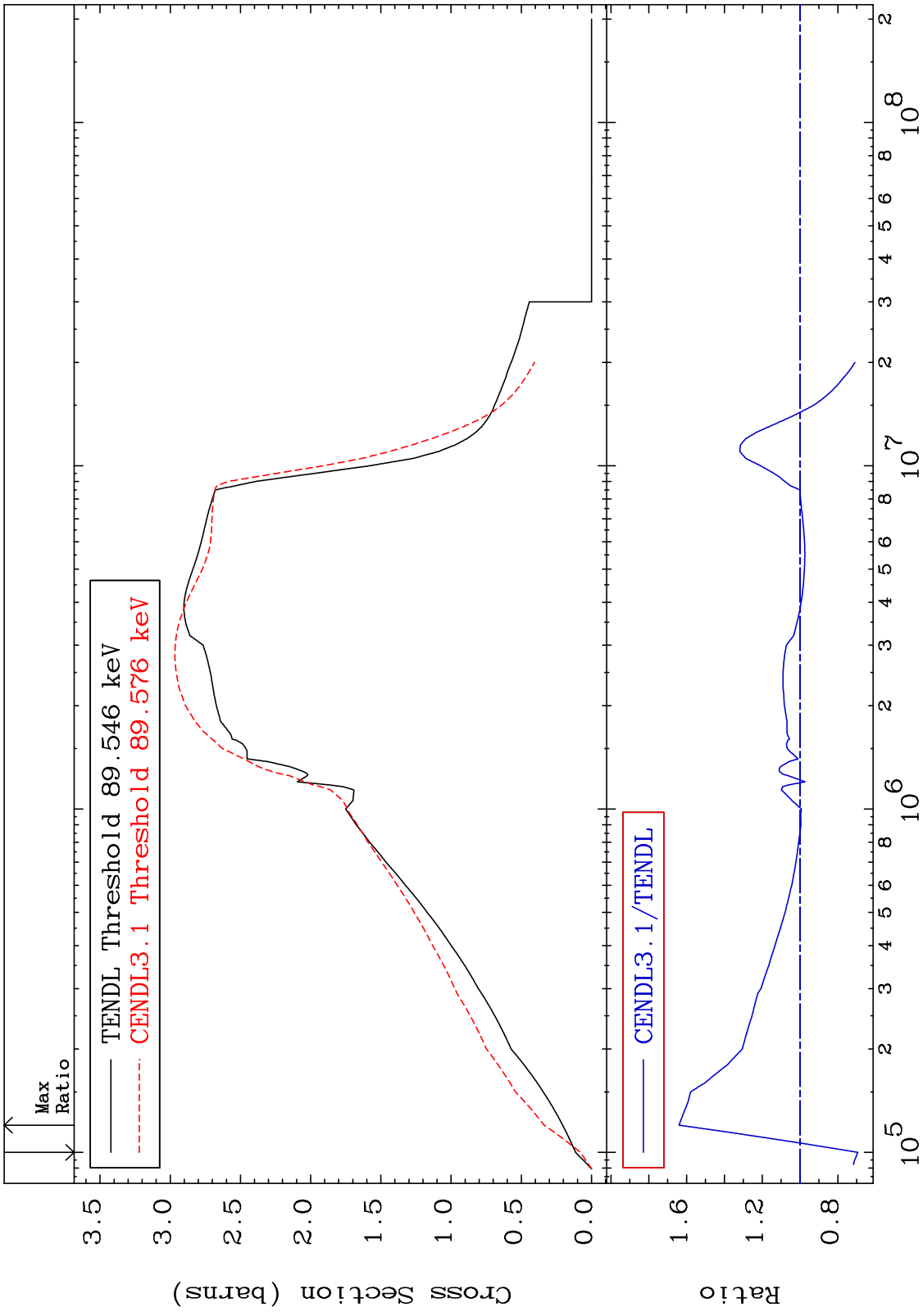
MAT 6437

Elastic
Cross Section

64-Gd-156
-99.76 To 9999. %

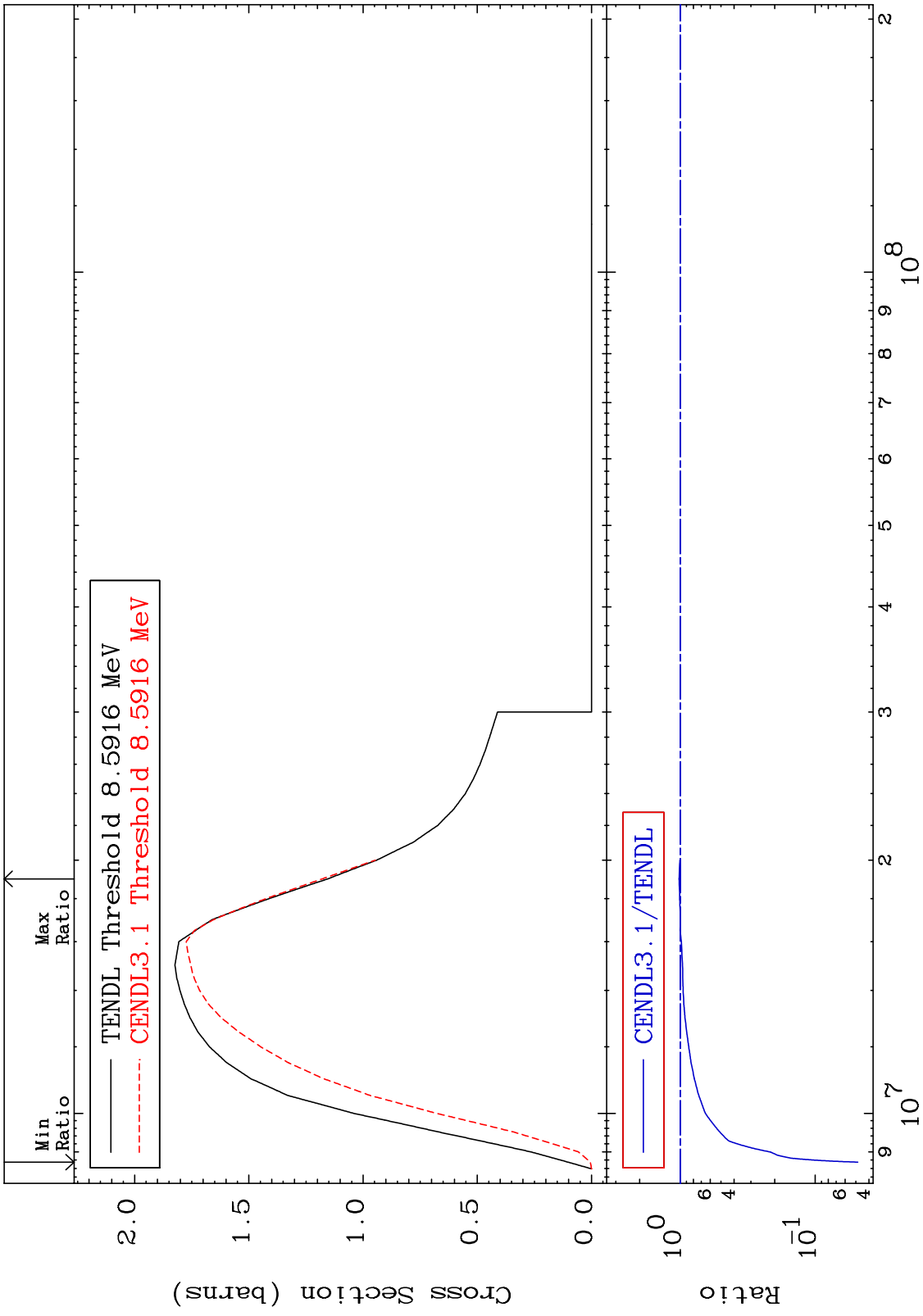


MAT 6437 Inelastic Cross Section 64-Gd-156 -30.58 To 63.99 %



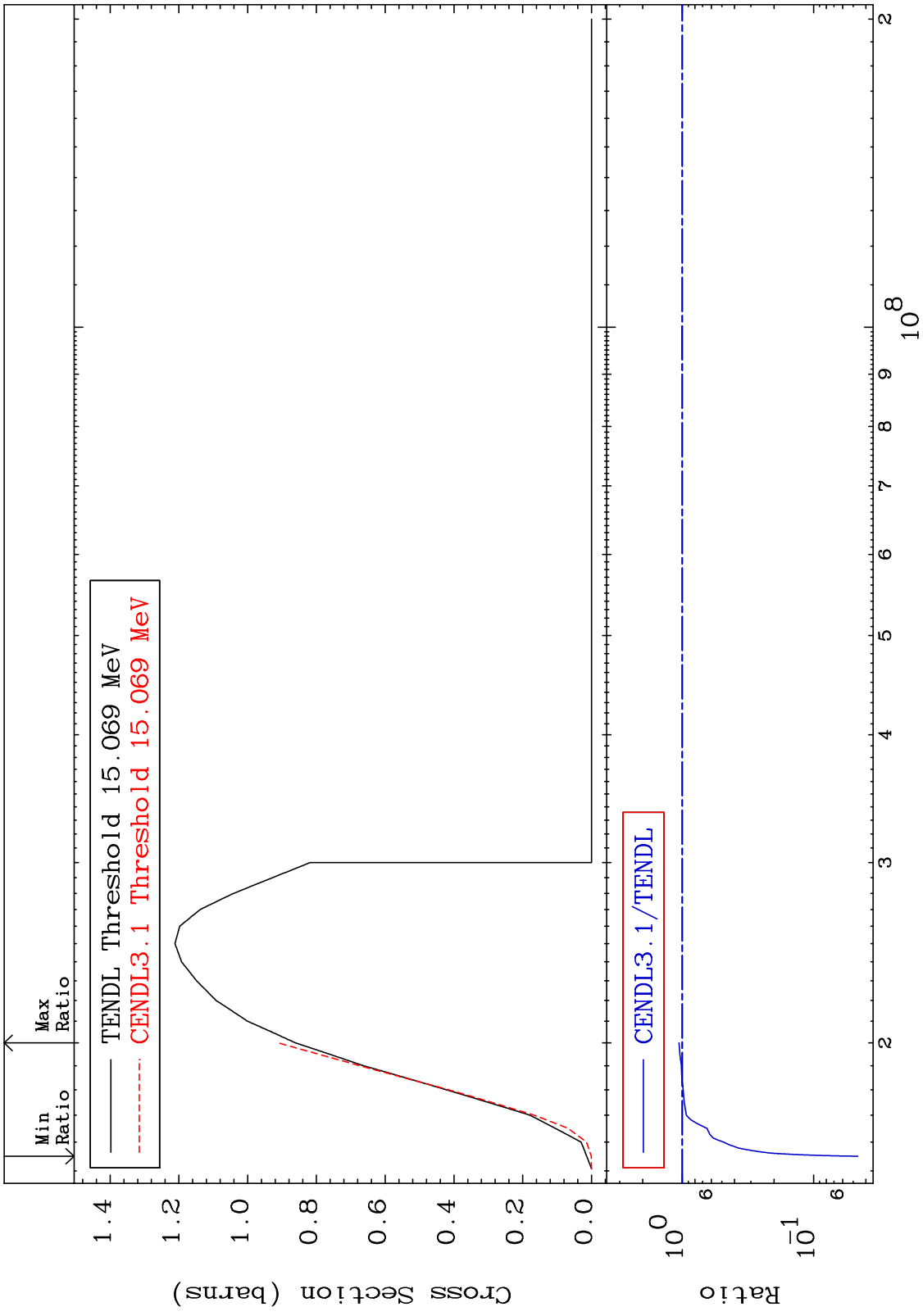
64-Gd-156

MAT 6437 $(n, 2n)$ Cross Section 64-Gd-156 -95.16 To 2.096 %



4 Incident Energy (eV) 64-Gd-156

MAT 6437 (n,3n) Cross Section 64-Gd-156 -95.40 To 5.851 %



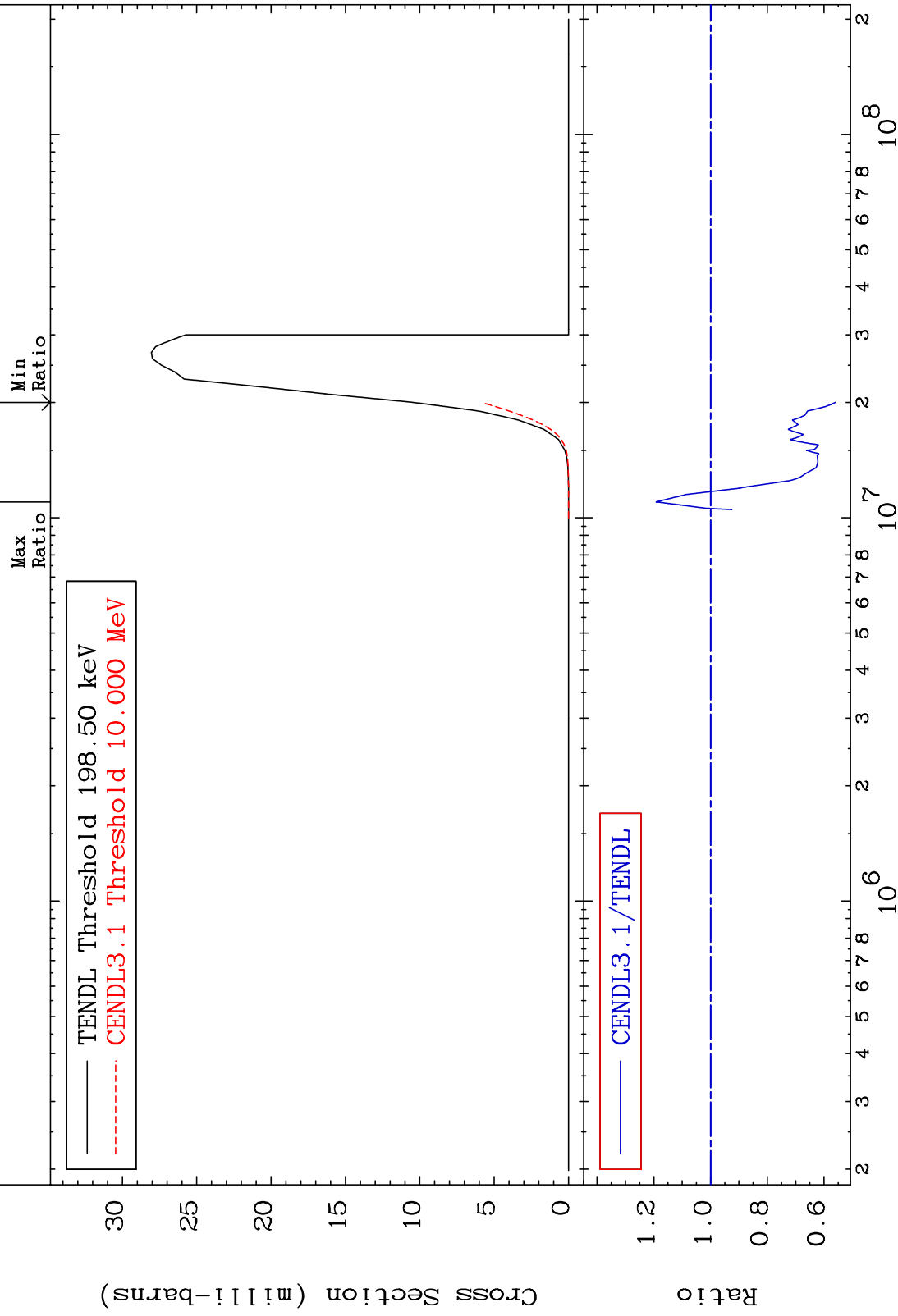
MAT 6437

$(n, n') \alpha$

64-Gd-156

-43.95 To 19.17 %

Cross Section

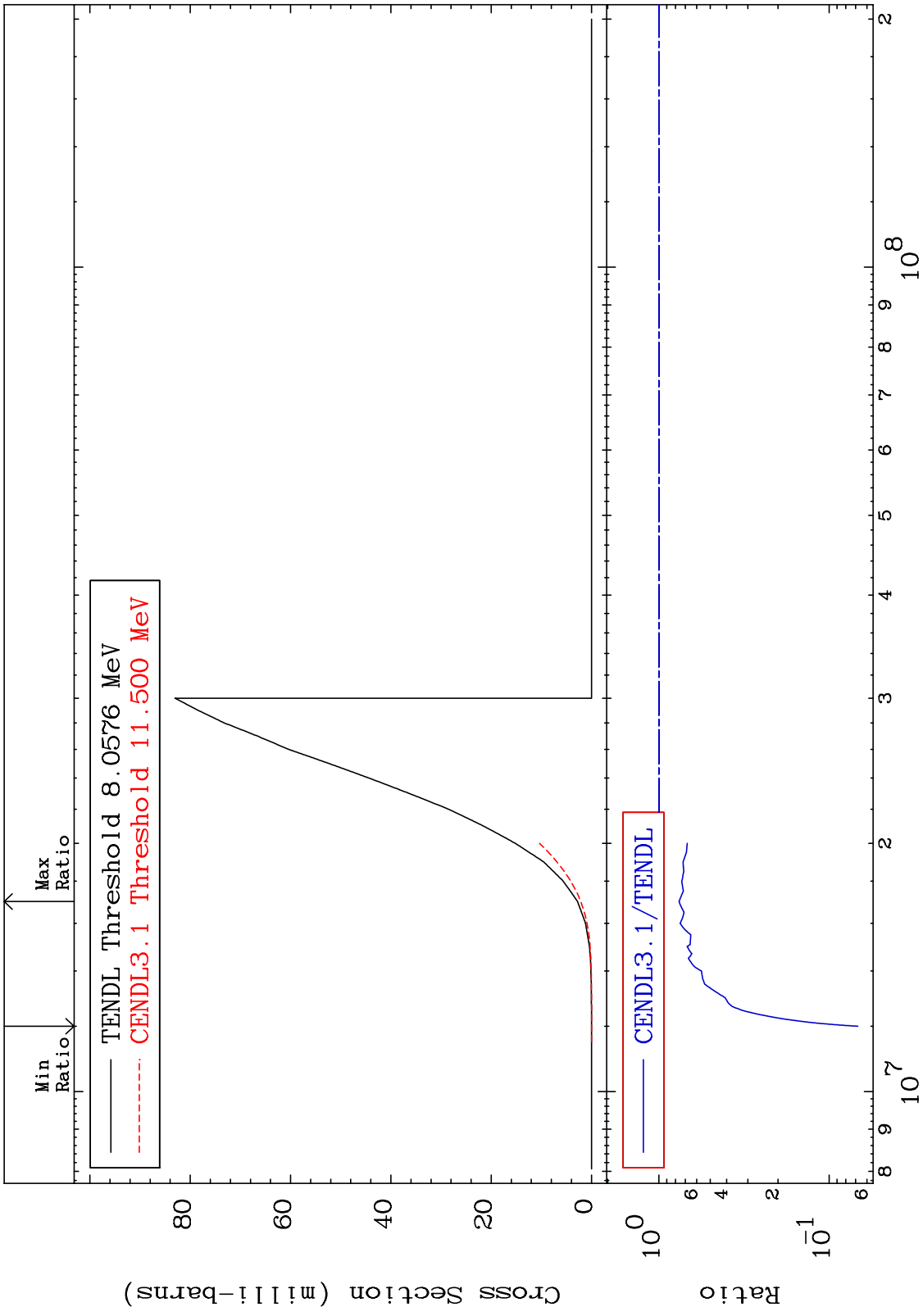


6

Incident Energy (eV)

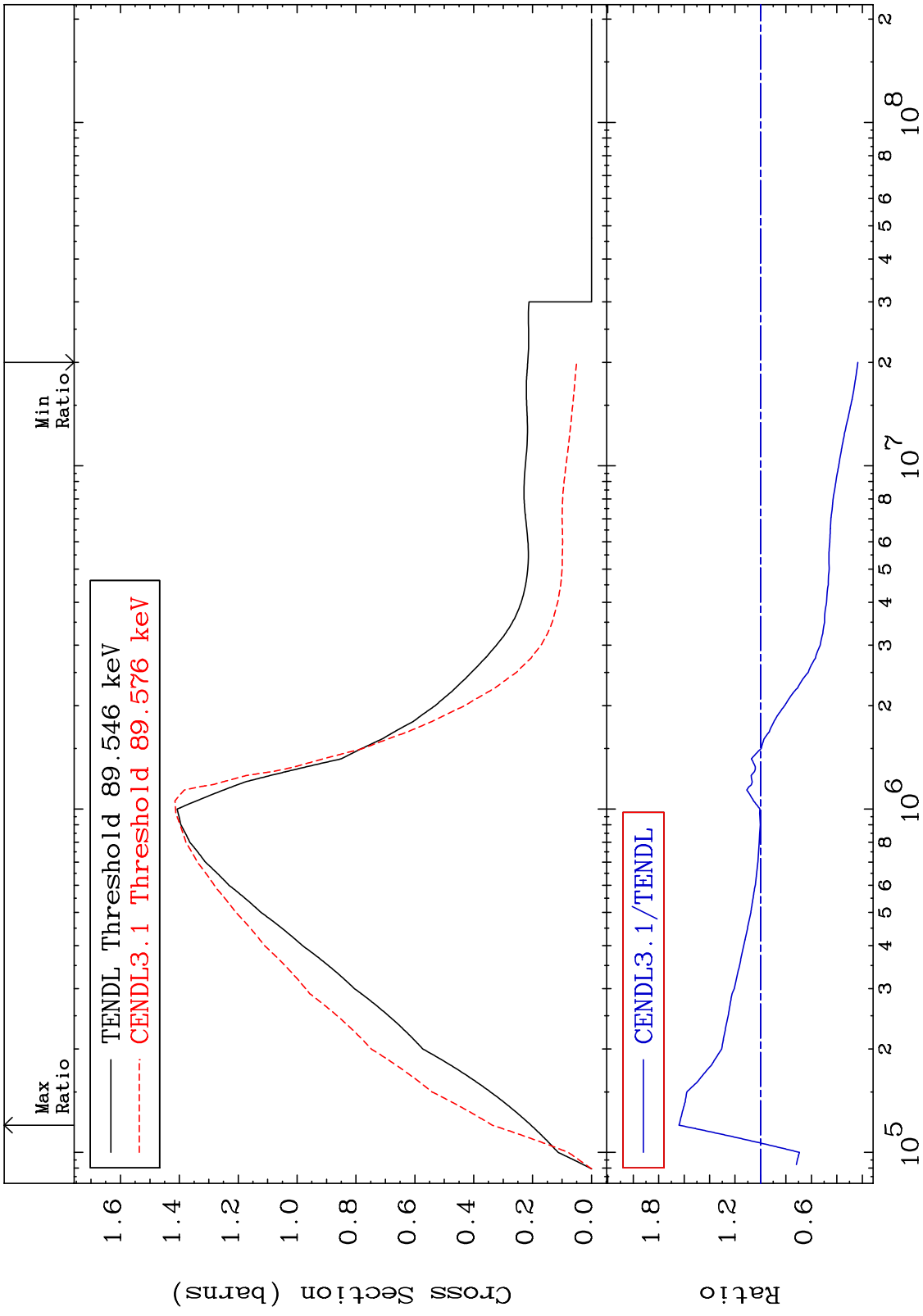
64-Gd-156

MAT 6437 (n, n') p 64-Gd-156
 Cross Section -93.21 To -23.85%



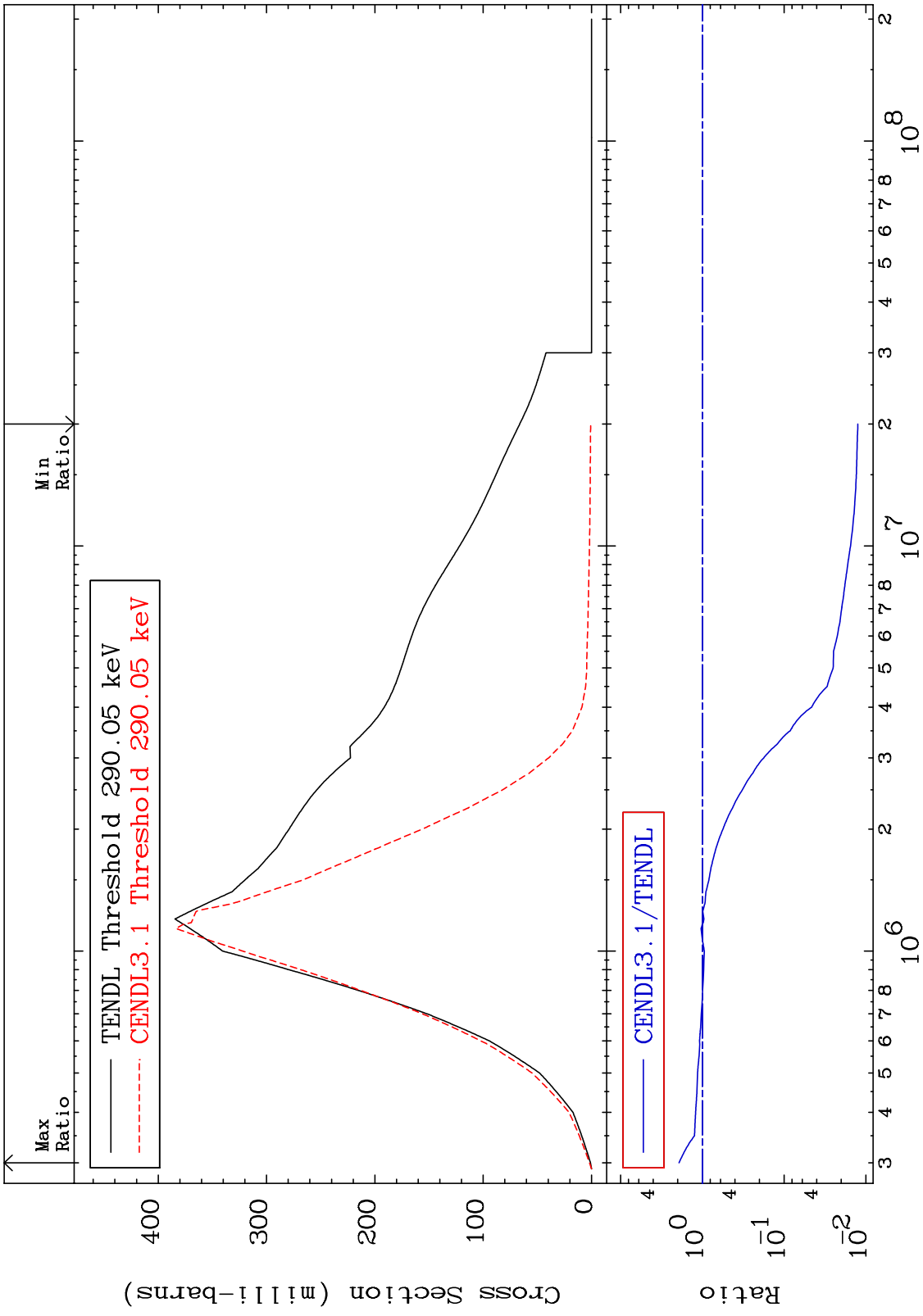
7 8 9 10⁷ 10⁸ 2
 64-Gd-156

MAT 6437 MT= 51 (n,n') Level Cross Section 64-Gd-156
 -76.51 To 63.99 %

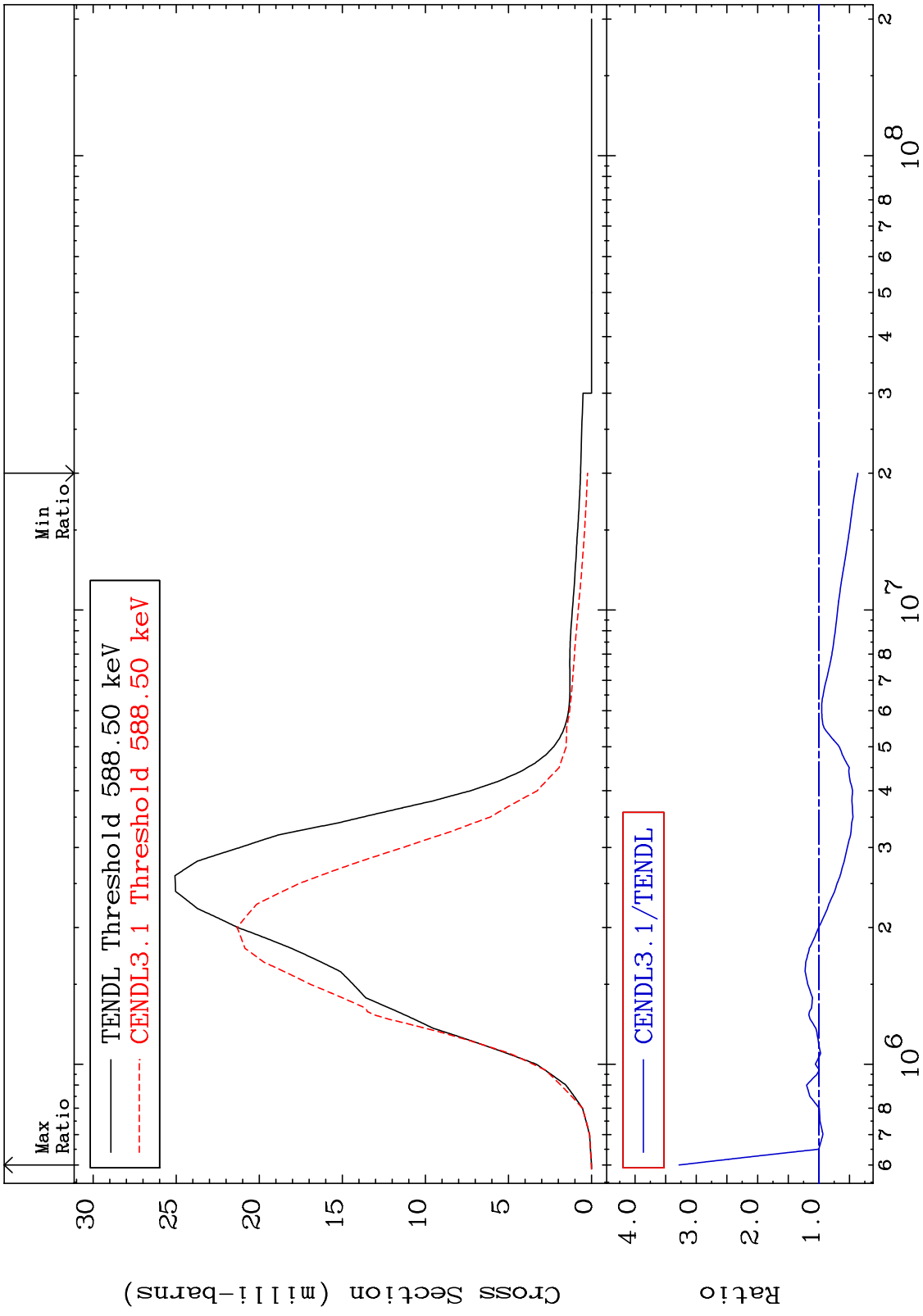


8 Incident Energy (eV) 64-Gd-156

MAT 6437 MT= 52 (n,n') Level Cross Section 64-Gd-156 -98.75 To 92.56 %

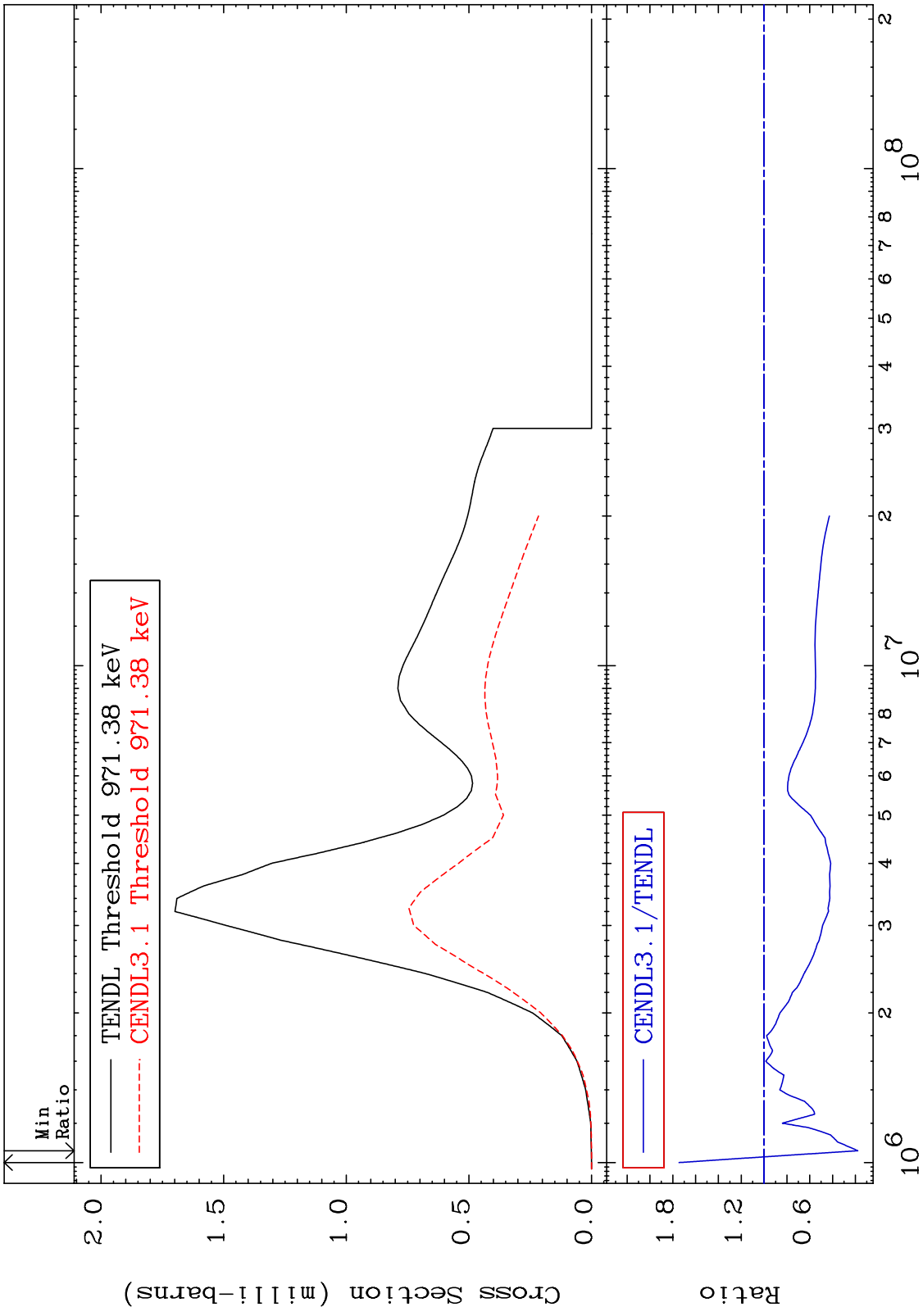


MAT 6437 MT= 53 (n,n') Level Cross Section 64-Gd-156 -63.64 To 228.1 %



10 Incident Energy (eV) 64-Gd-156

MAT 6437 MT= 54 (n,n') Level Cross Section 64-Gd-156 -82.14 To 74.50 %

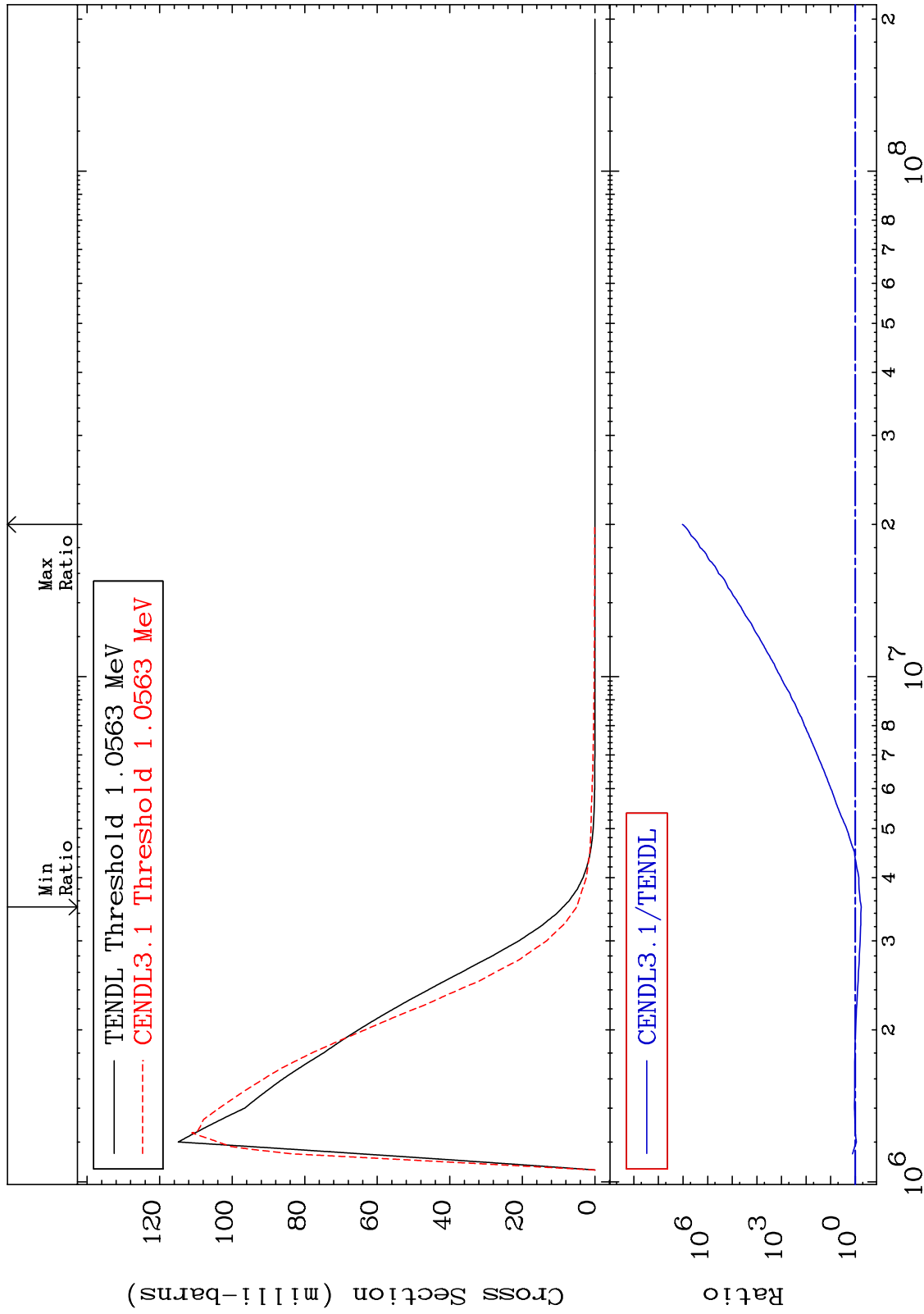


11 Incident Energy (eV) 64-Gd-156

MAT 6437

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

64-Gd-156
-42.85 To 9999. %

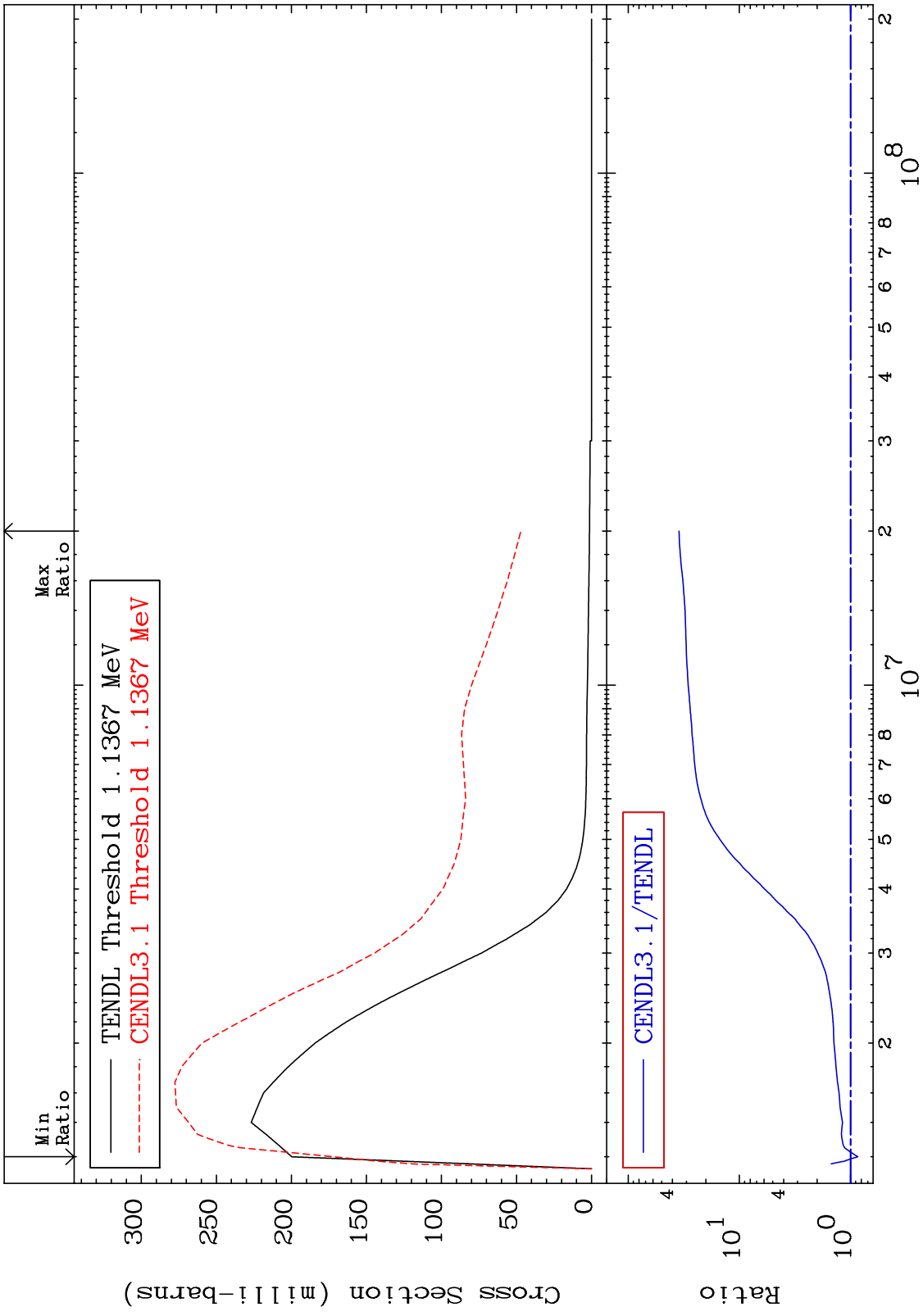


12

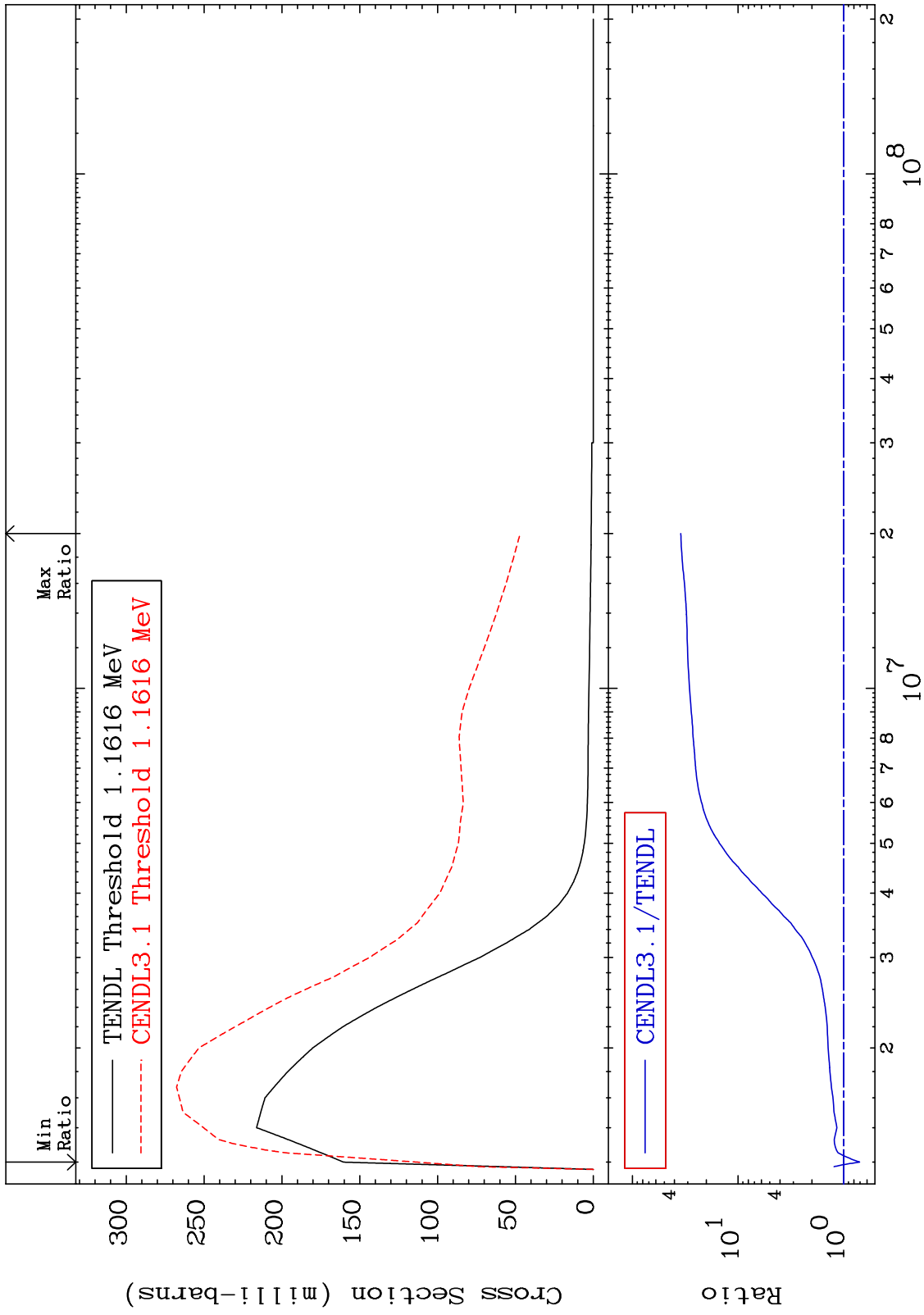
Incident Energy (eV)

64-Gd-156

MAT 6437 MT= 56 (n,n') Level Cross Section 64-Gd-156
 -14.00 To 3389. %



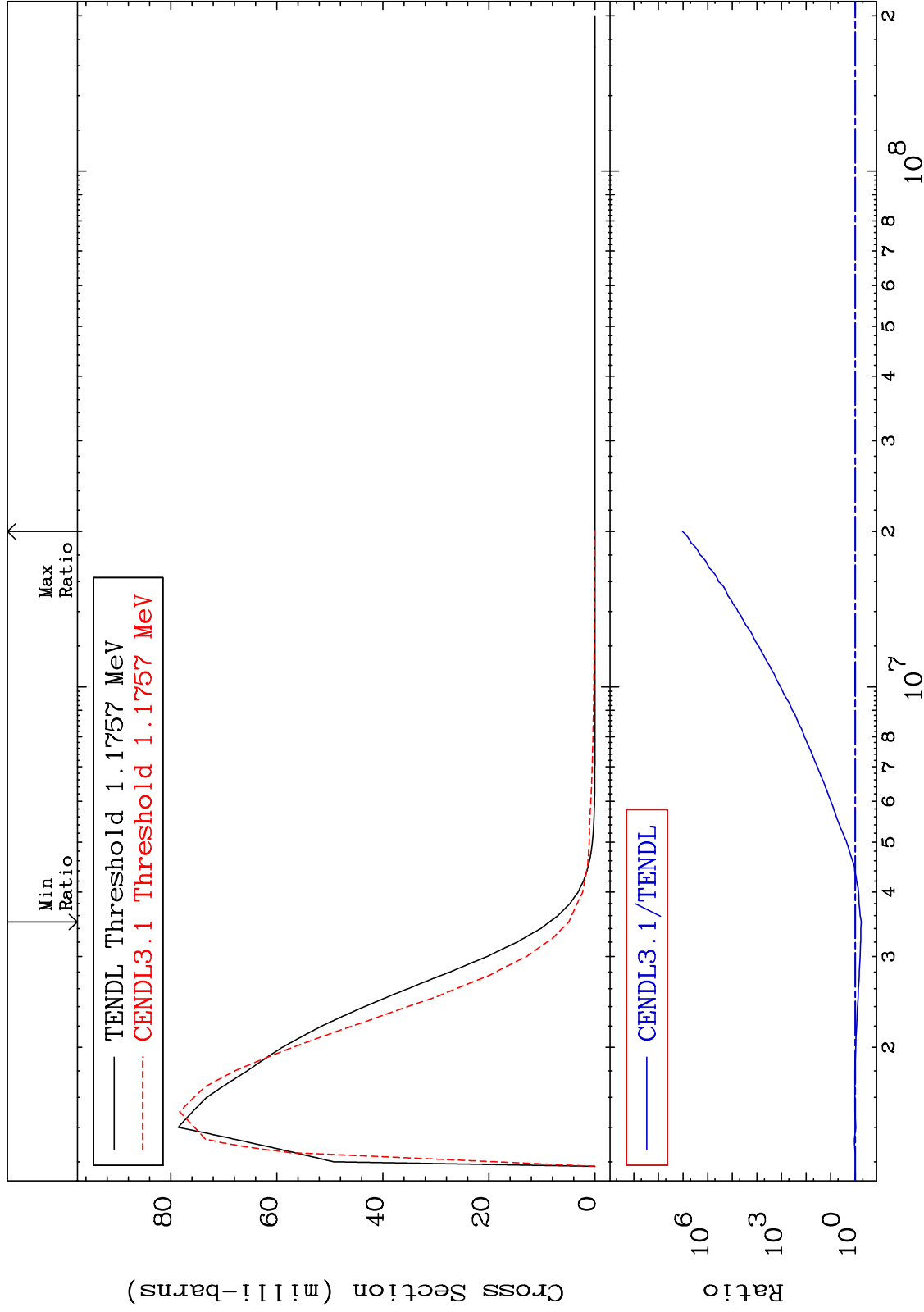
MAT 6437 MT= 57 (n,n') Level 64-Gd-156
 Cross Section -29.45 To 3384. %



MAT 6437

MT= 58 (n,n') Level
Cross Section

64-Gd-156
-42.77 To 9999. %

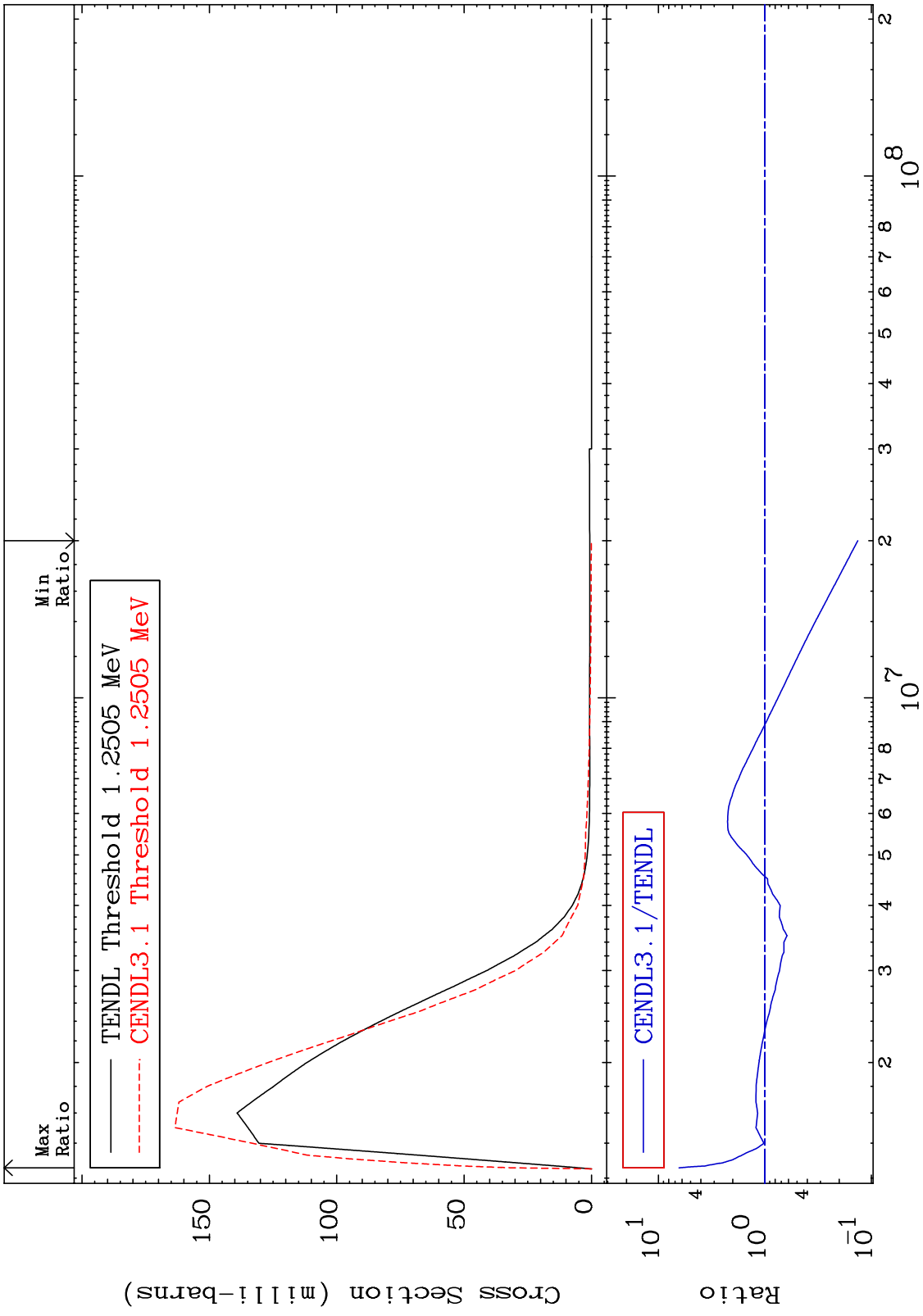


15

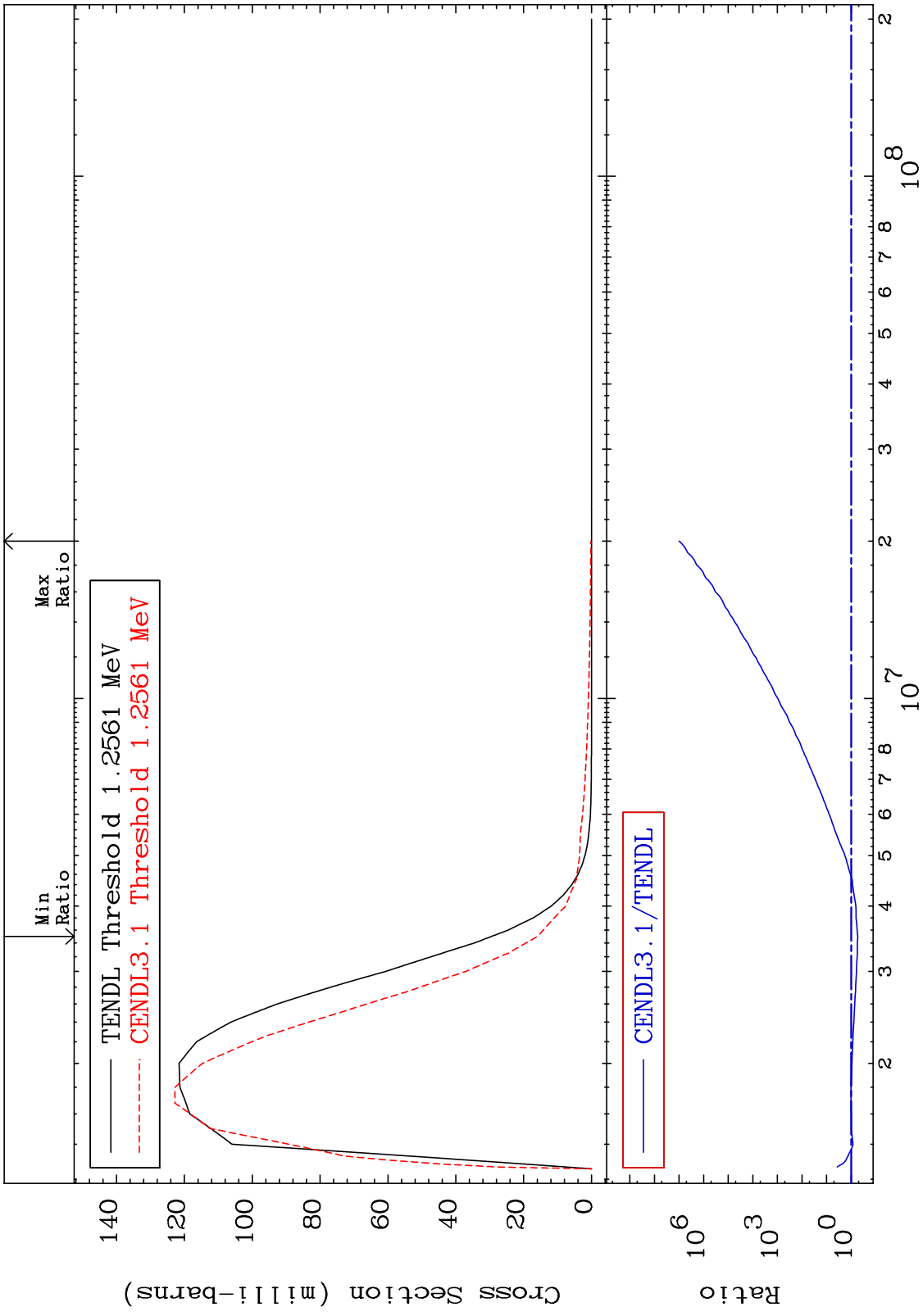
Incident Energy (eV)

64-Gd-156

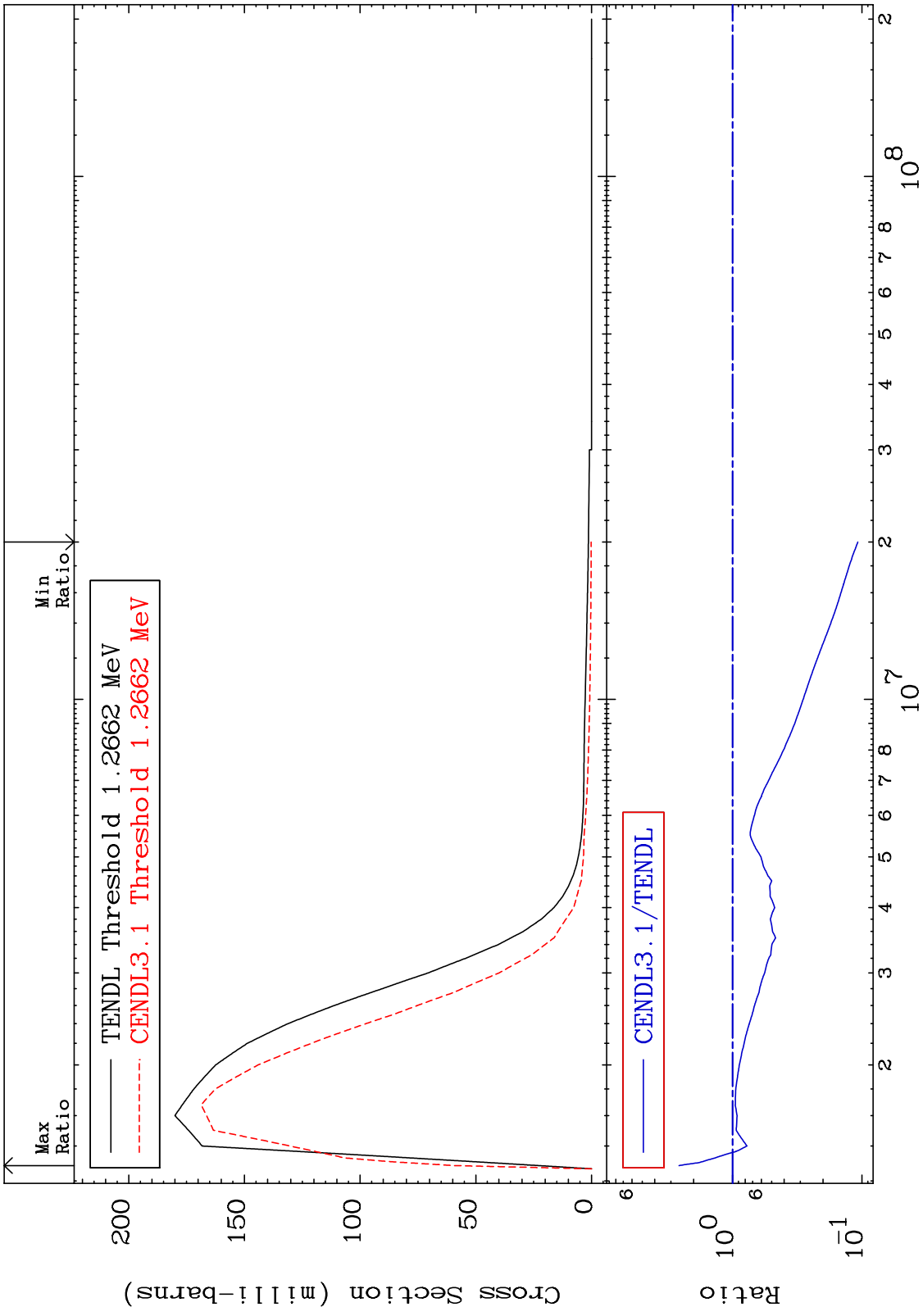
MAT 6437 MT= 59 (n,n') Level Cross Section 64-Gd-156 -86.62 To 540.9 %



MAT 6437 MT= 60 (n,n') Level Cross Section 64-Gd-156 -46.18 To 9999. %

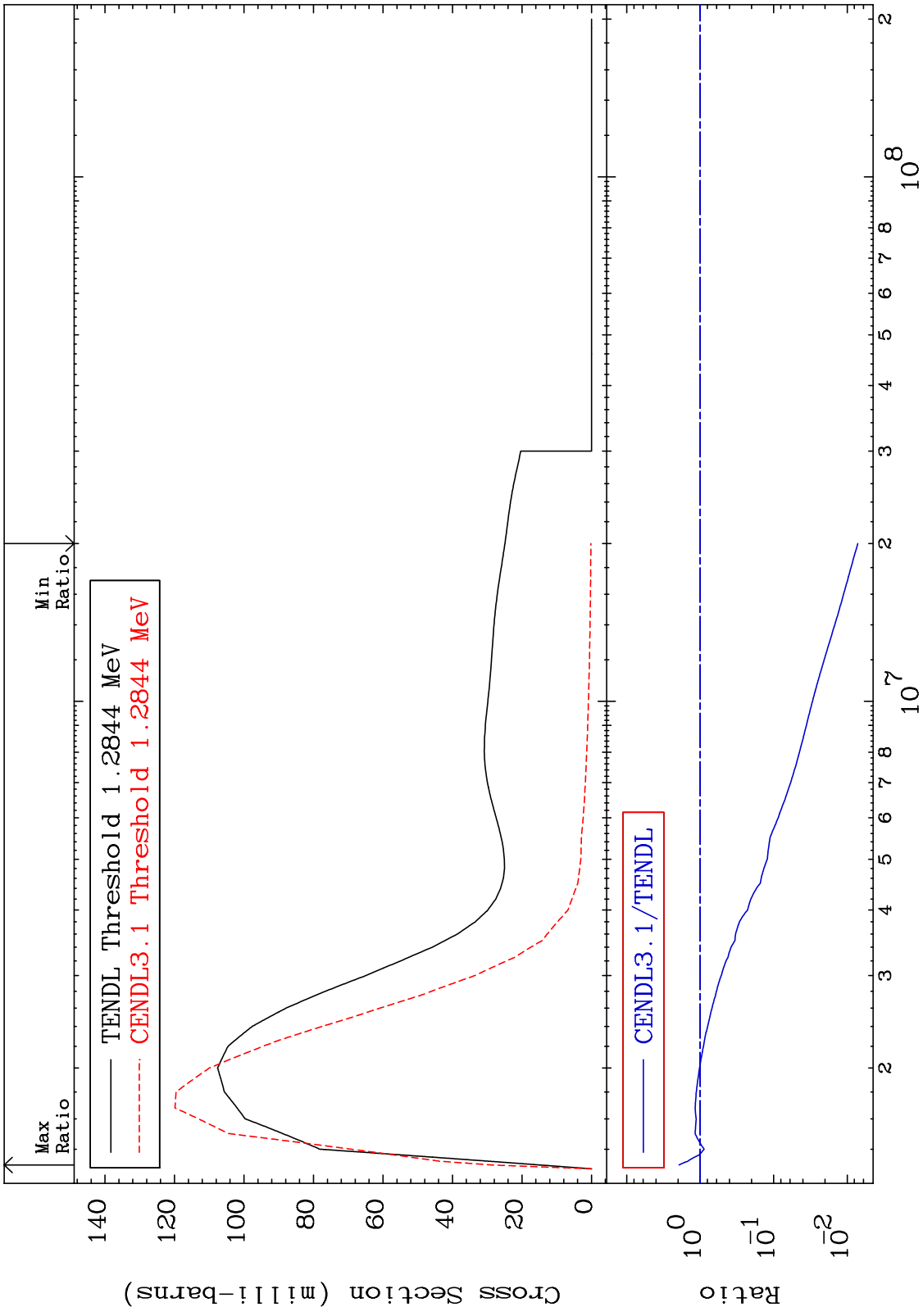


MAT 6437 MT= 61 (n,n') Level Cross Section 64-Gd-156 -89.23 To 159.4 %

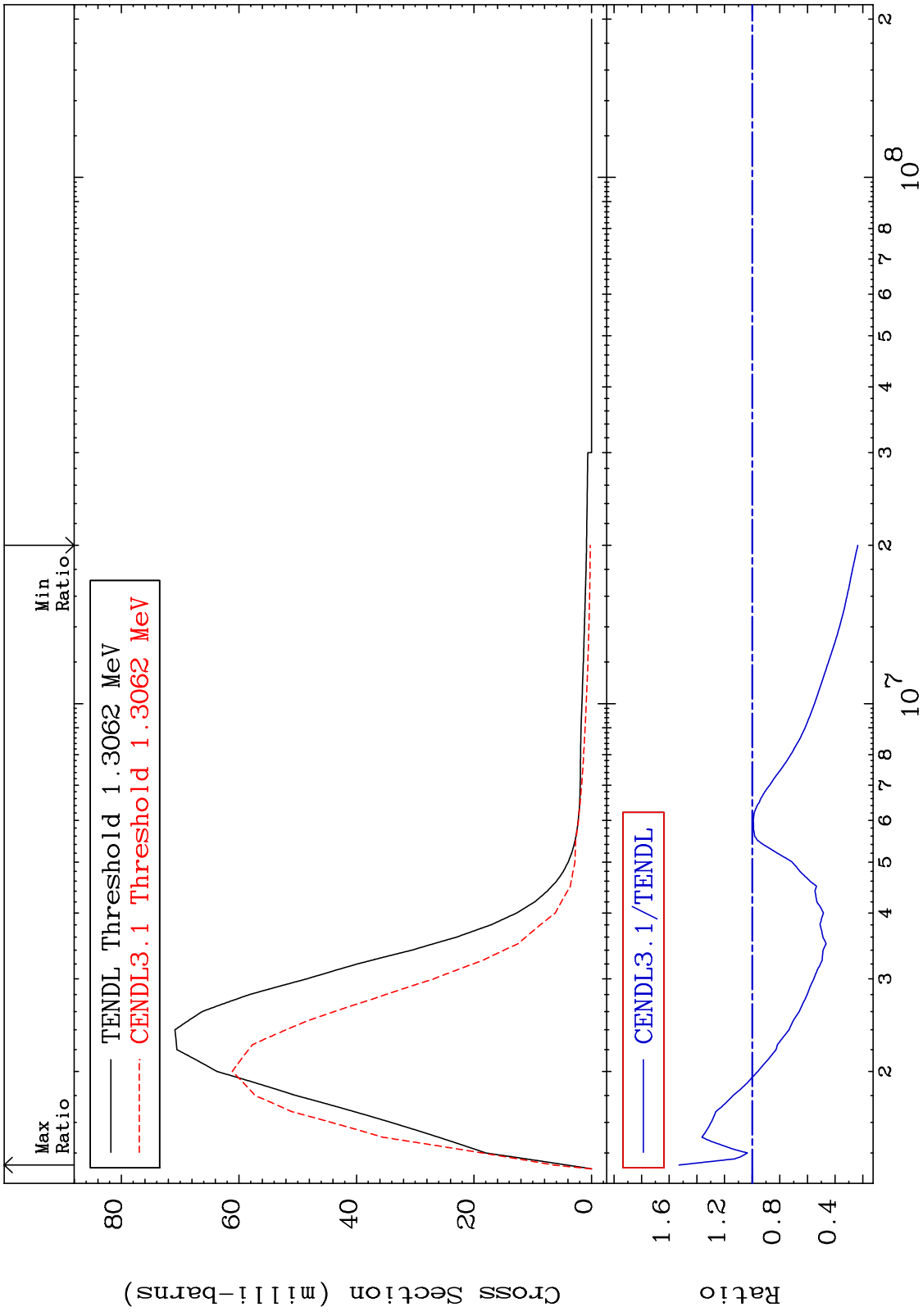


18 64-Gd-156 Incident Energy (eV)

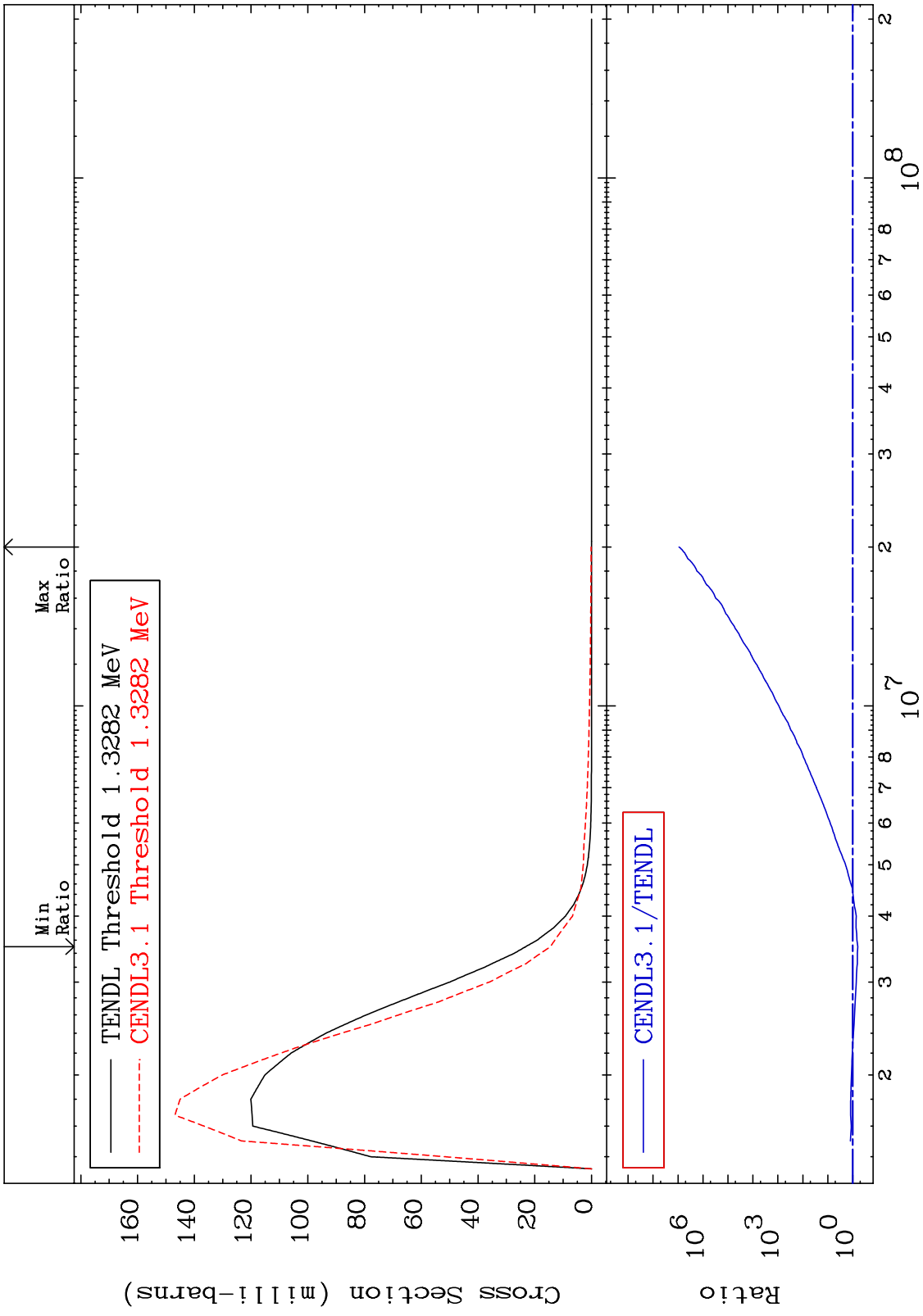
MAT 6437 MT= 62 (n,n') Level Cross Section 64-Gd-156 -99.28 To 94.15 %



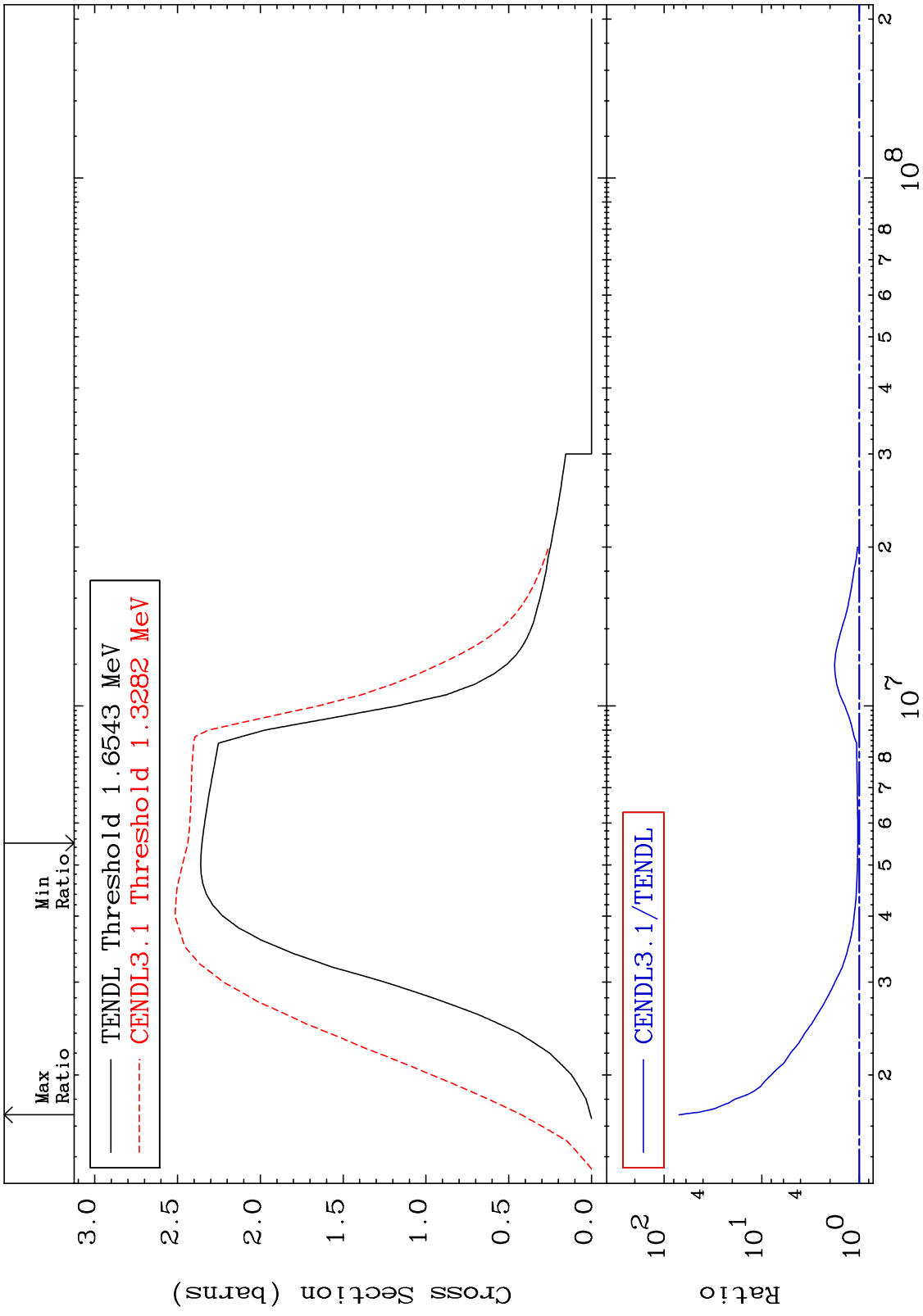
MAT 6437 MT= 63 (n,n') Level Cross Section 64-Gd-156 -76.45 To 52.90 %



MAT 6437 MT= 64 (n,n') Level Cross Section 64-Gd-156 -37.50 To 9999. %



MAT 6437 (n,n') Continuum Cross Section 64-Gd-156 3.615 To 6948. %



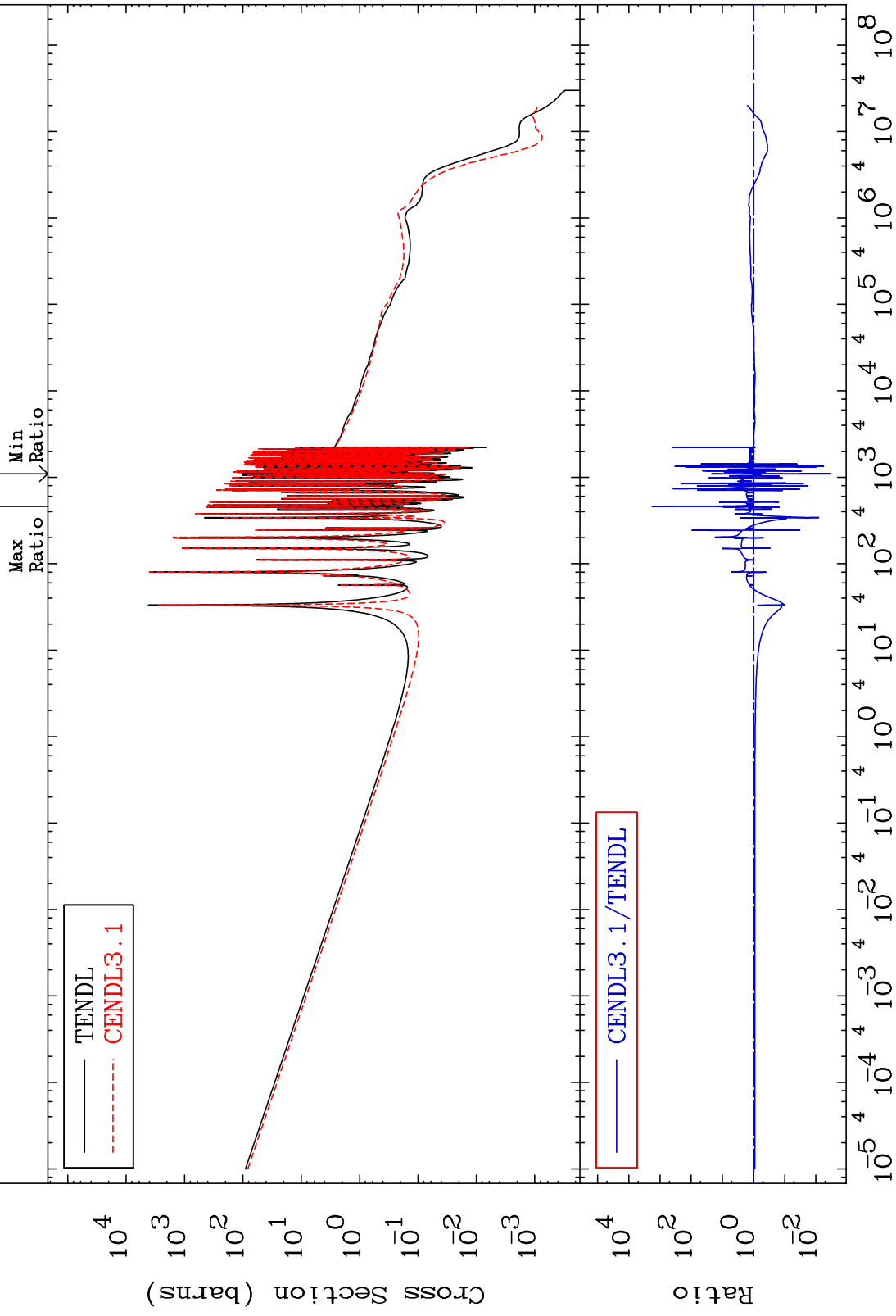
MAT 6437

(n, γ)

64-Gd-156

-99.67 To 9999. %

Cross Section



MAT 6437

(n,p)

64-Gd-156

-88.40 To 260.4 %

Cross Section

Min Ratio

Max Ratio

TENDL Threshold 1.6808 MeV
CENDL3.1 Threshold 5.5000 MeV

Cross Section (milli-barns)

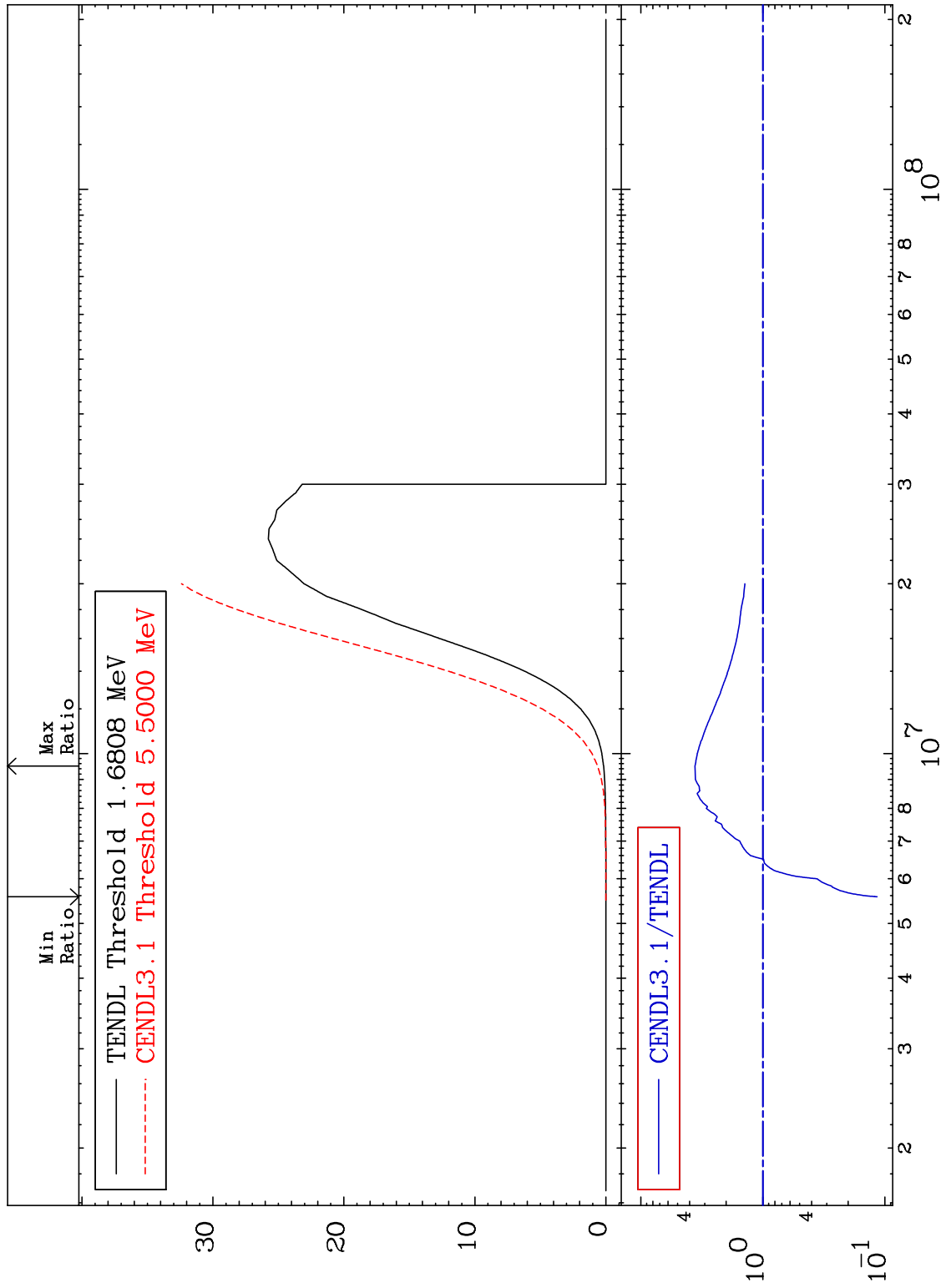
CENDL3.1/TENDL

Ratio

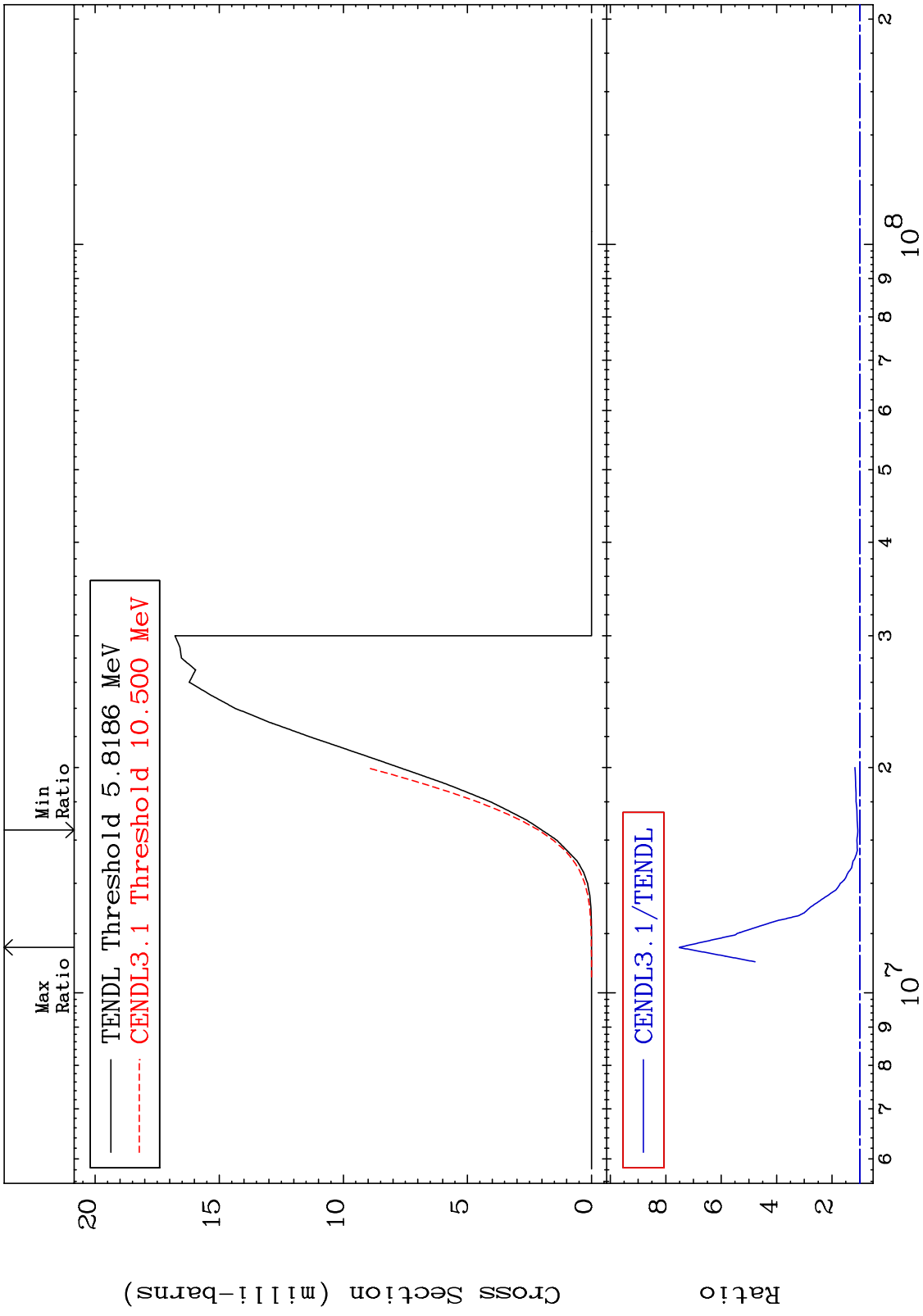
24

Incident Energy (eV)

64-Gd-156

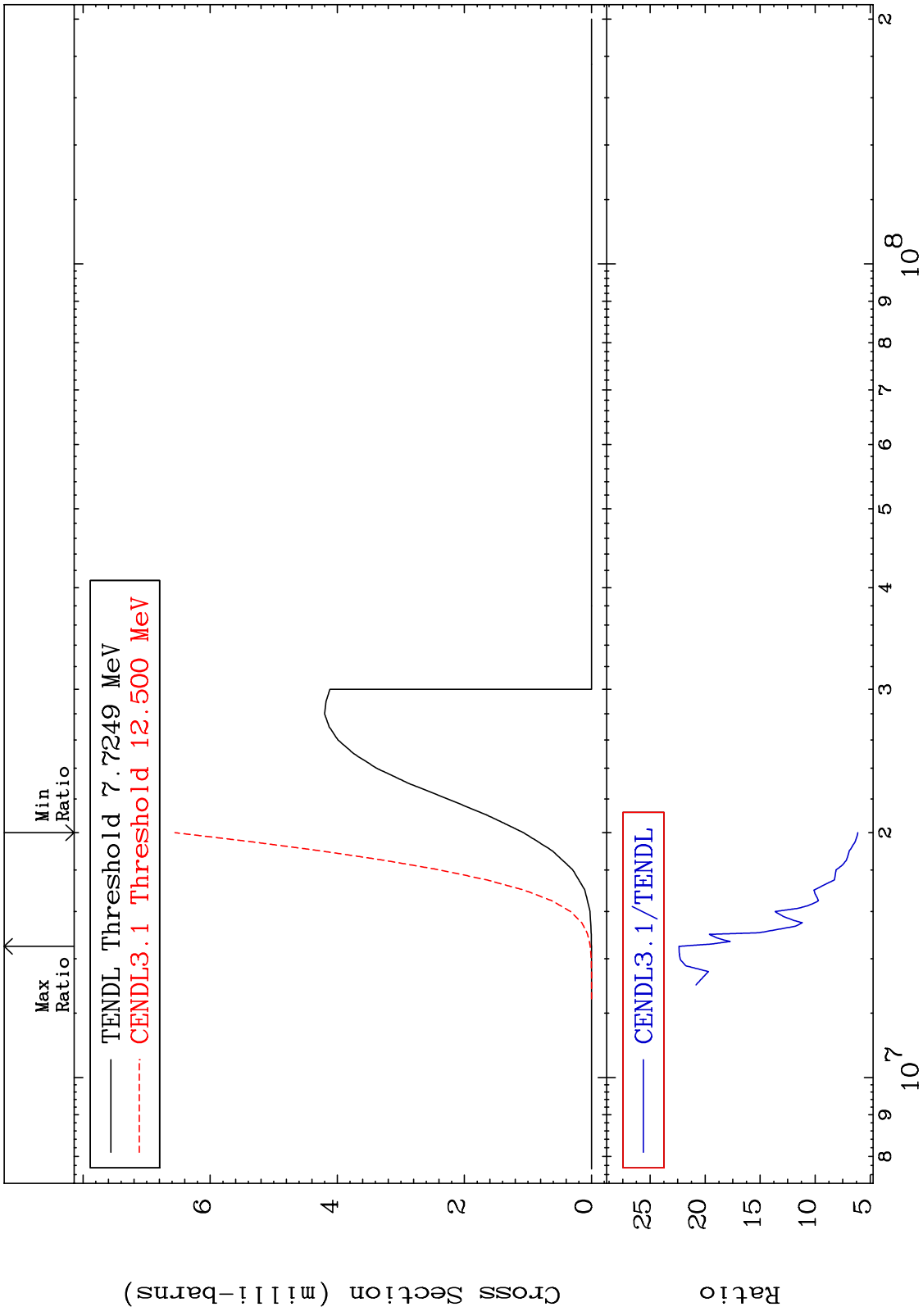


MAT 6437 (n,d) Cross Section 64-Gd-156 6.761 To 652.1 %



64-Gd-156

MAT 6437 (n,t) Cross Section 64-Gd-156 512.0 To 2138. %



26 64-Gd-156 Incident Energy (eV)

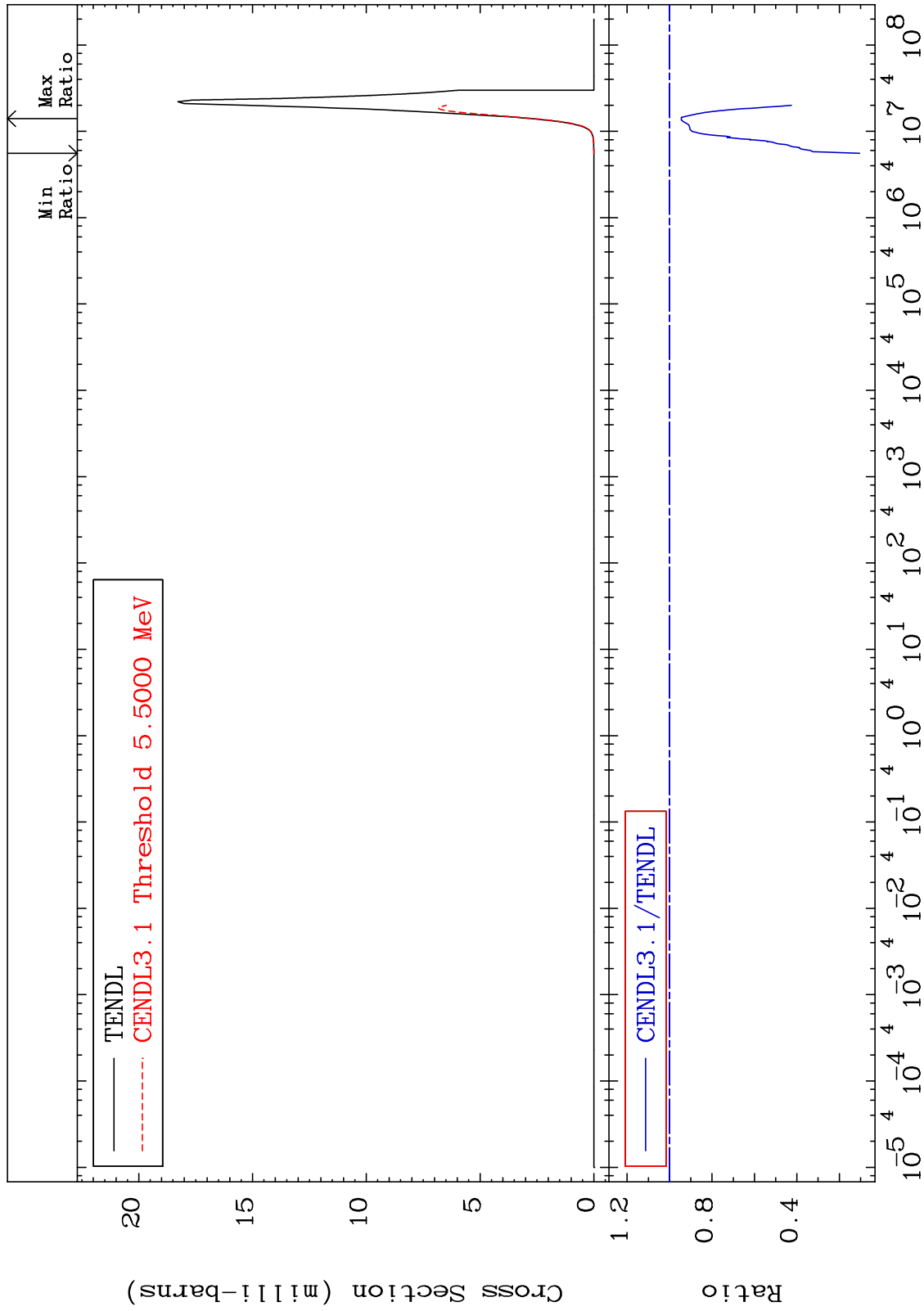
MAT 6437

(n, α)

64-Gd-156

Cross Section

-89.61 To -5.502%



27

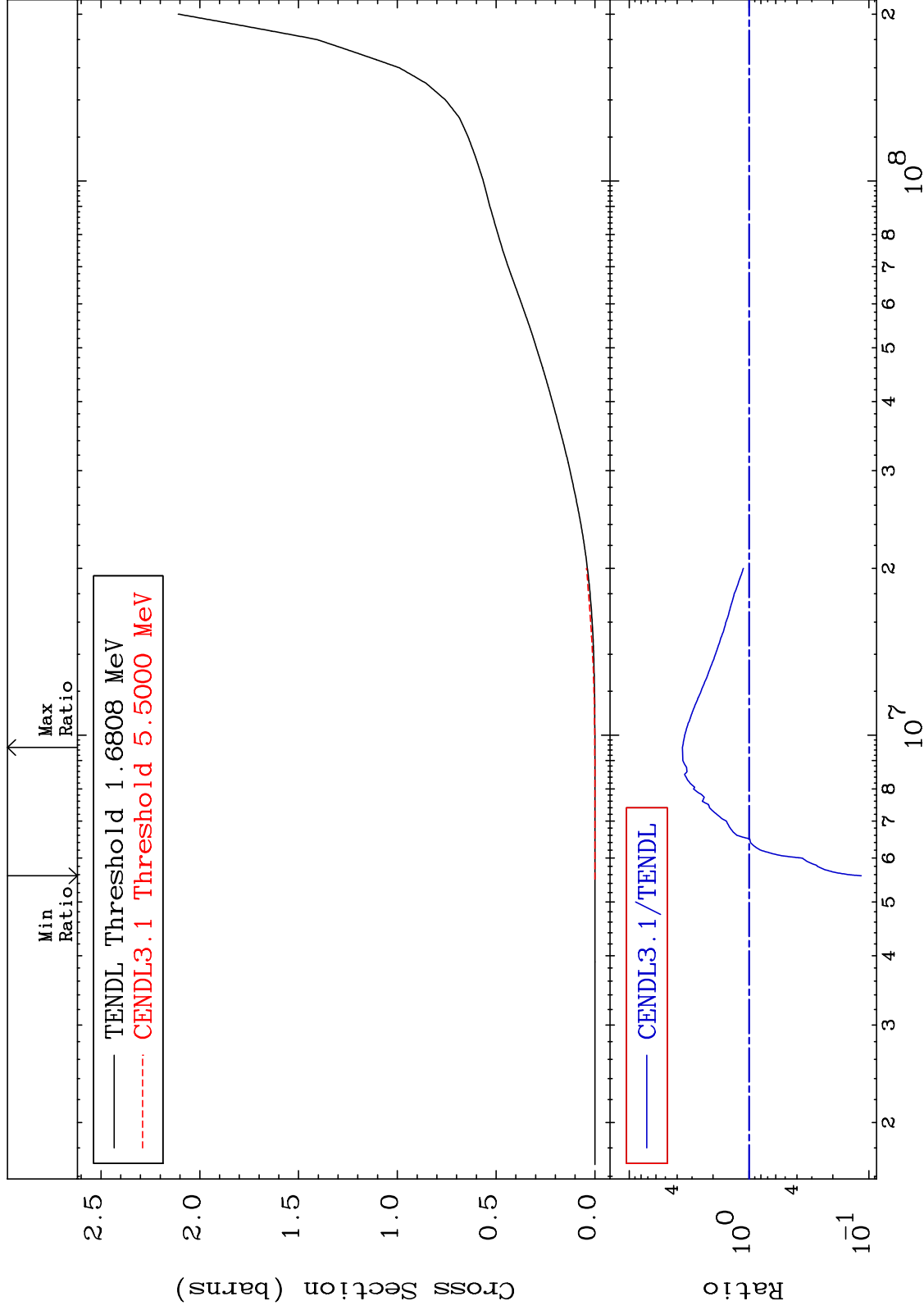
Incident Energy (eV)

64-Gd-156

MAT 6437

Hydrogen Production
Cross Section

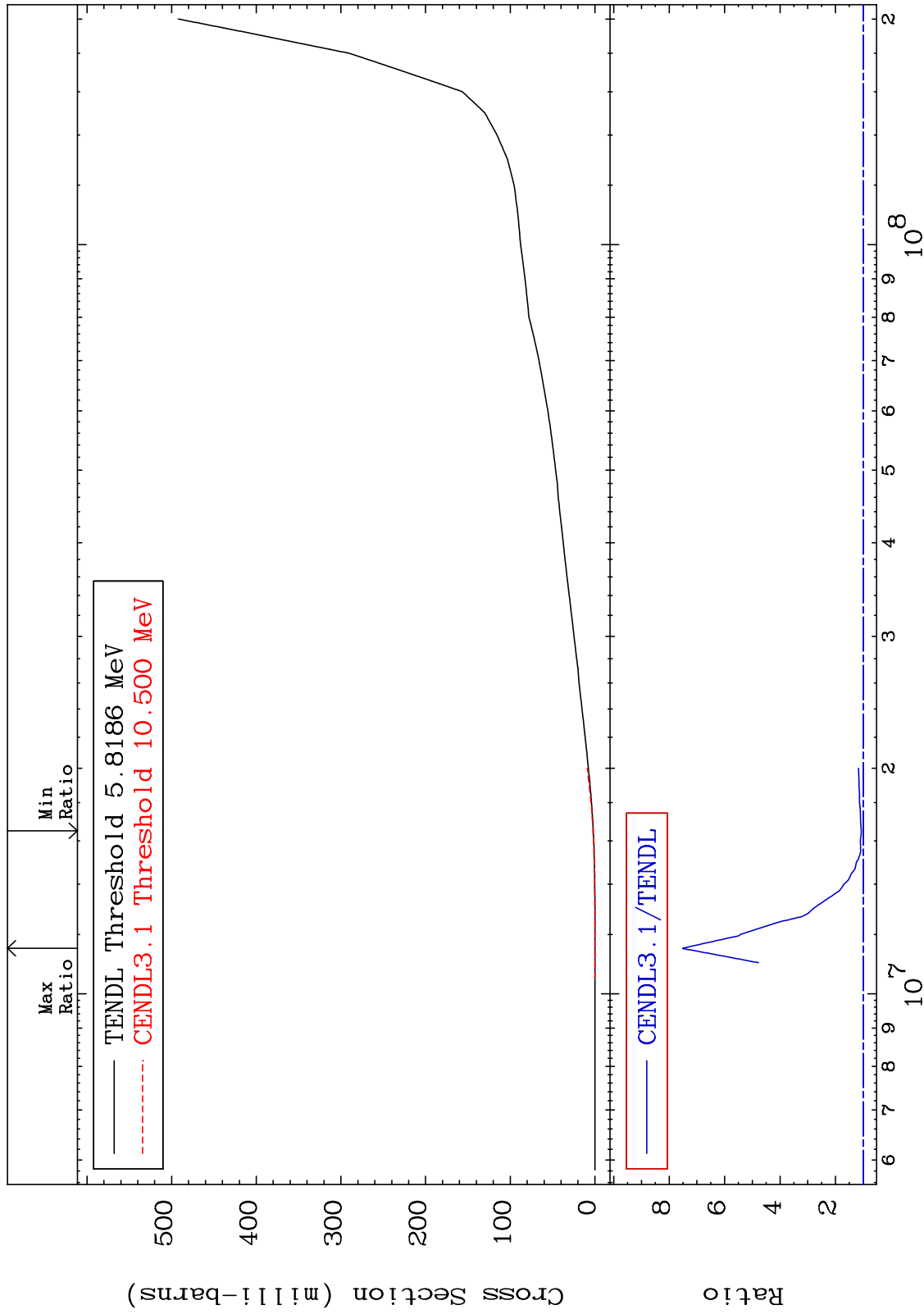
64-Gd-156
-88.40 To 260.4 %



MAT 6437

Deuterium Production
Cross Section

64-Gd-156
6.761 To 652.1 %

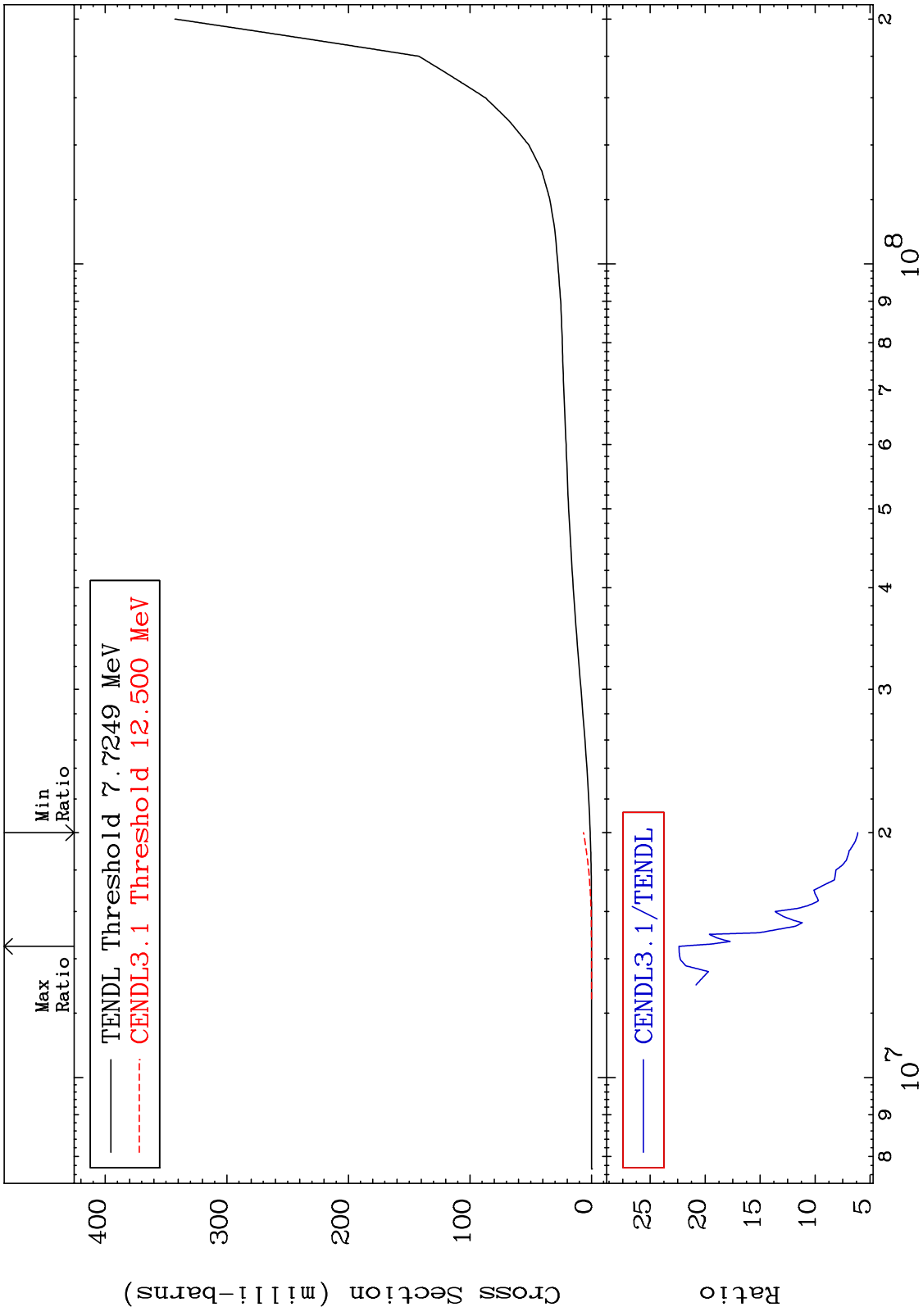


29

Incident Energy (eV)

64-Gd-156

MAT 6437 Tritium Production Cross Section 64-Gd-156 511.8 To 2138. %

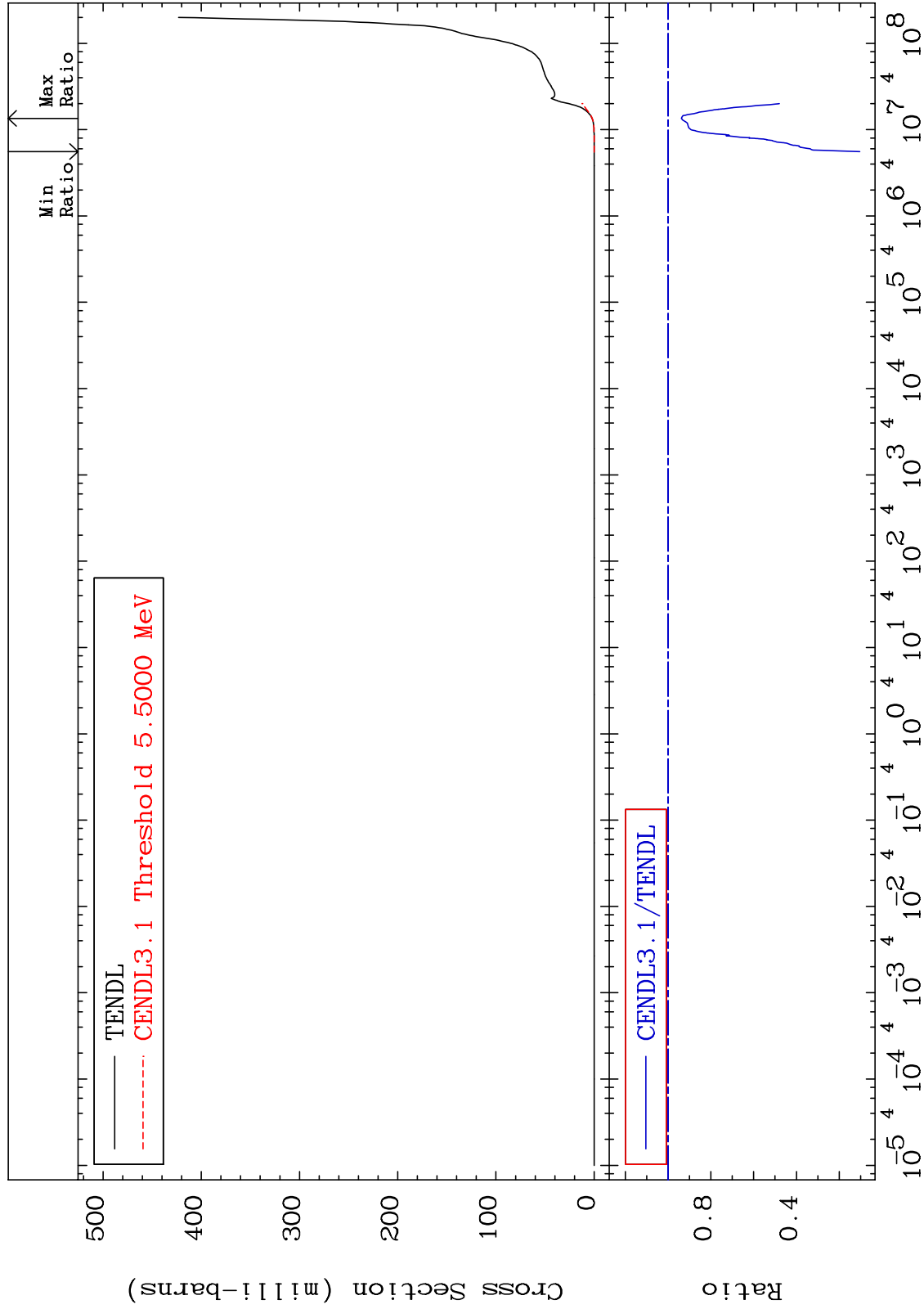


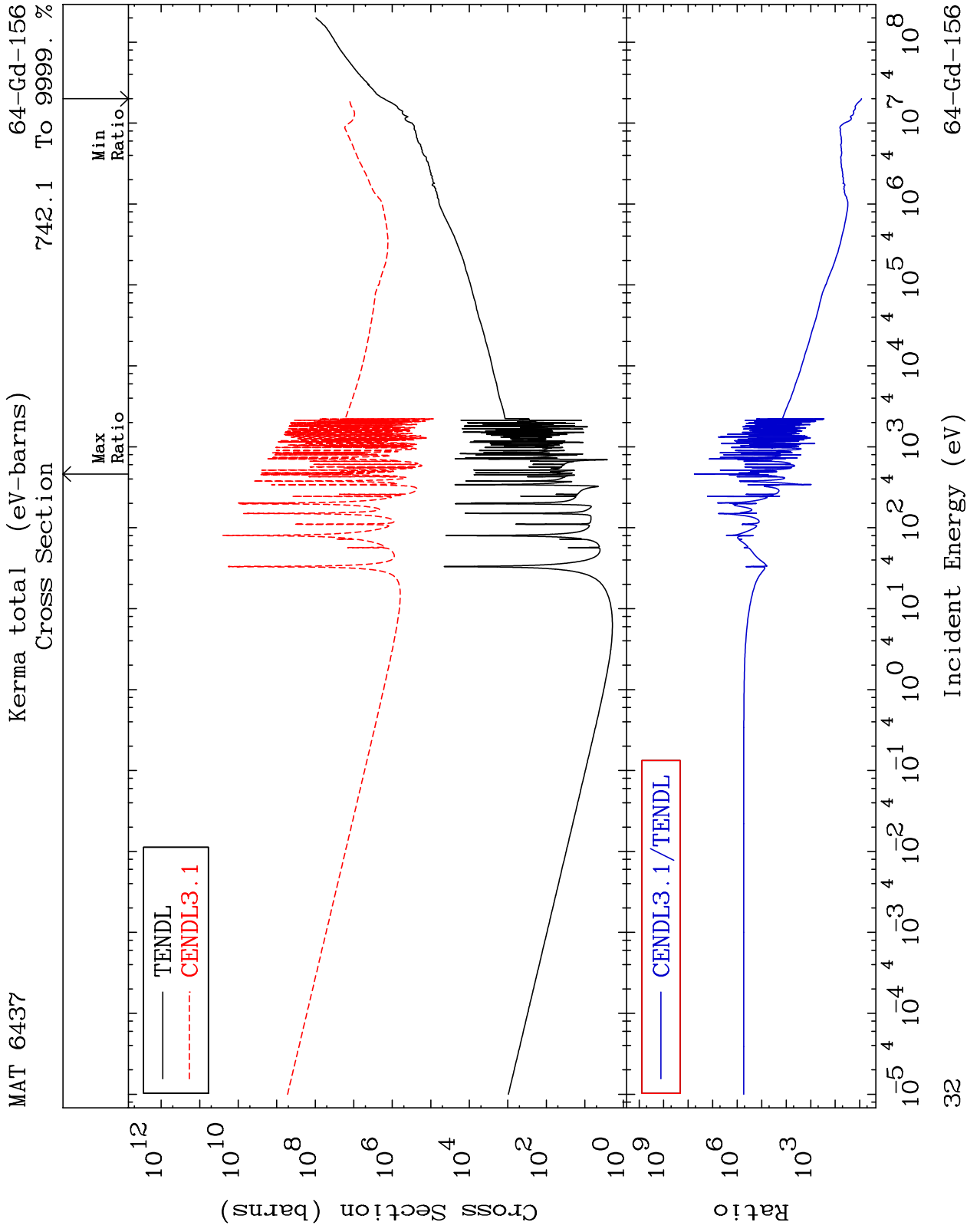
30 64-Gd-156 Incident Energy (eV)

MAT 6437

He-4 Production
Cross Section

64-Gd-156
-89.61 To -6.263%

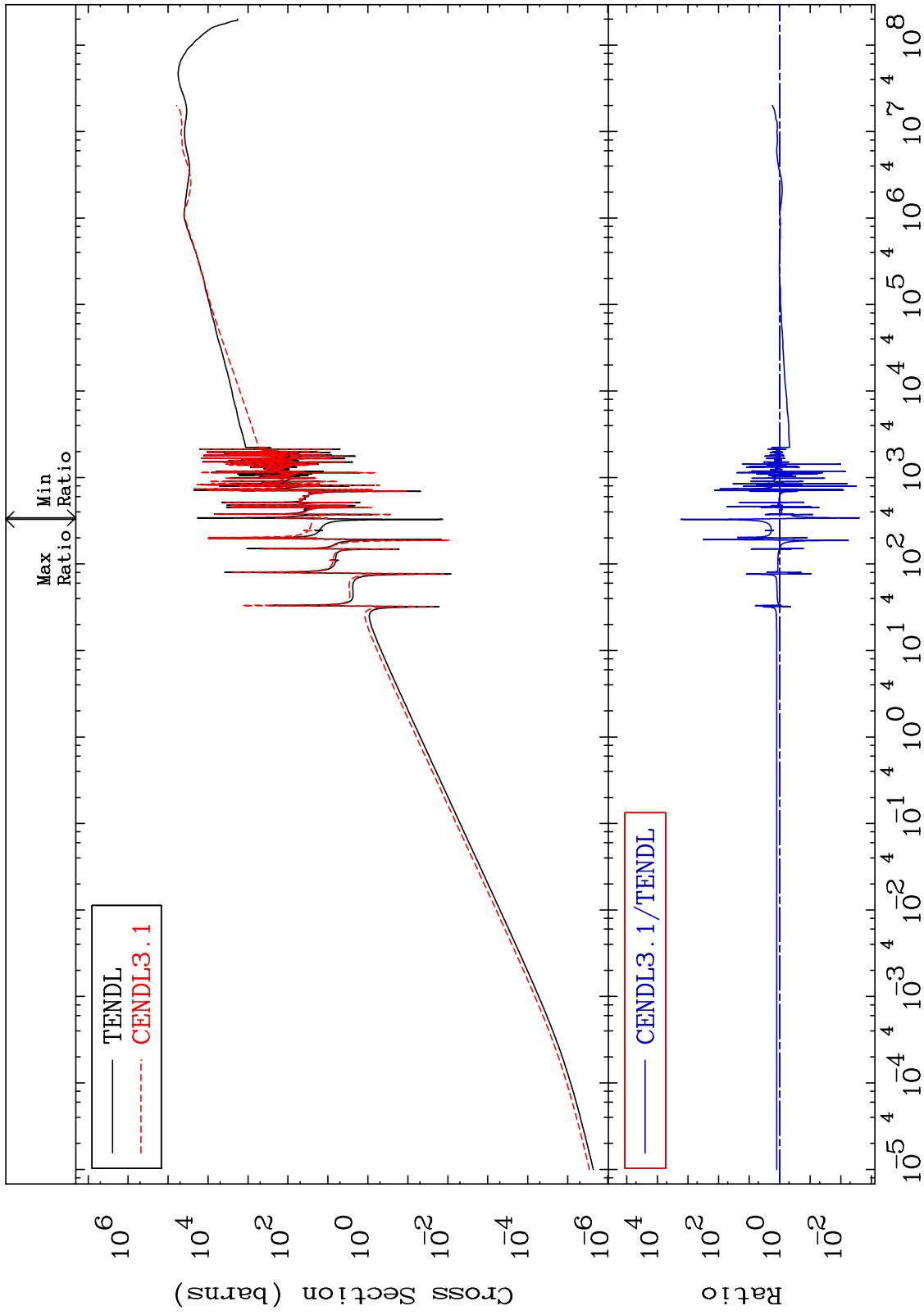




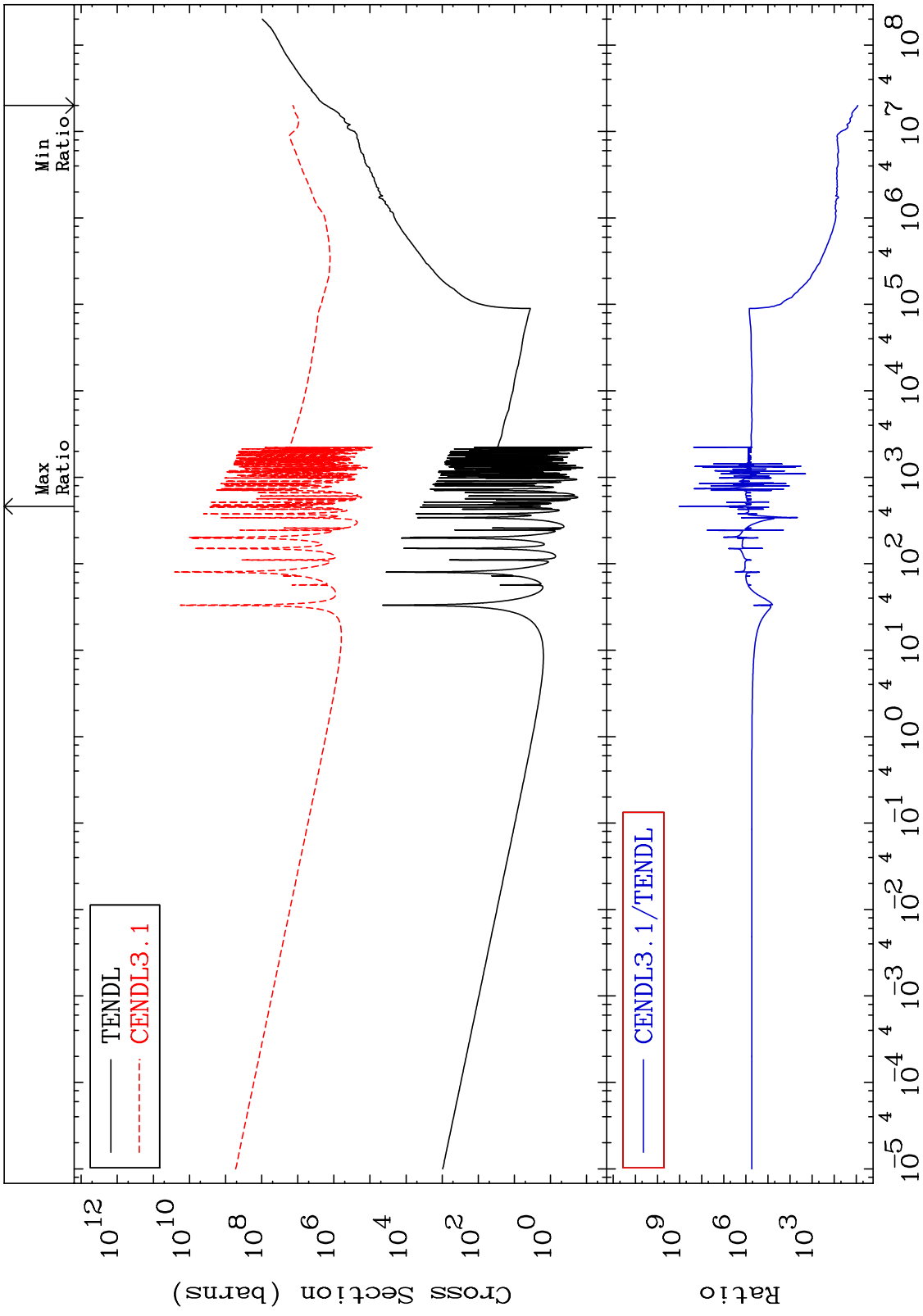
MAT 6437

Kerma elastic
Cross Section

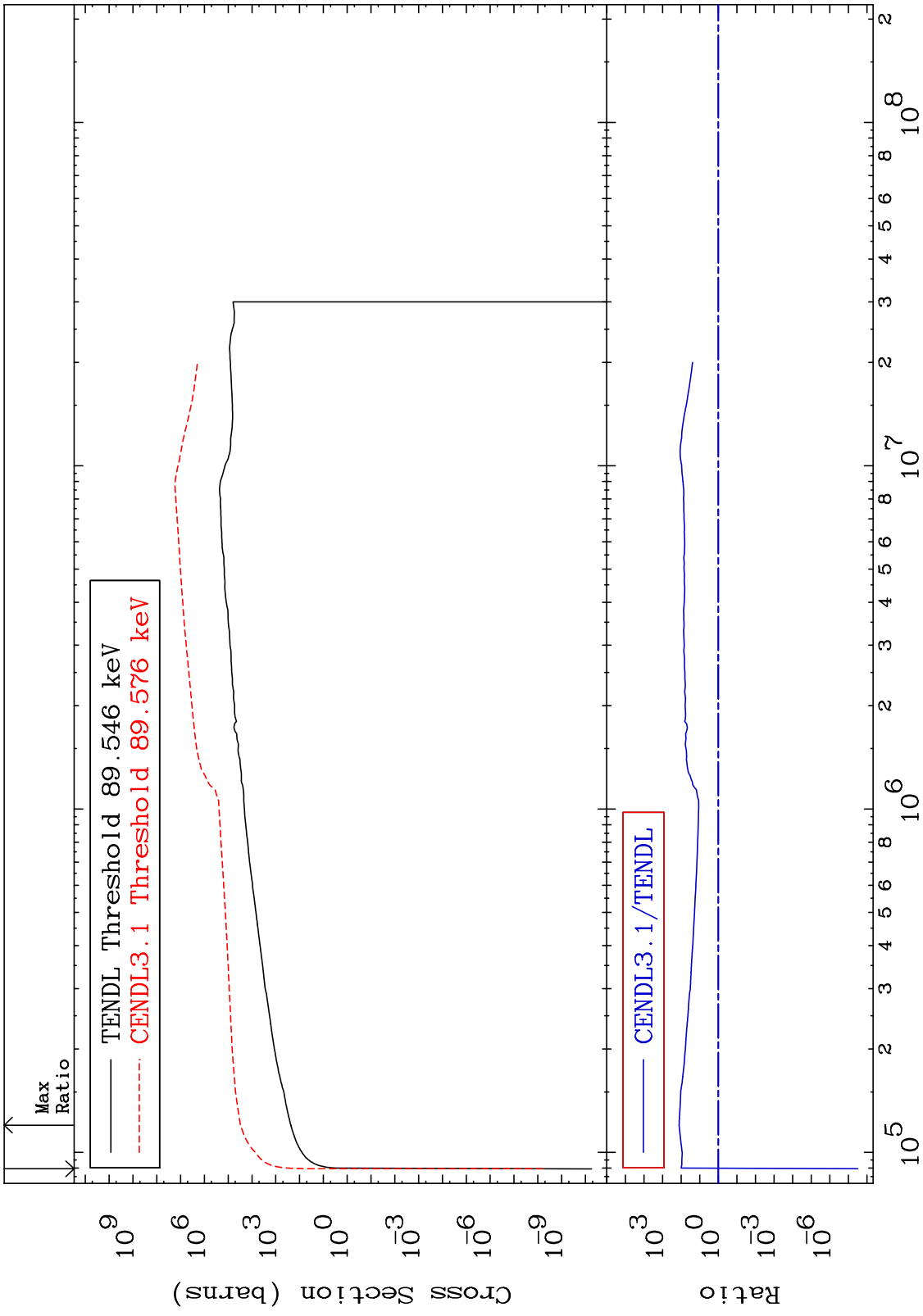
64-Gd-156
-99.76 To 9999. %



MAT 6437 Kerma non-elastic (all but mt2) 64-Gd-156
 Cross Section 756.9 To 9999. %



MAT 6437 Kerma inelastic (mt51-91) 64-Gd-156
 Cross Section -100.0 To 9999. %

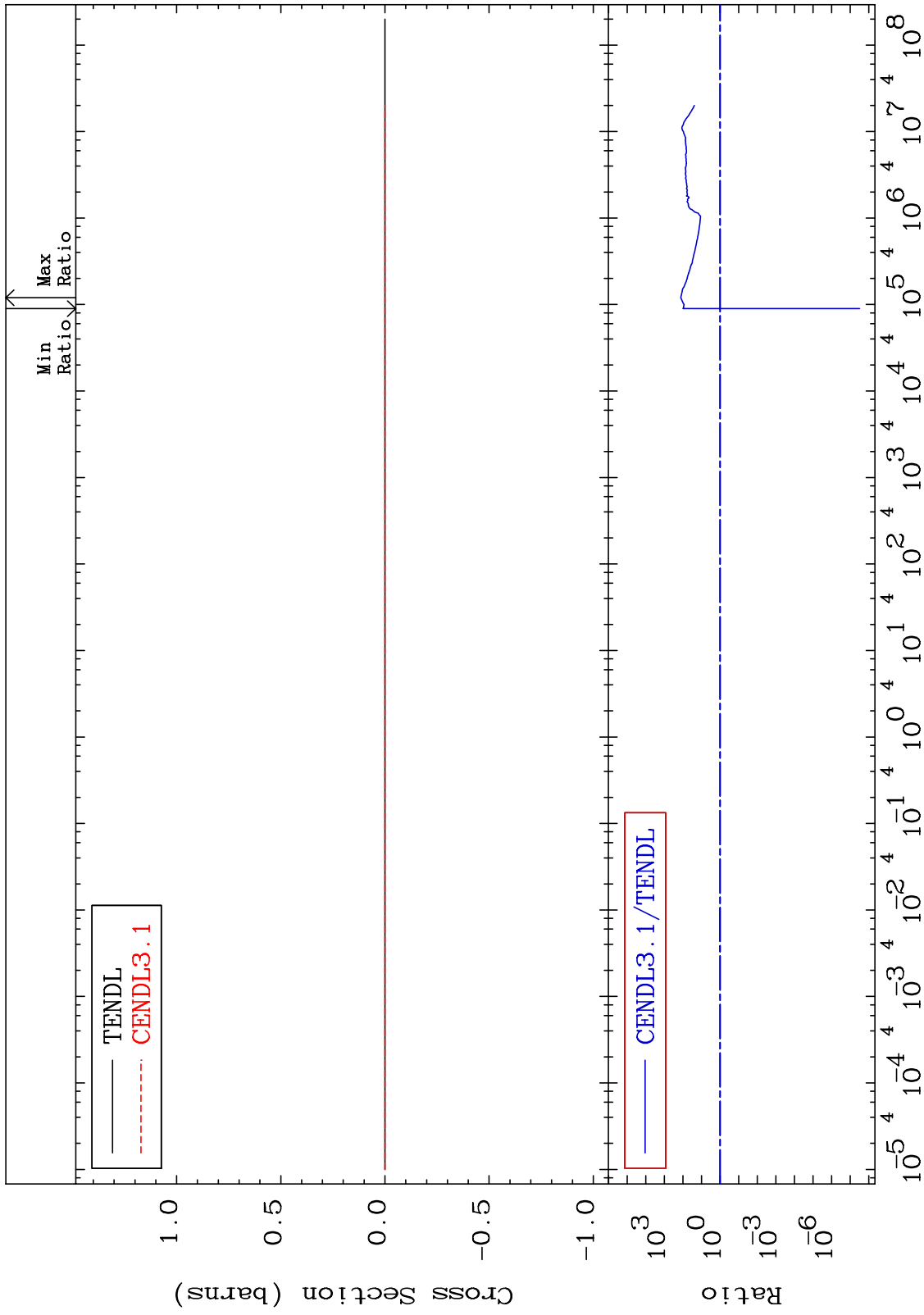


35 Incident Energy (eV) 64-Gd-156

MAT 6437

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

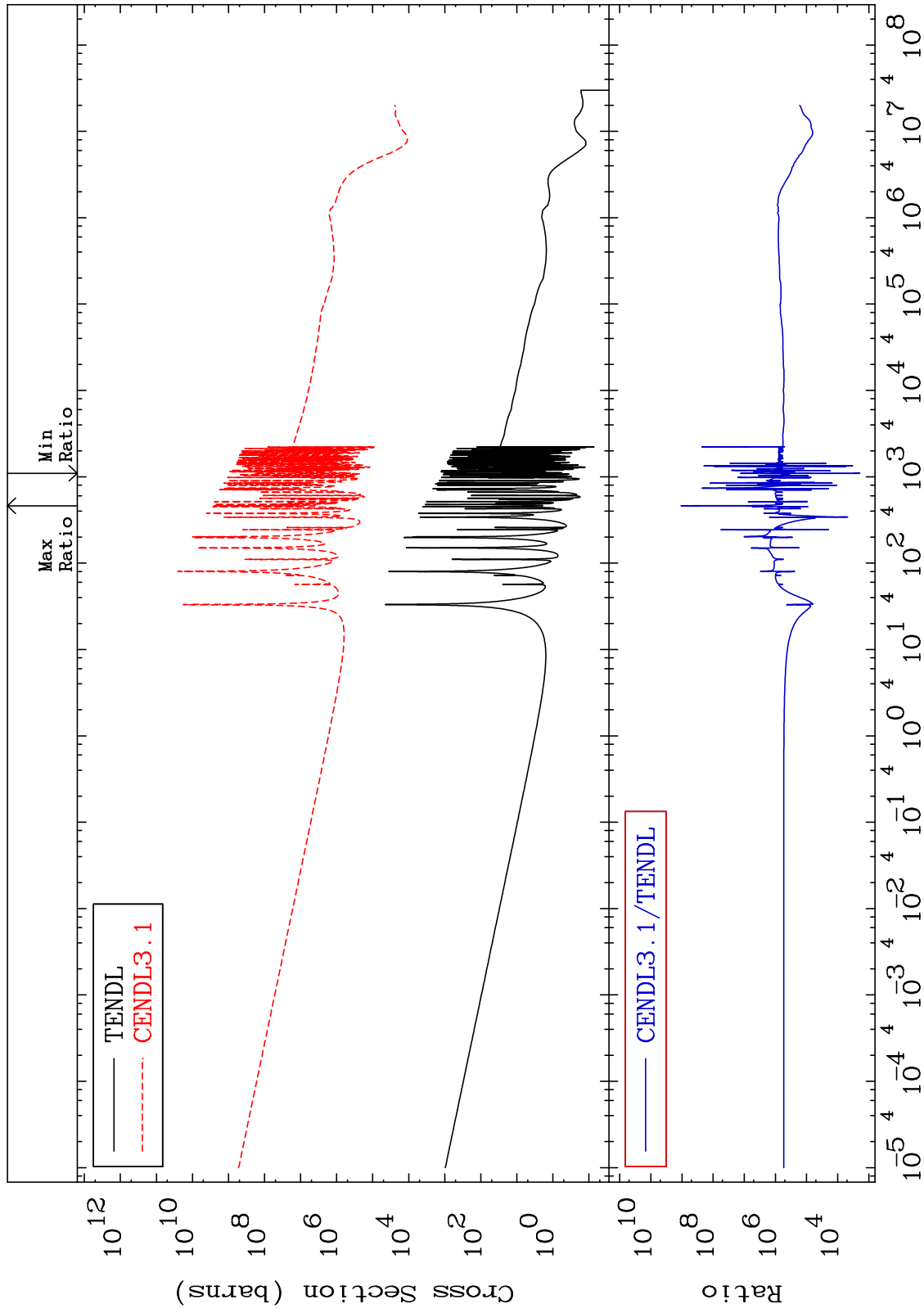
64-Gd-156
-100.0 To 9999. %



MAT 6437

Kerma capture (mt102)
Cross Section

64-Gd-156
9999. To 9999. %



37

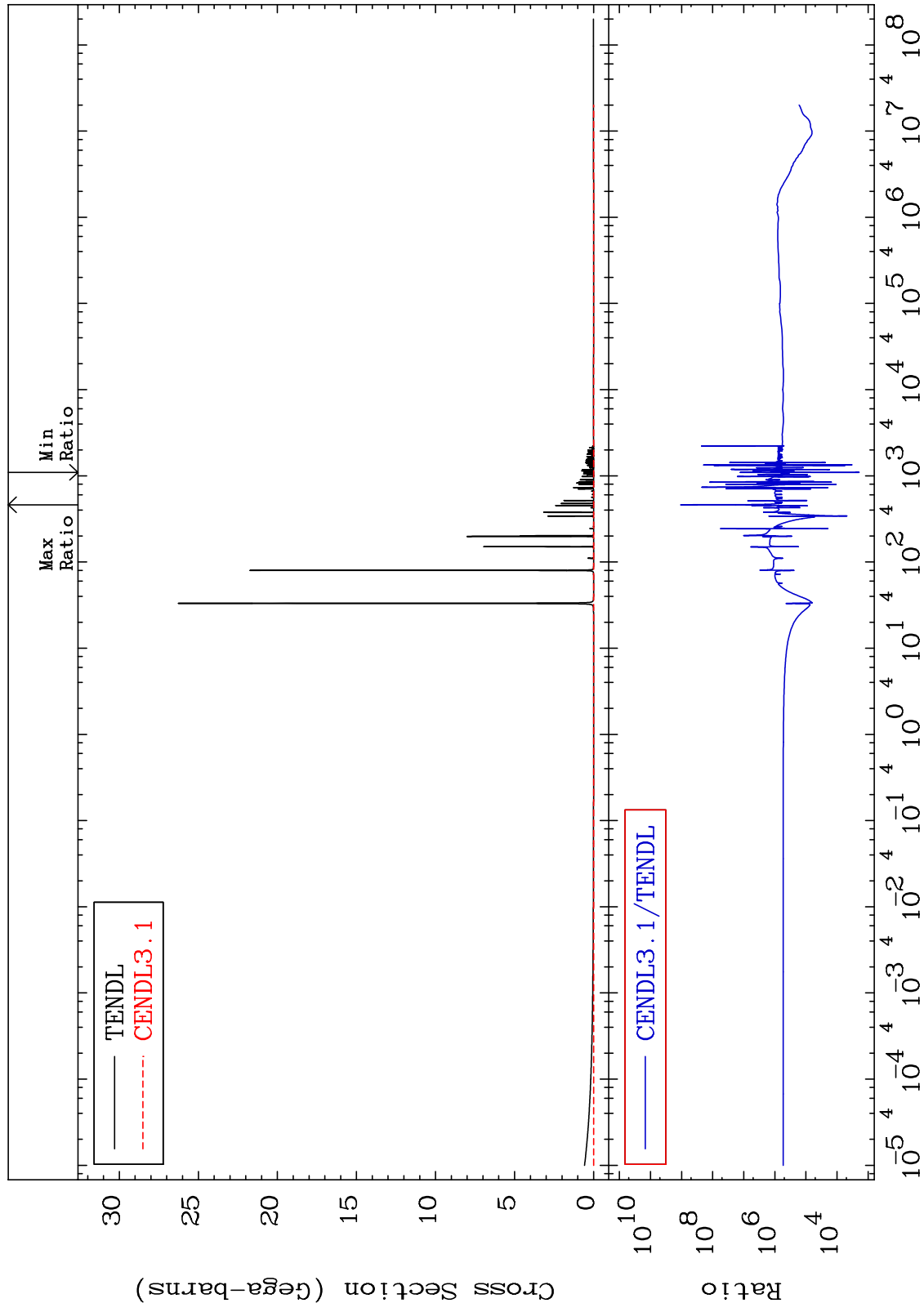
Incident Energy (eV)

64-Gd-156

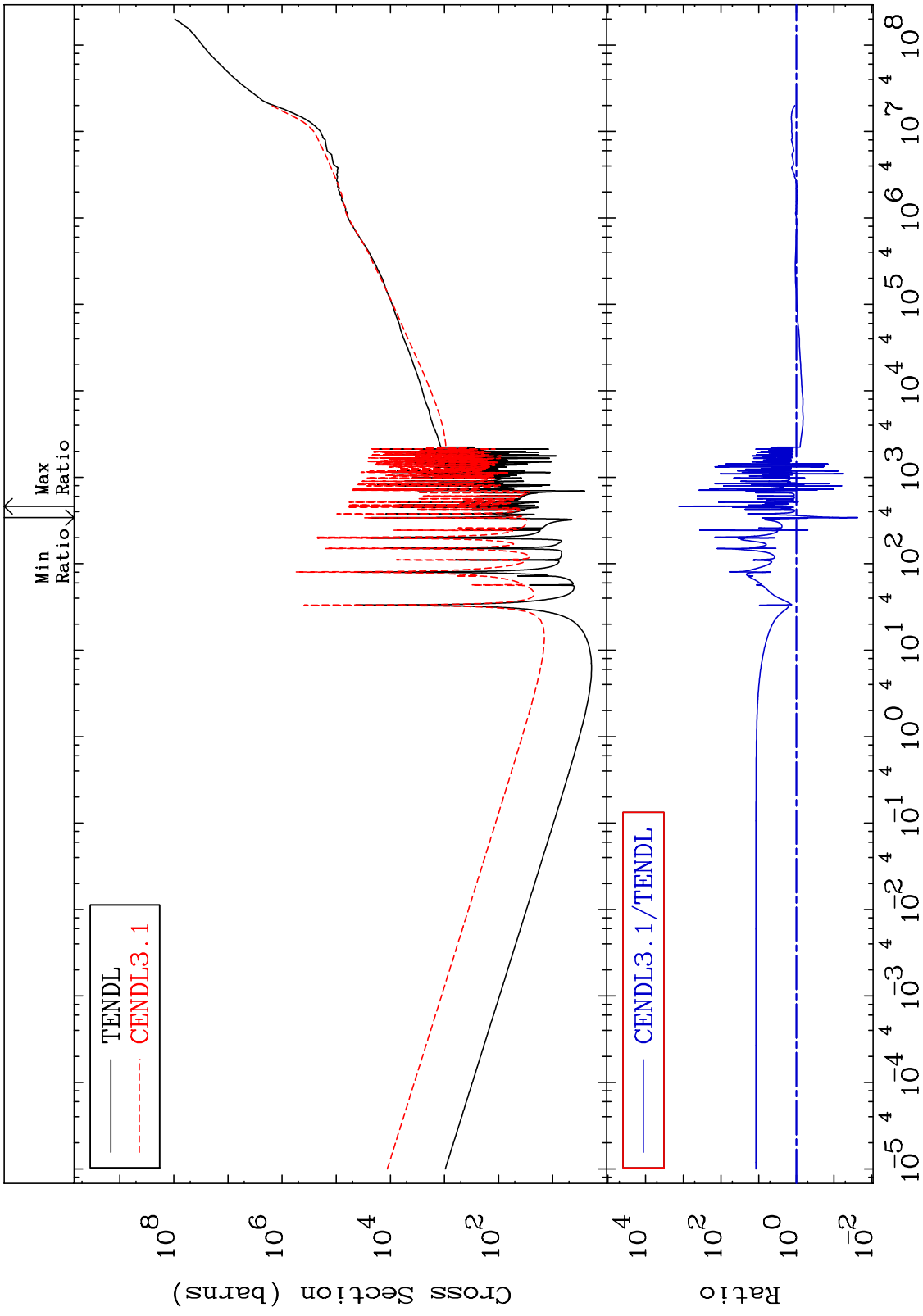
MAT 6437

Total photon (eV-barns)
Cross Section

64-Gd-156
9999. To 9999. %



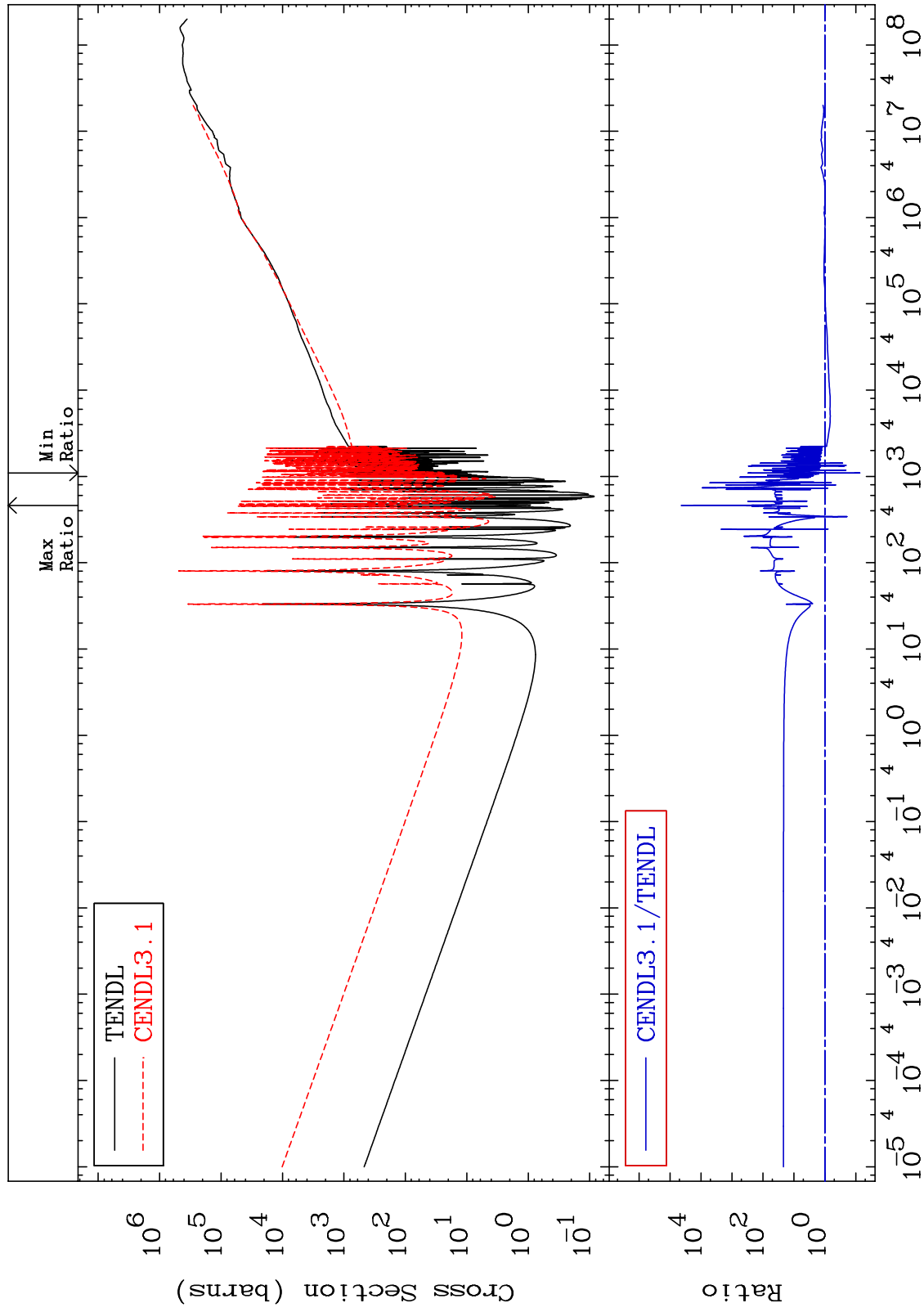
MAT 6437 Total kinematic kerma (high limit) 64-Gd-156
 Cross Section -97.67 To 9999. %



MAT 6437

Dpa total (eV-barns)
Cross Section

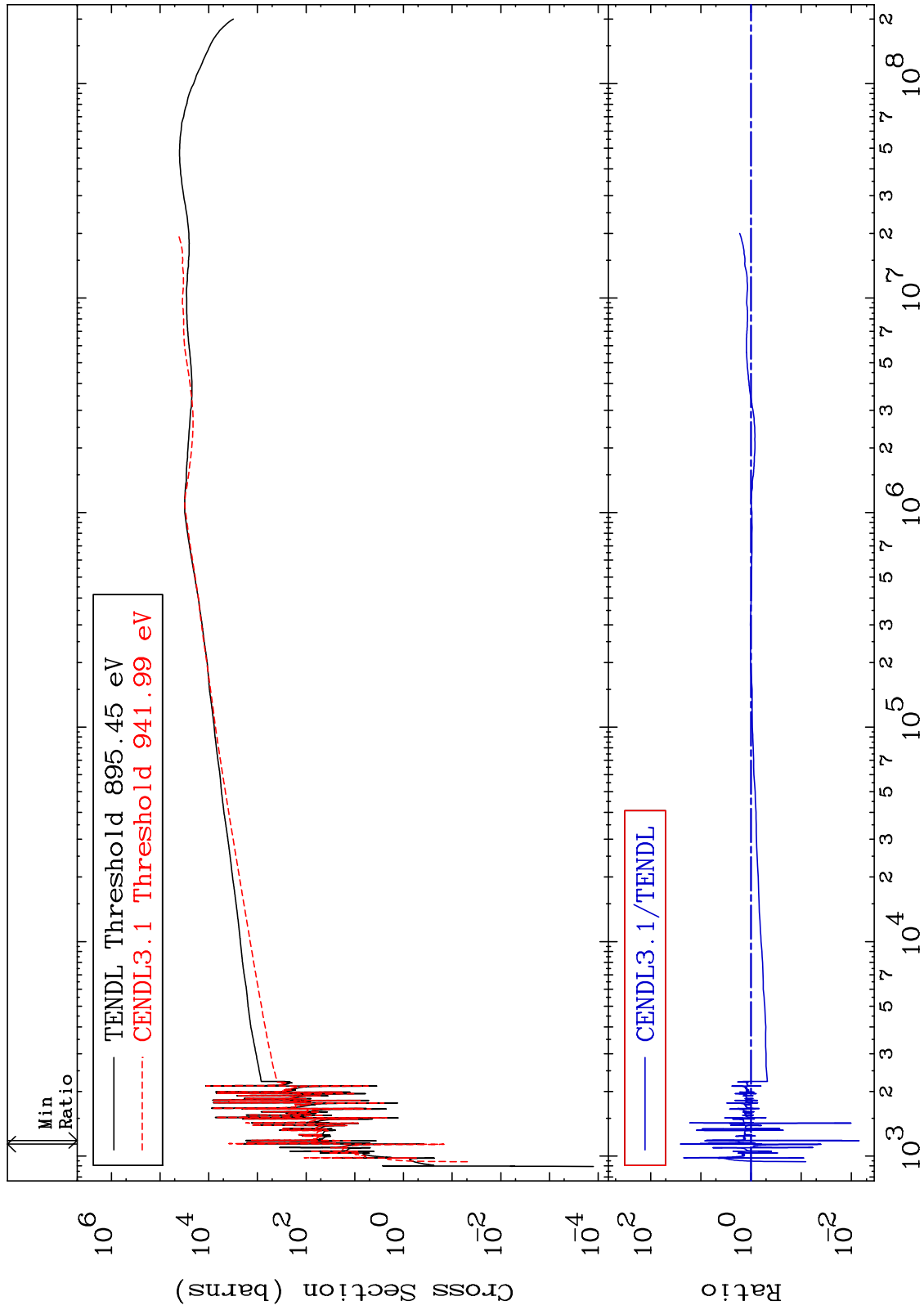
64-Gd-156
-92.58 To 9999. %



MAT 6437

Dpa elastic (mt2)
Cross Section

64-Gd-156
-99.29 To 2425. %



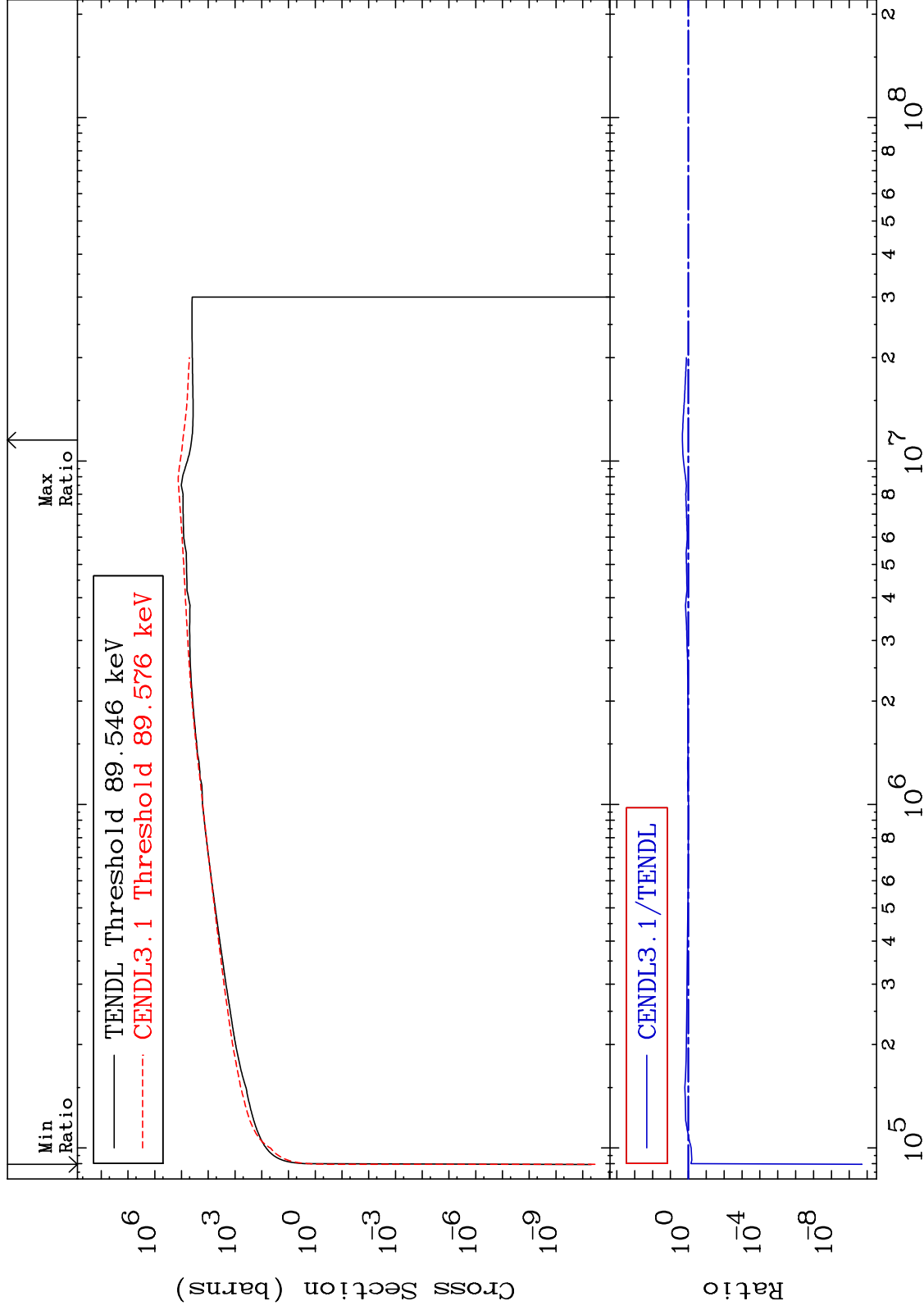
41

64-Gd-156

MAT 6437

Dpa inelastic (mt51-91)
Cross Section

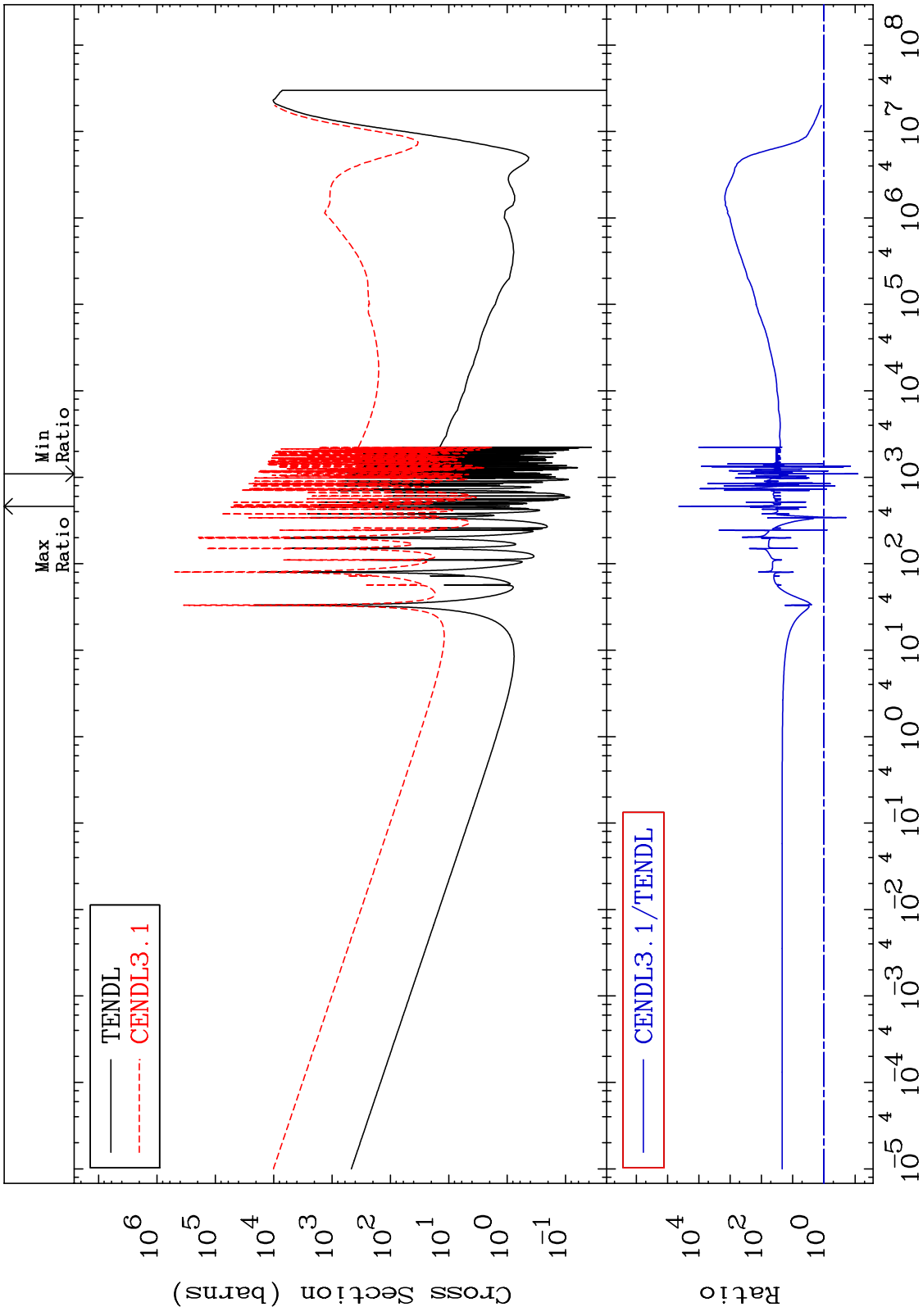
64-Gd-156
-100.0 To 112.7 %



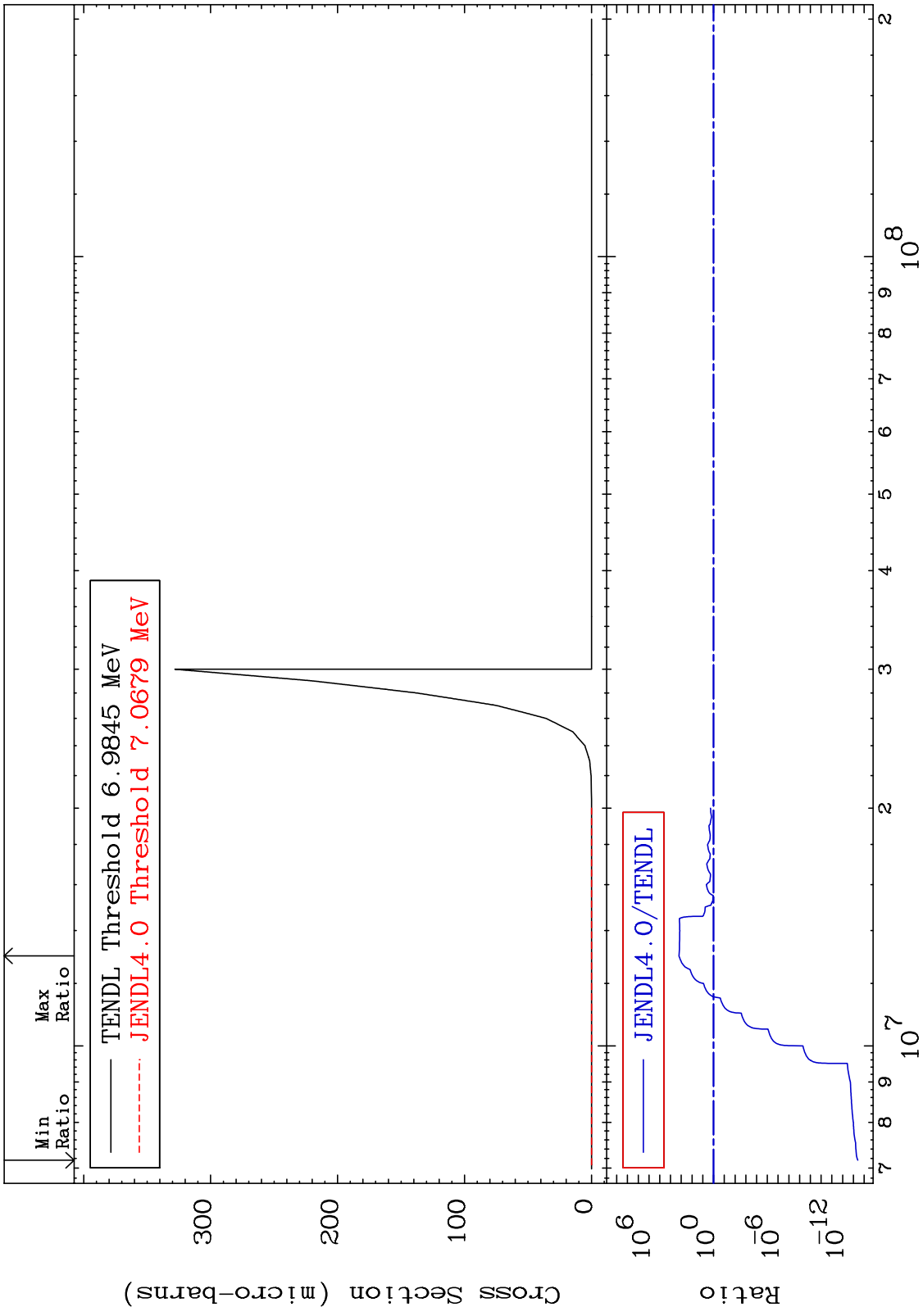
42

64-Gd-156

MAT 6437 Dpa disappearance (mt102 -120) 64-Gd-156
 Cross Section -91.83 To 9999. %

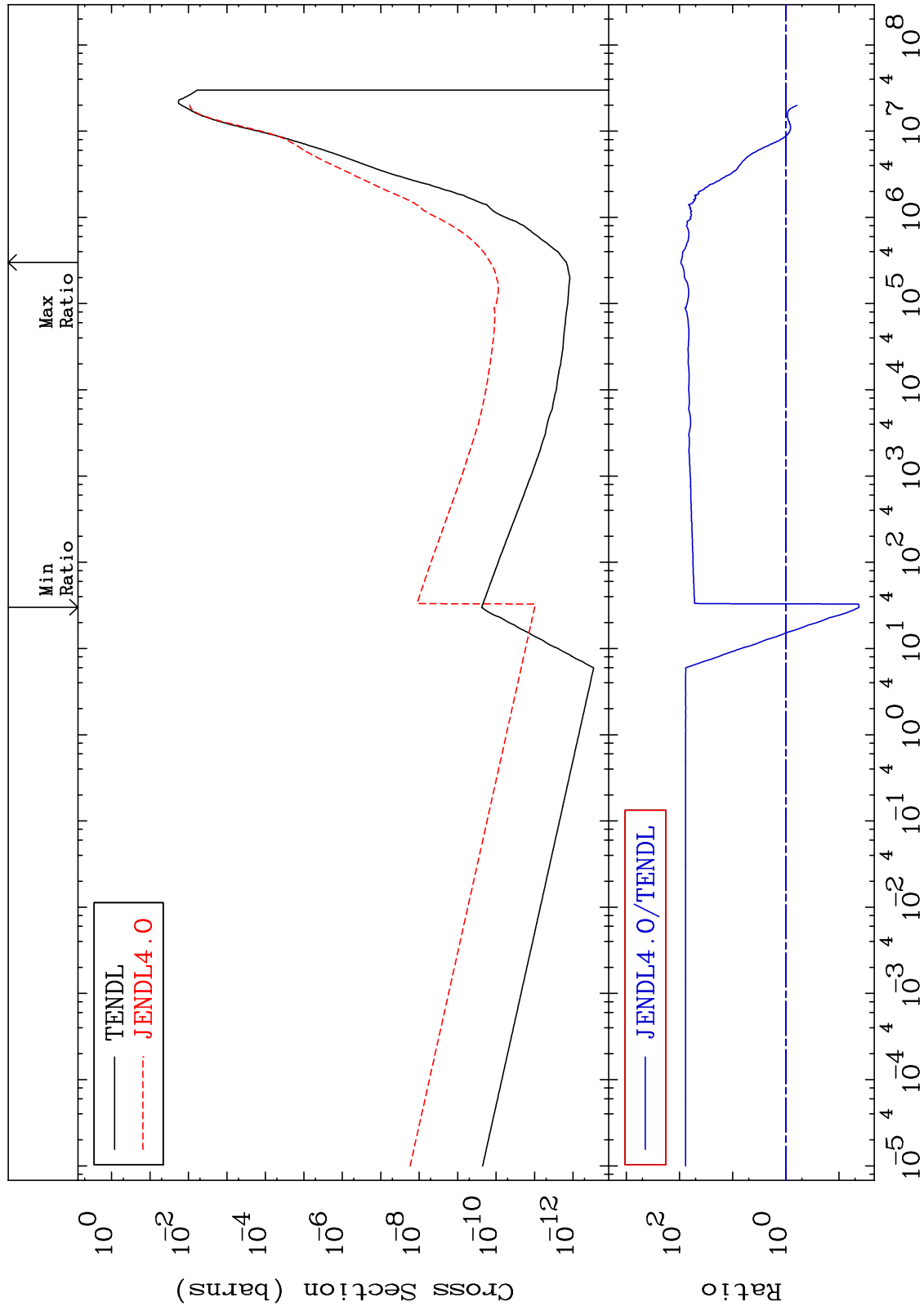


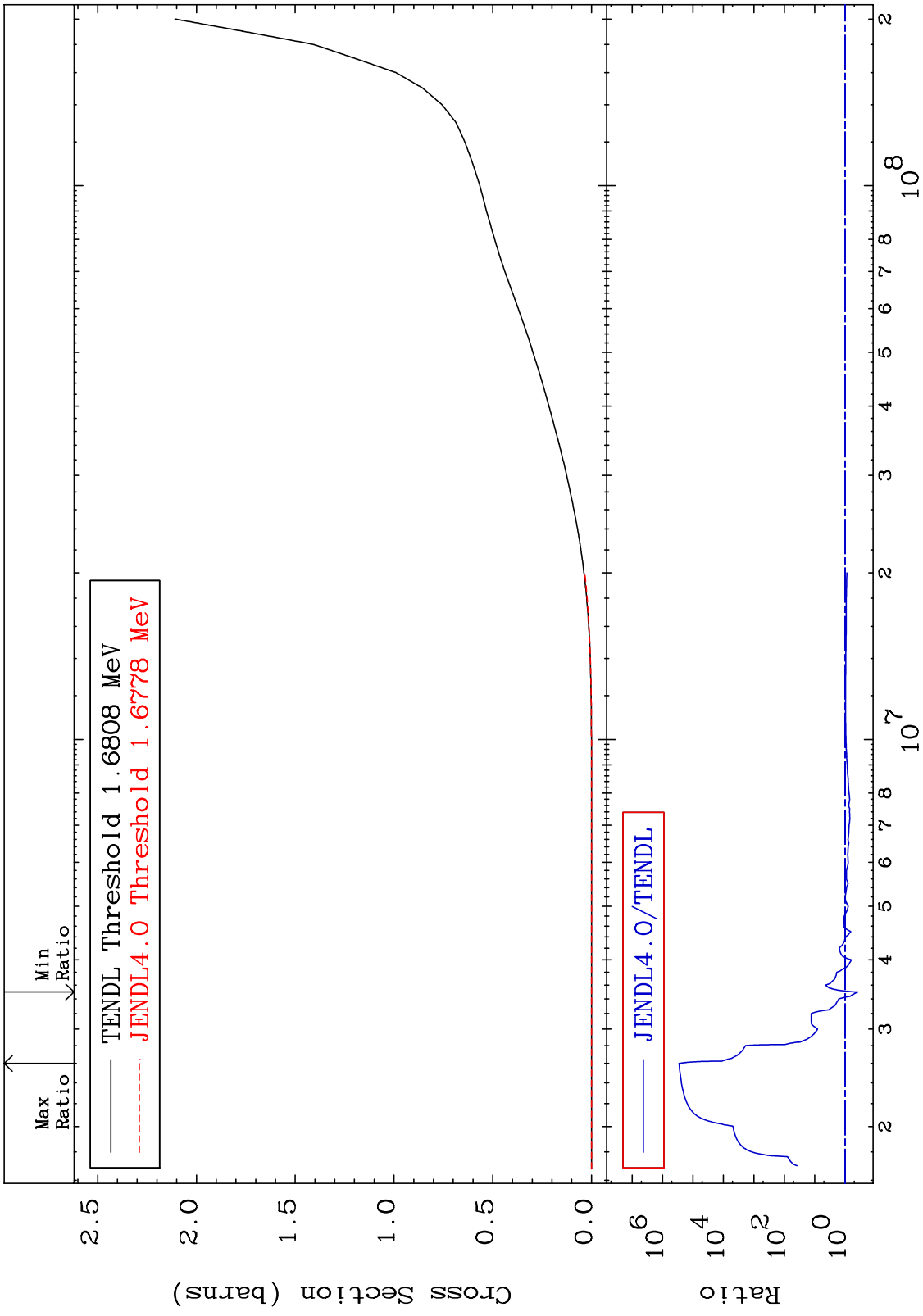
43 Incident Energy (eV) 64-Gd-156



MAT 6437

(n, α) Cross Section
64-Gd-156
-95.80 To 9351. %

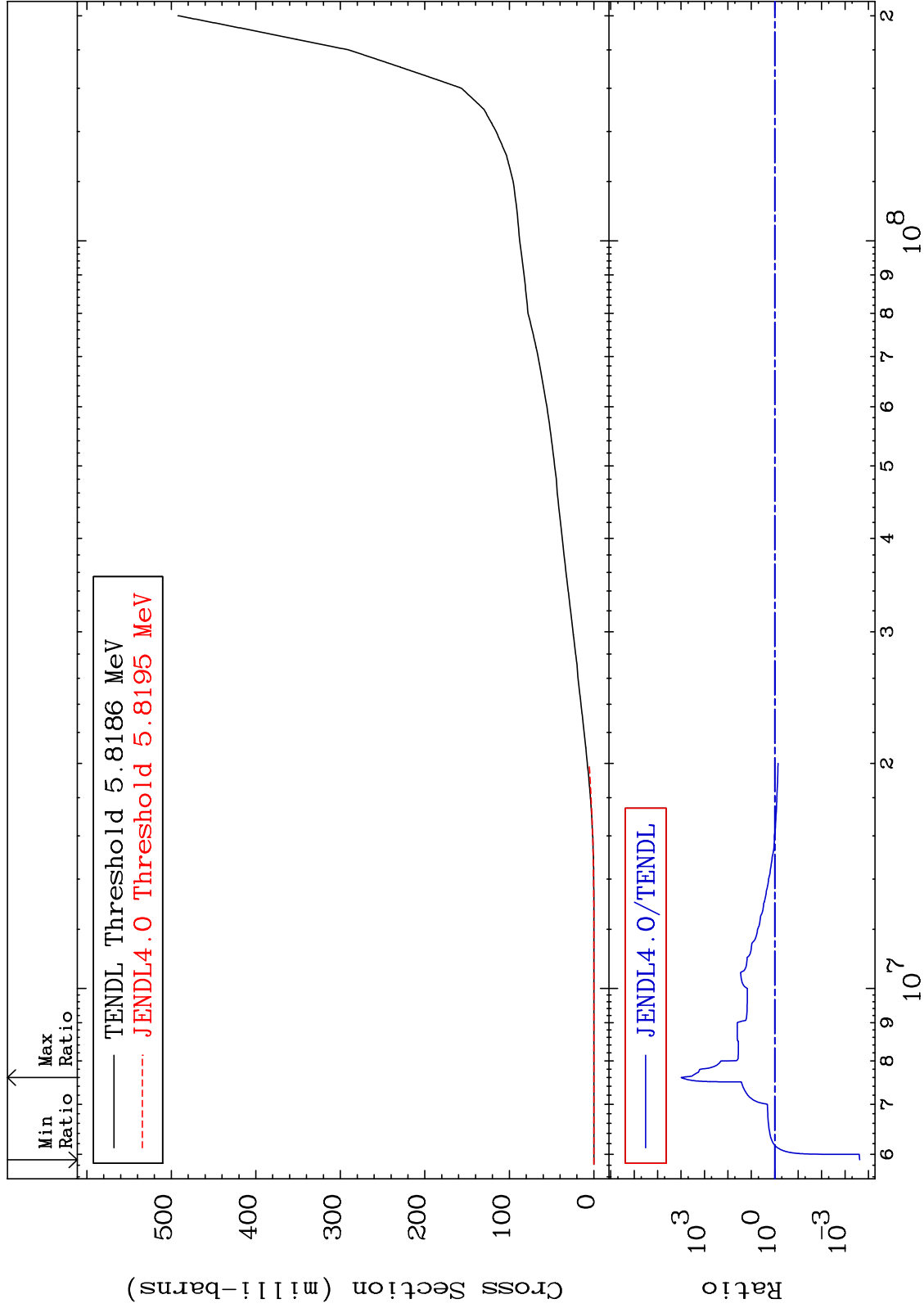




MAT 6437

Deuterium Production
Cross Section

64-Gd-156
-99.98 To 9999. %



47

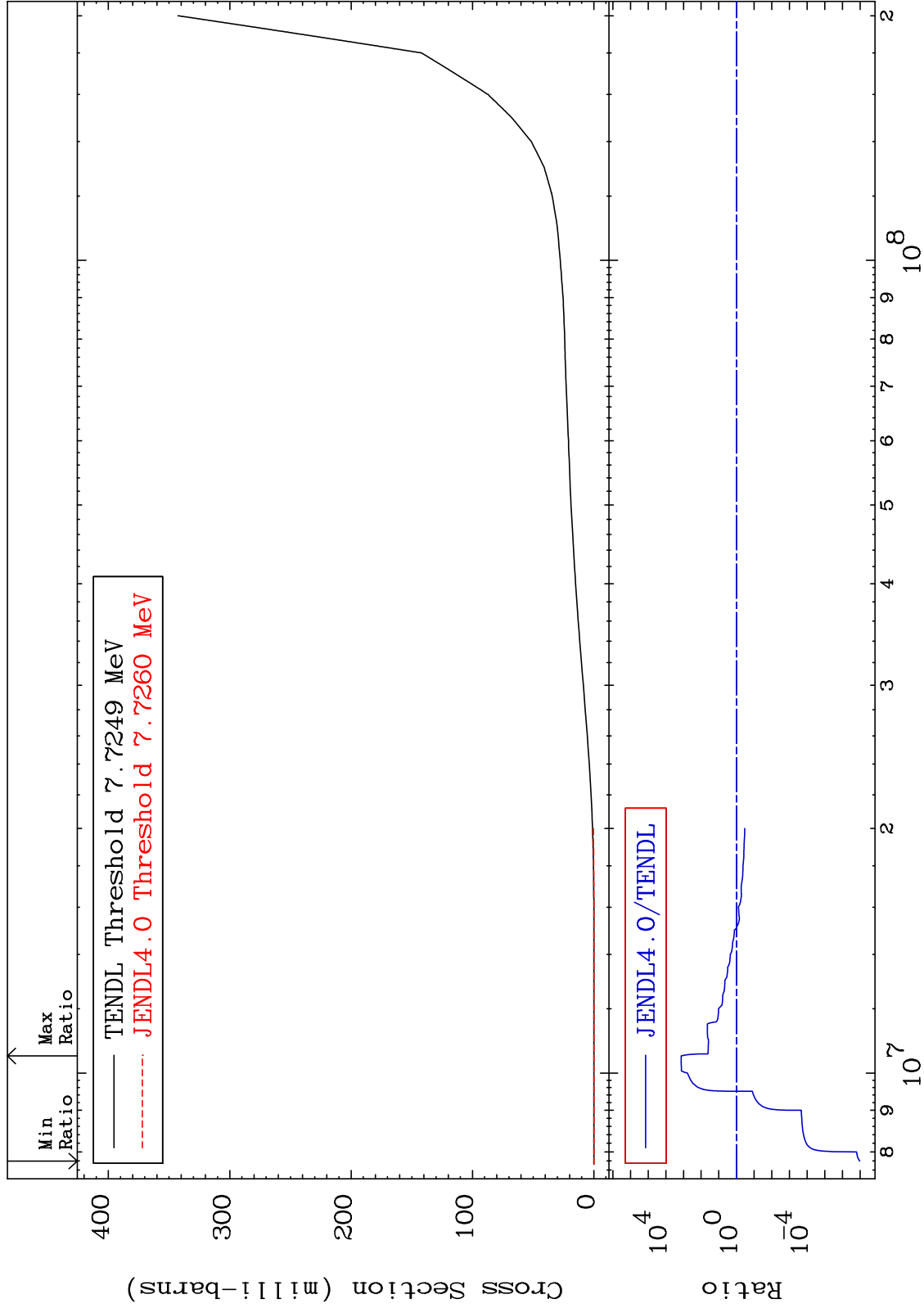
Incident Energy (eV)

64-Gd-156

MAT 6437

Tritium Production
Cross Section

64-Gd-156
-100.0 To 9999. %



48

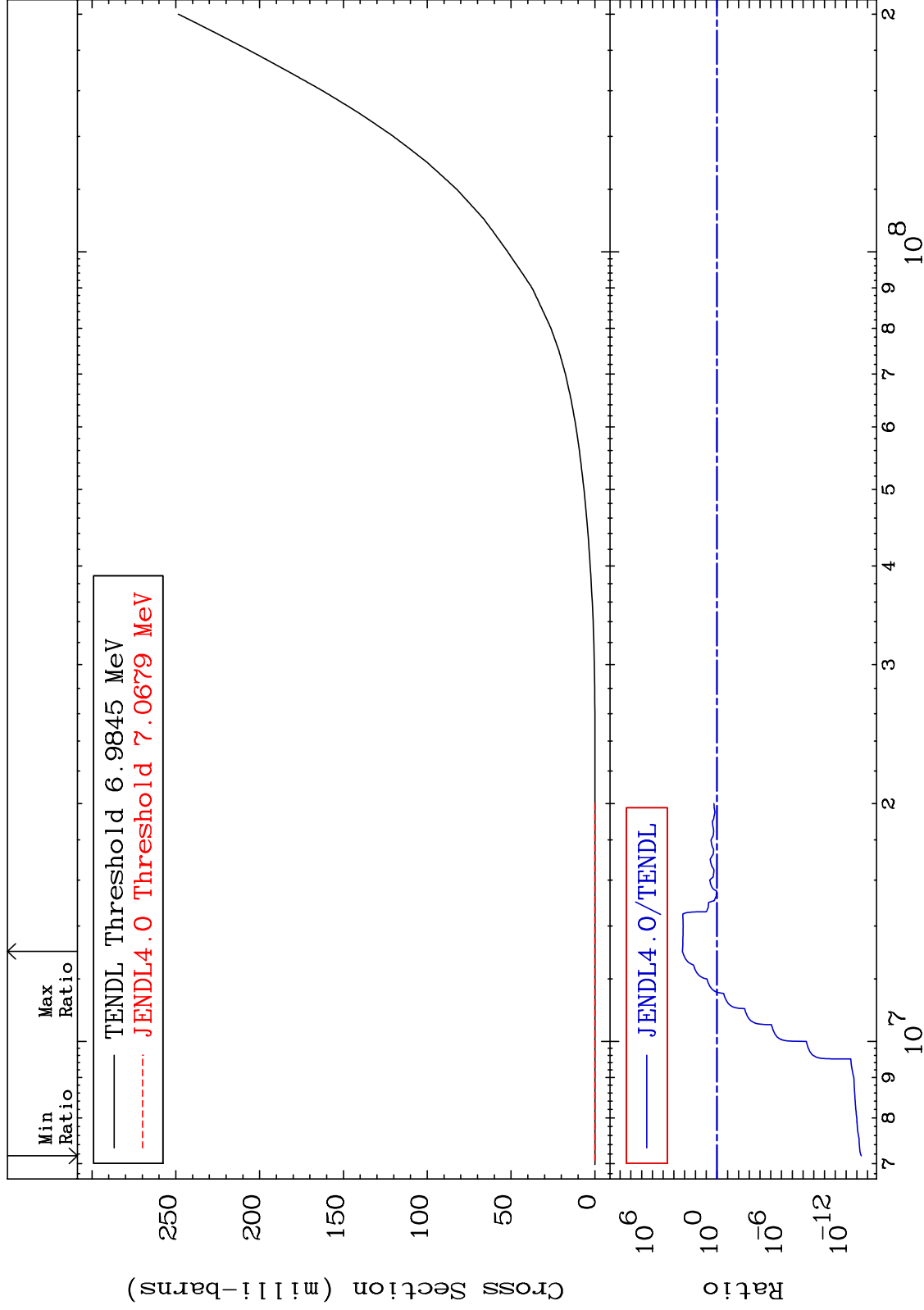
Incident Energy (eV)

64-Gd-156

MAT 6437

He-3 Production
Cross Section

64-Gd-156
-100.0 To 9999. %



49

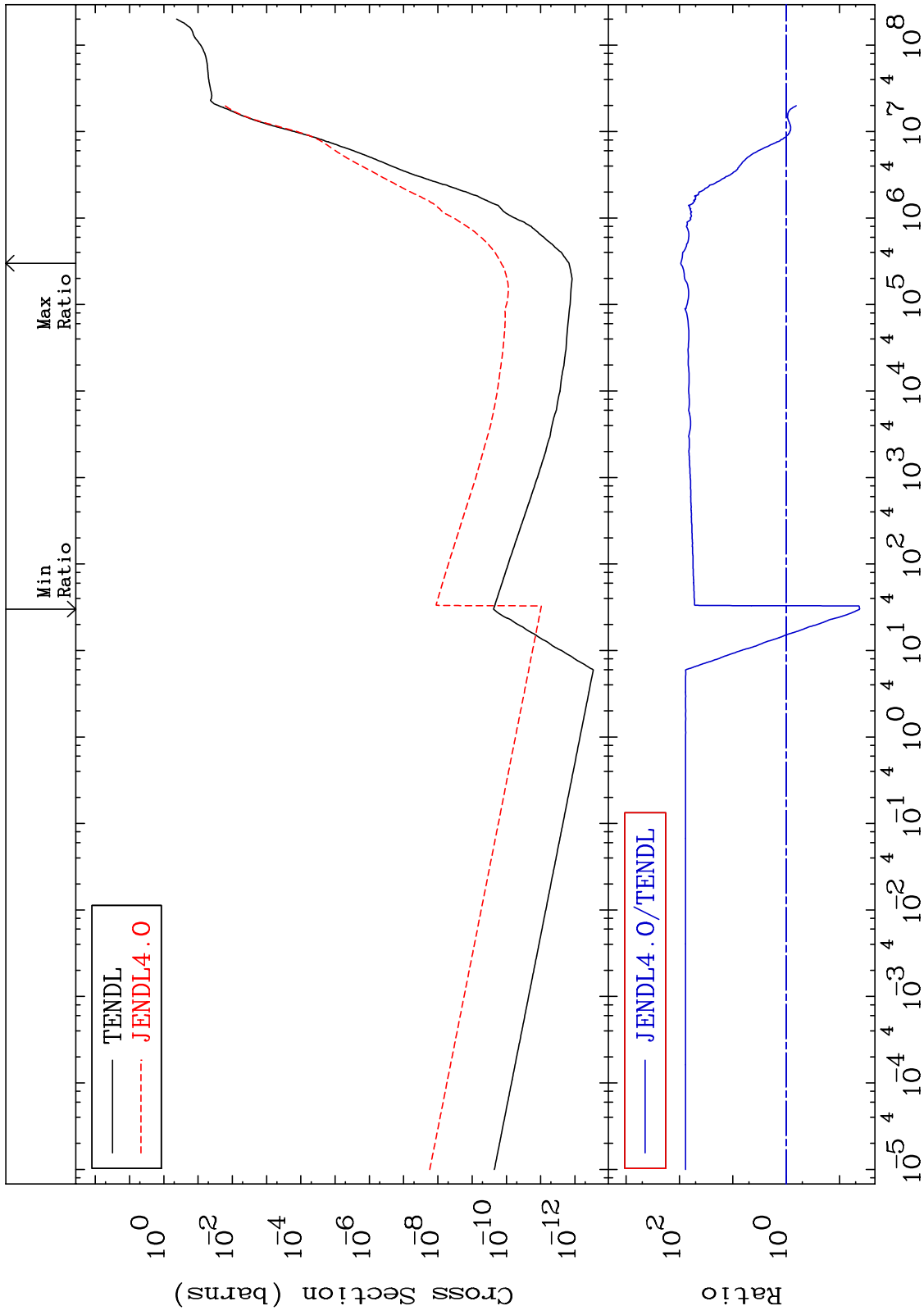
Incident Energy (eV)

64-Gd-156

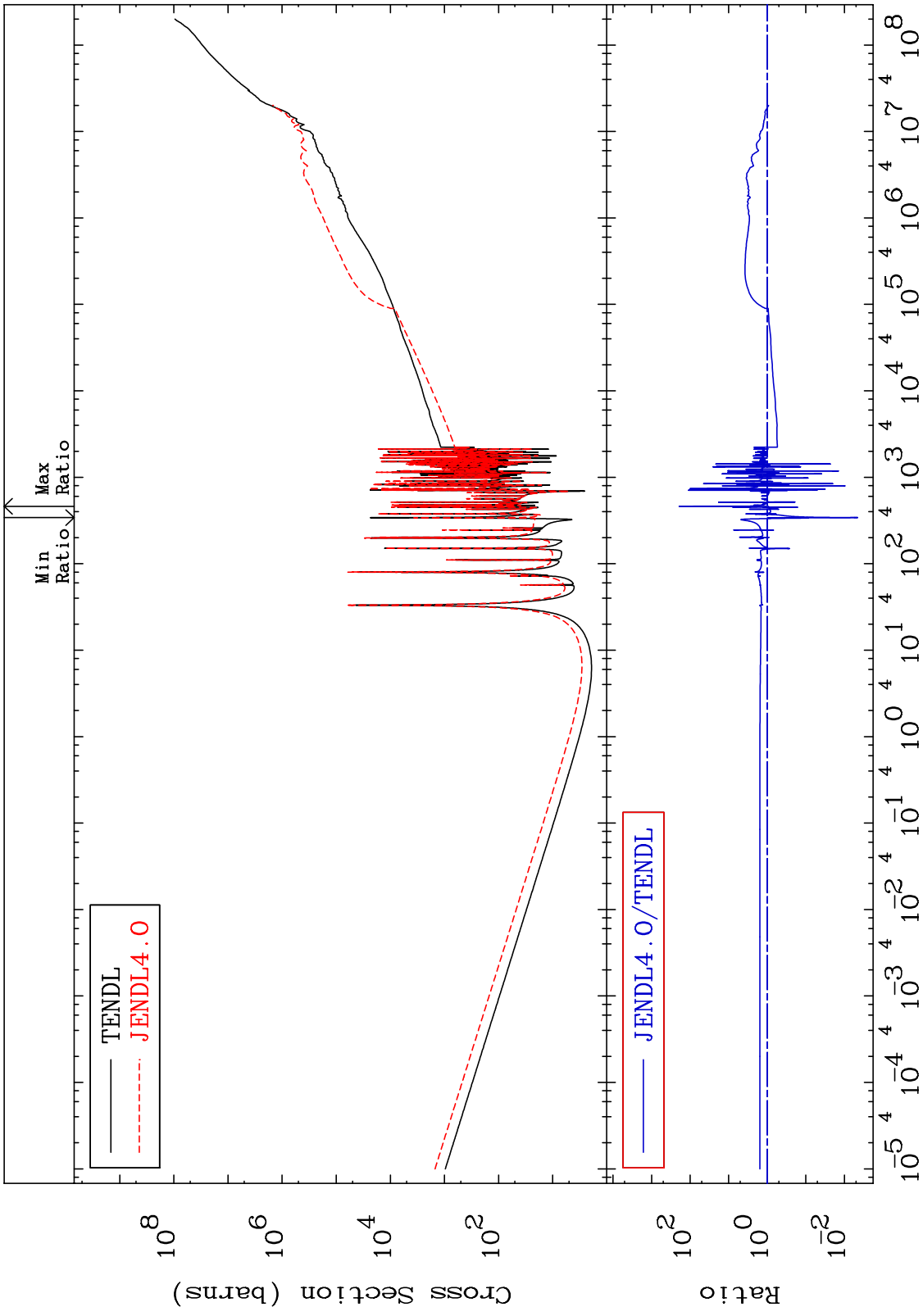
MAT 6437

He-4 Production
Cross Section

64-Gd-156
-95.80 To 9351. %



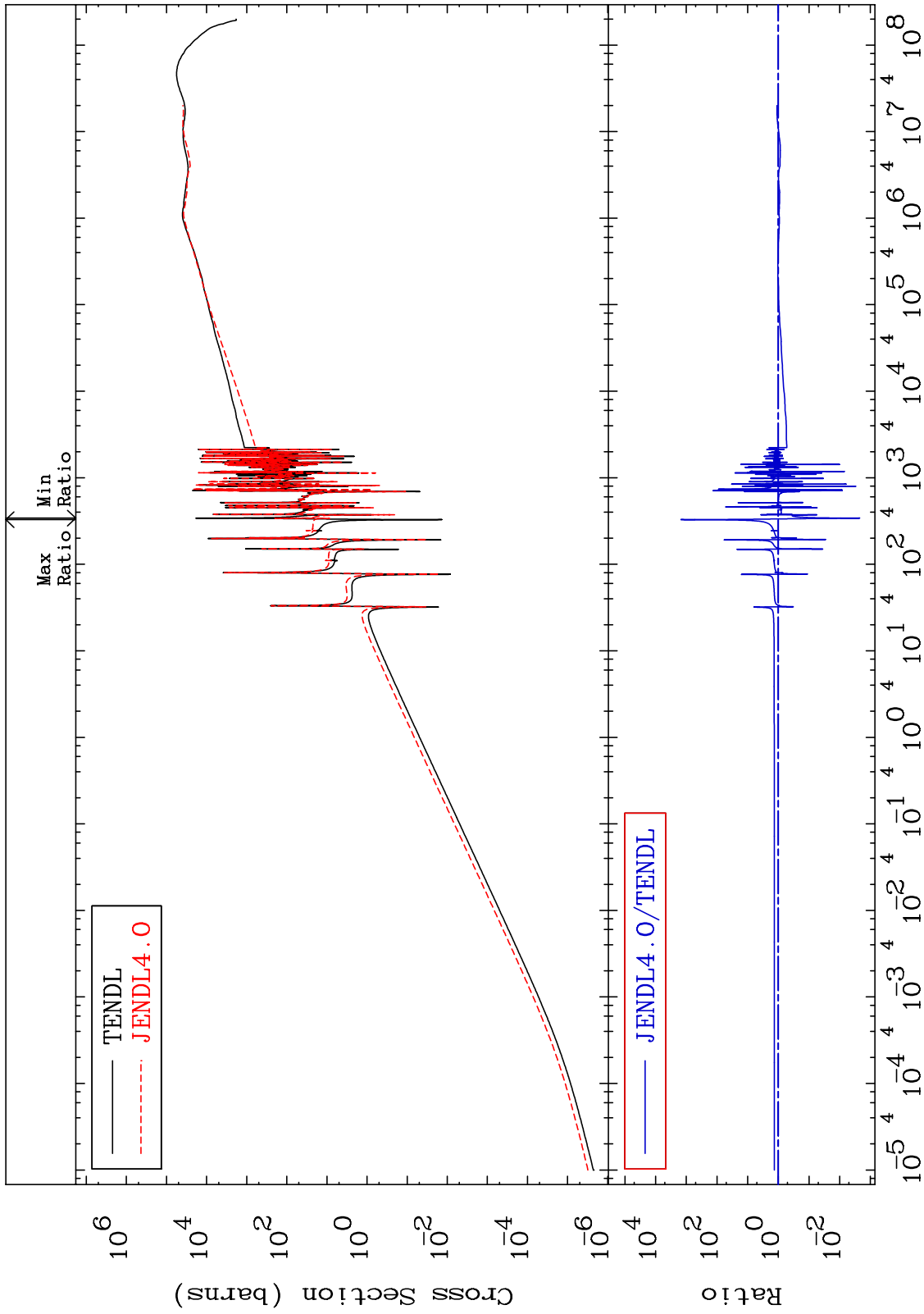
MAT 6437 Kerma total (eV-barns) 64-Gd-156
 Cross Section -99.55 To 9999. %



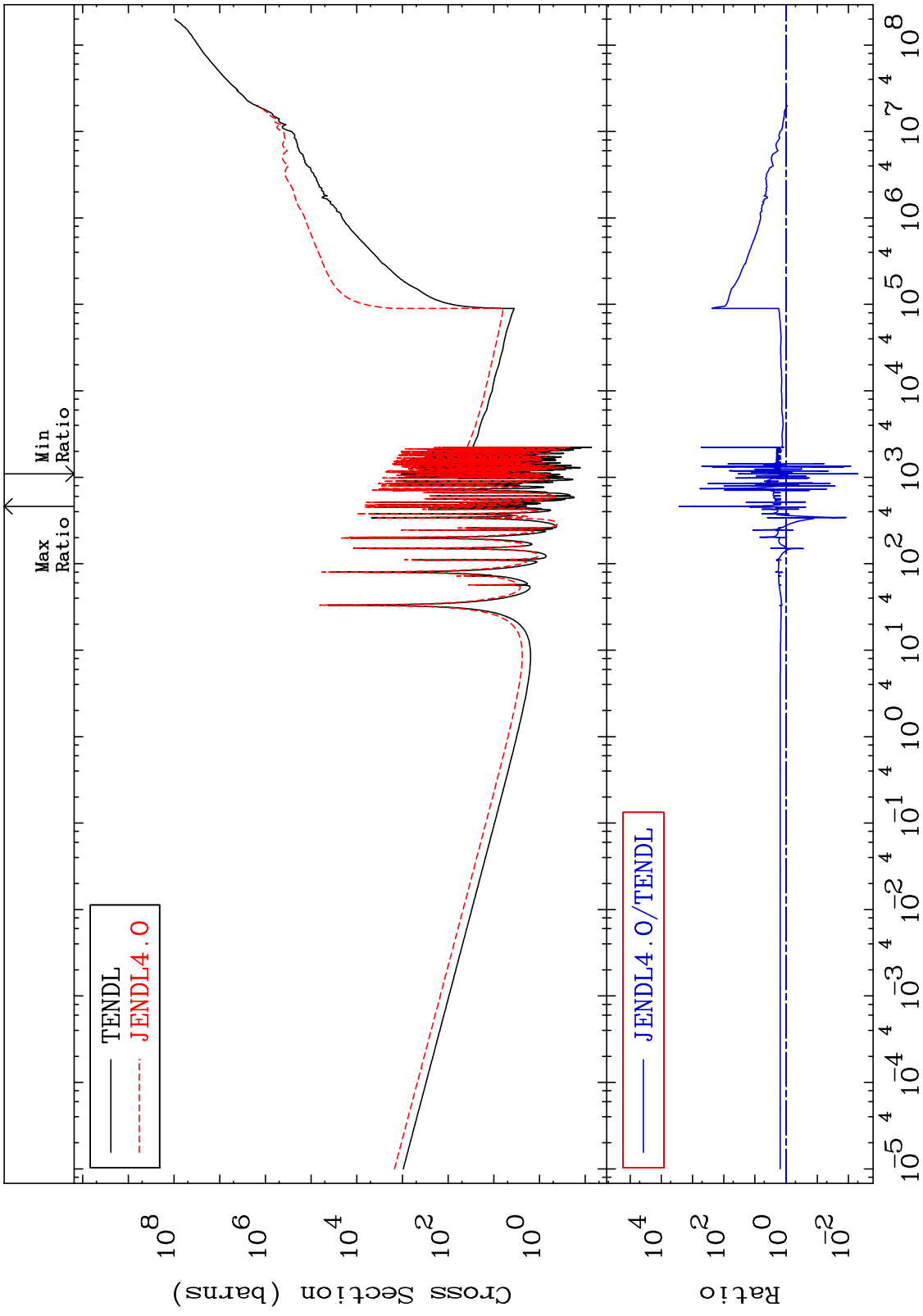
MAT 6437

Kerma elastic
Cross Section

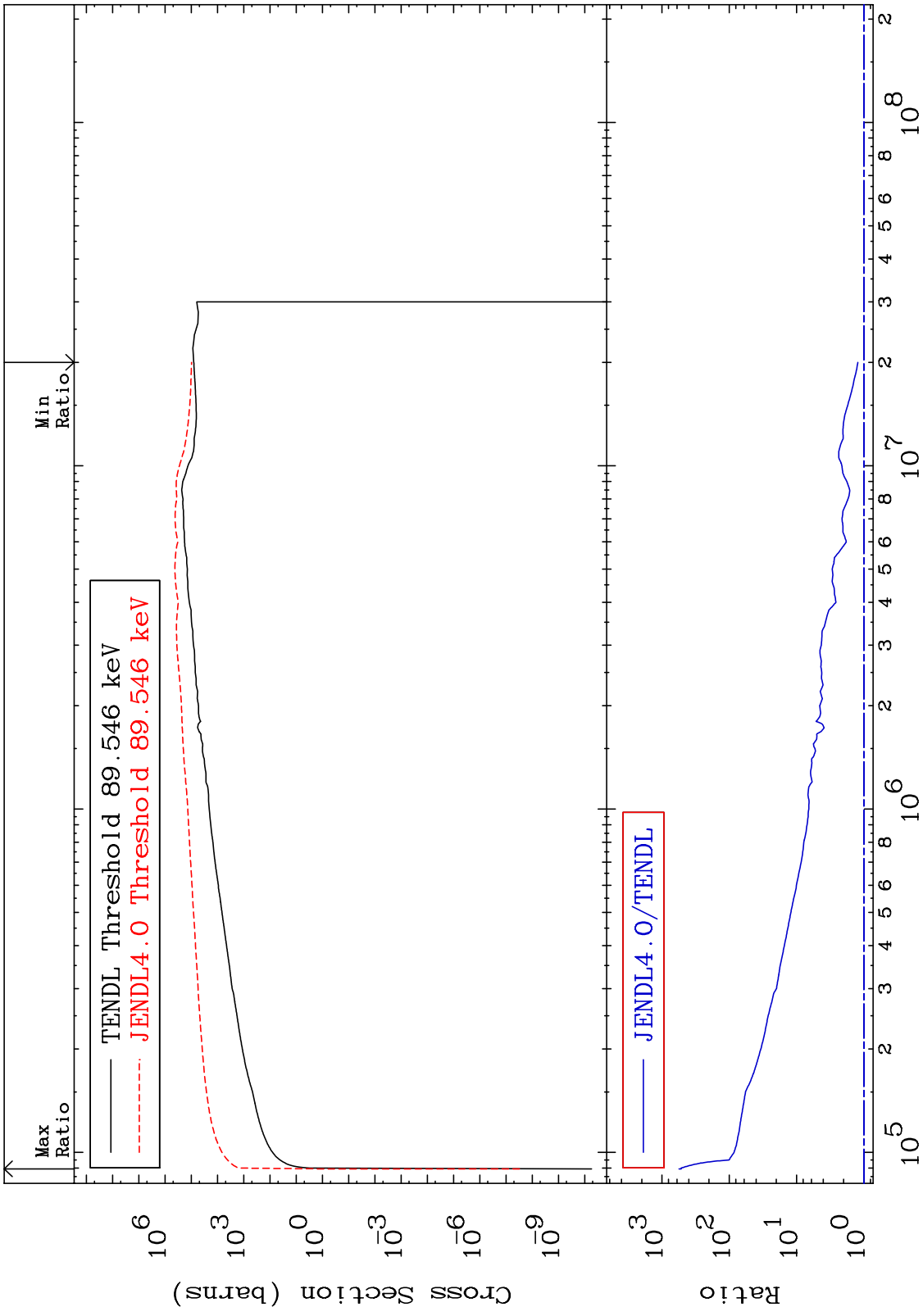
64-Gd-156
-99.78 To 9999. %



MAT 6437 Kerma non-elastic (all but mt2) 64-Gd-156
 Cross Section -99.50 To 9999. %



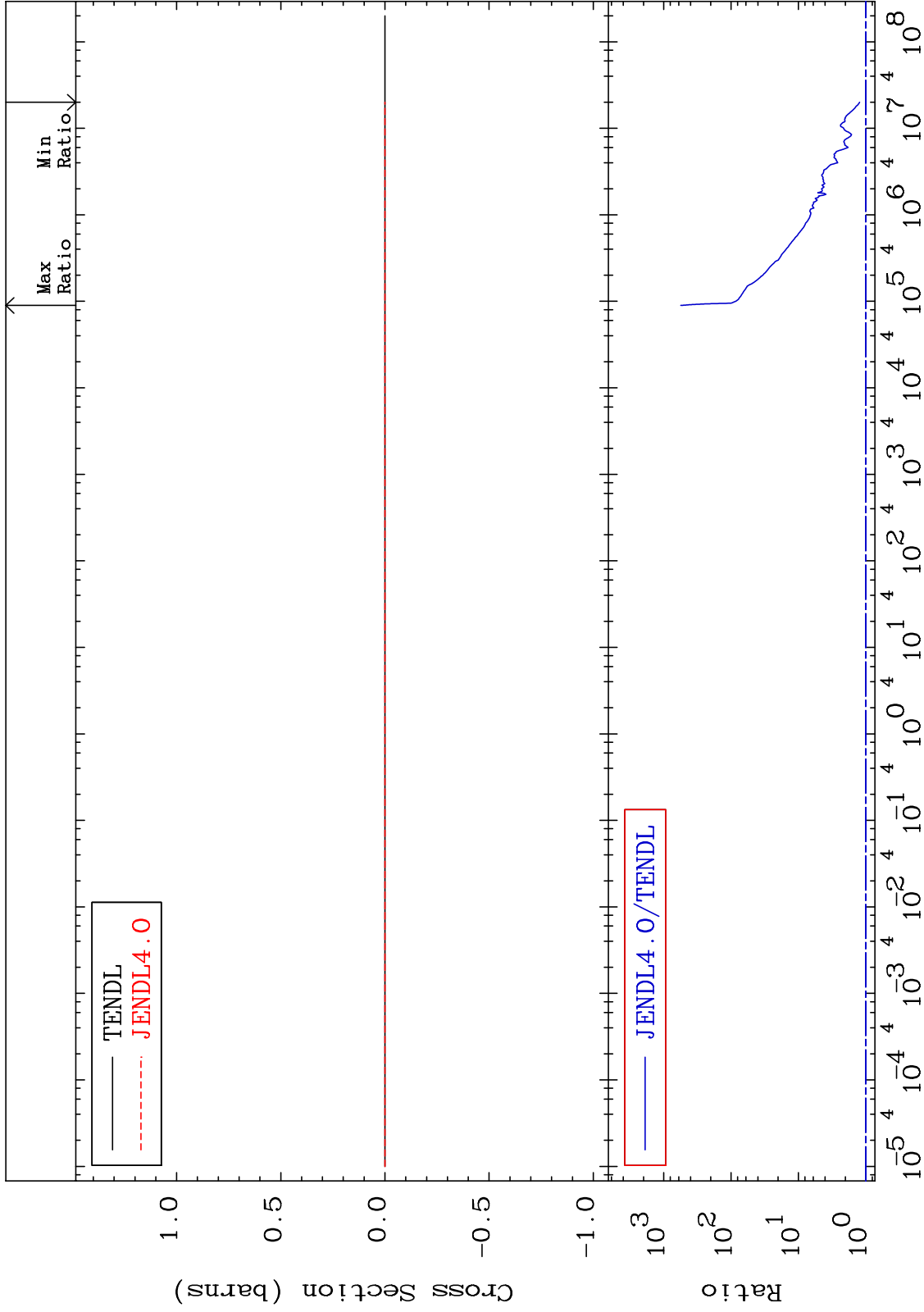
MAT 6437 Kerma inelastic (mt51-91) 64-Gd-156
 Cross Section 22.84 To 9999. %



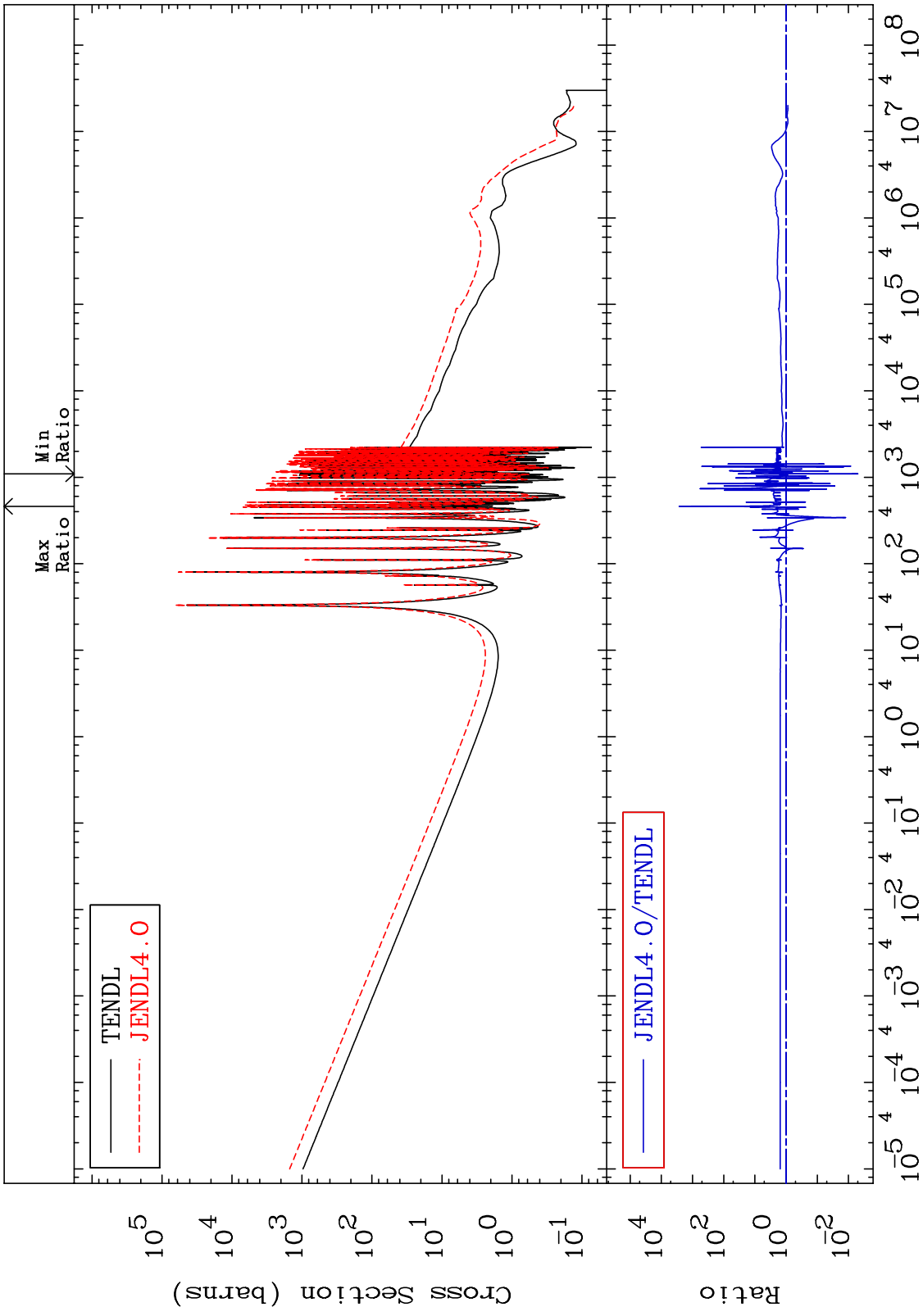
MAT 6437

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

64-Gd-156
22.84 To 9999. %



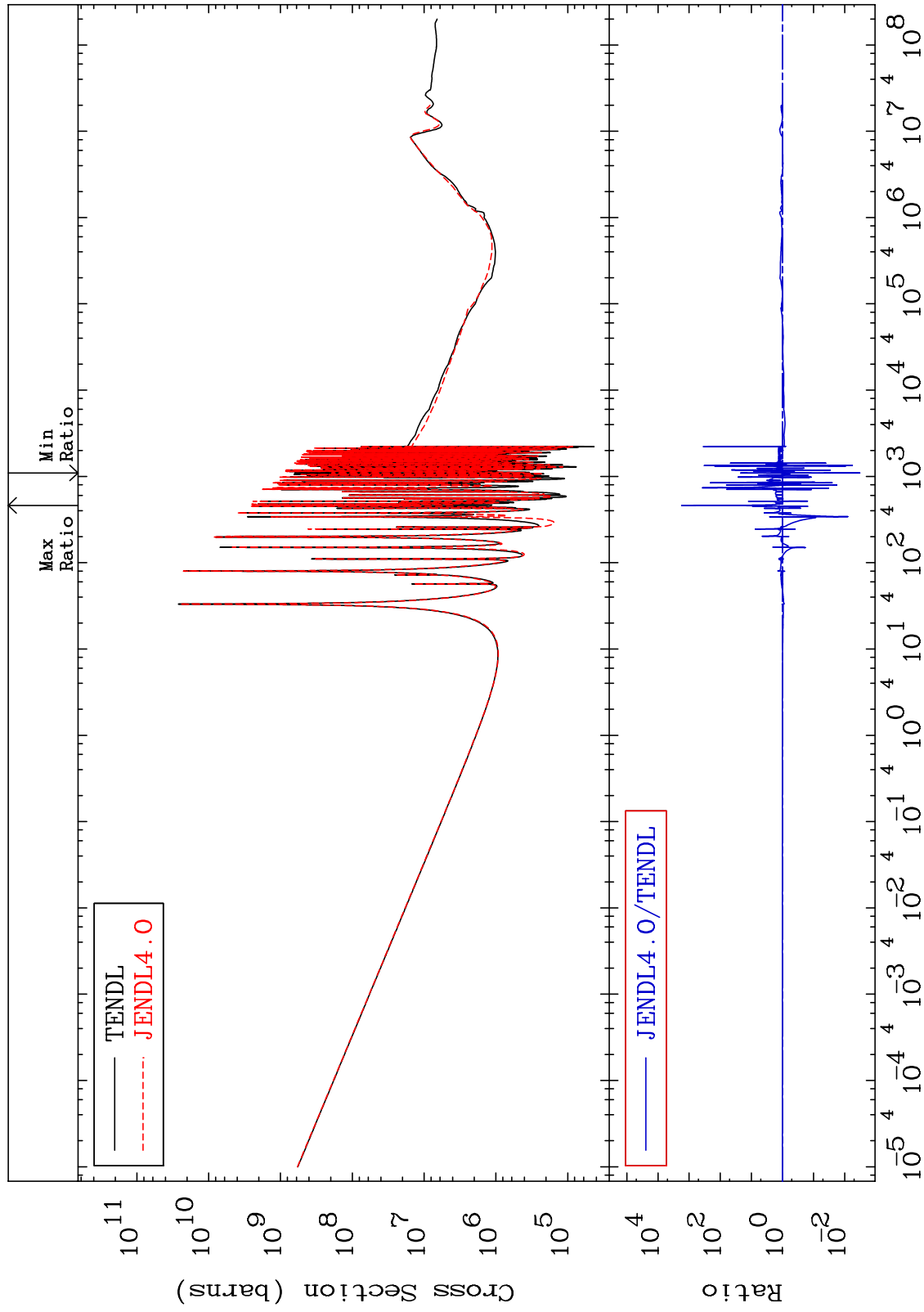
MAT 6437 Kerma capture (mt102) 64-Gd-156
 -99.50 To 9999. %



MAT 6437

Total photon (eV-barns)
Cross Section

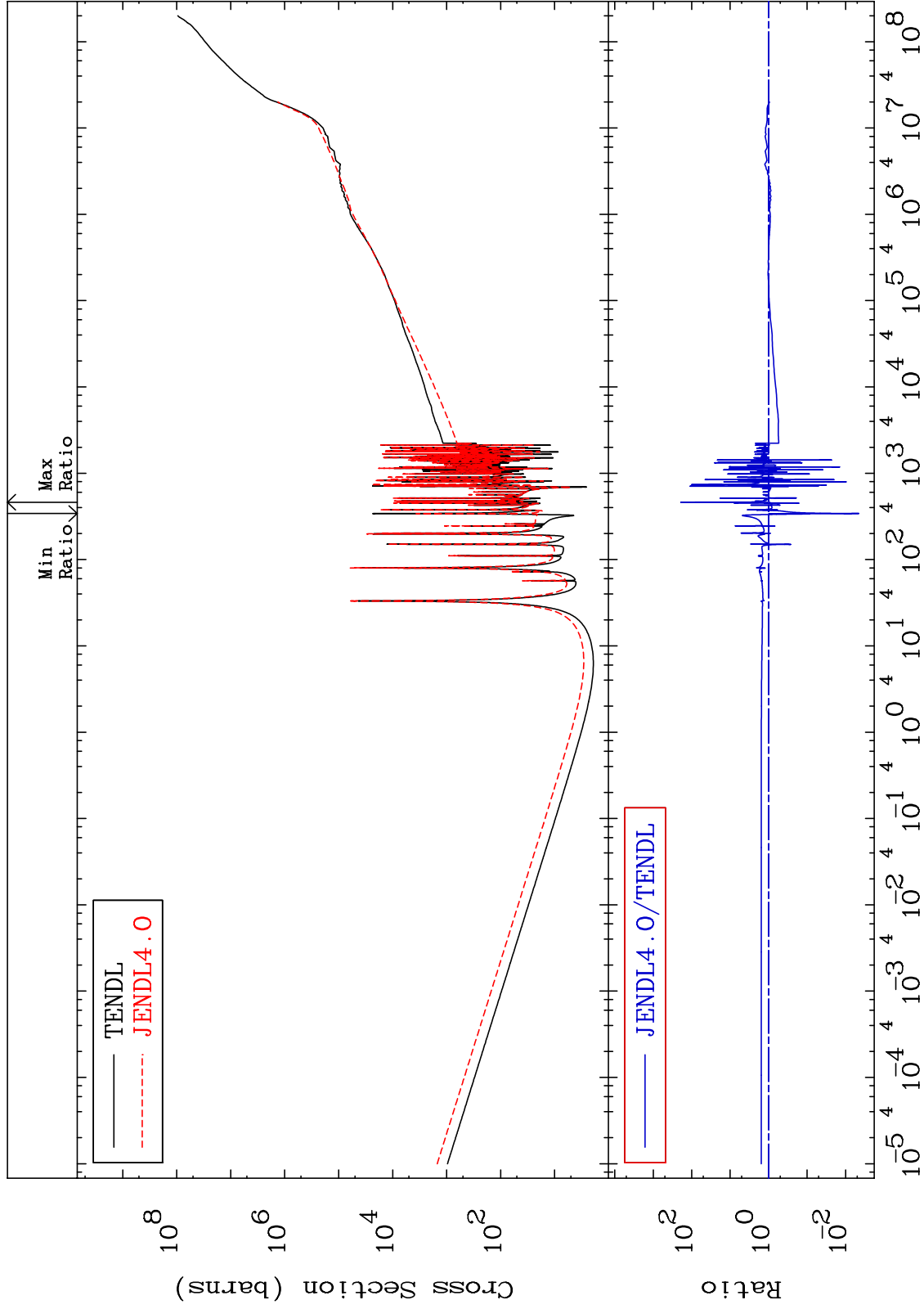
64-Gd-156
-99.67 To 9999. %



MAT 6437

Total kinematic kerma (high limit)
Cross Section

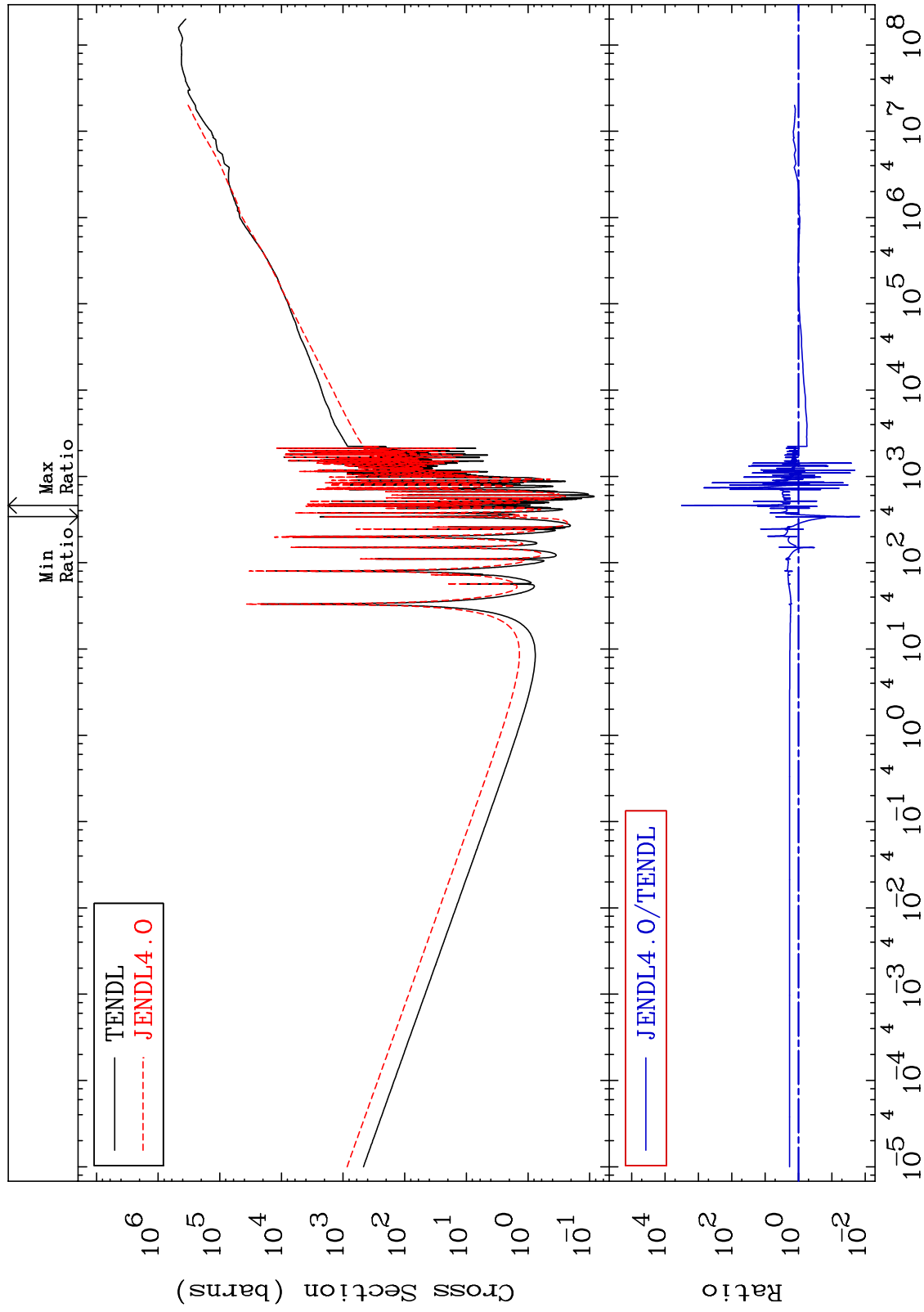
64-Gd-156
-99.55 To 9999. %



MAT 6437

Dpa total (eV-barns)
Cross Section

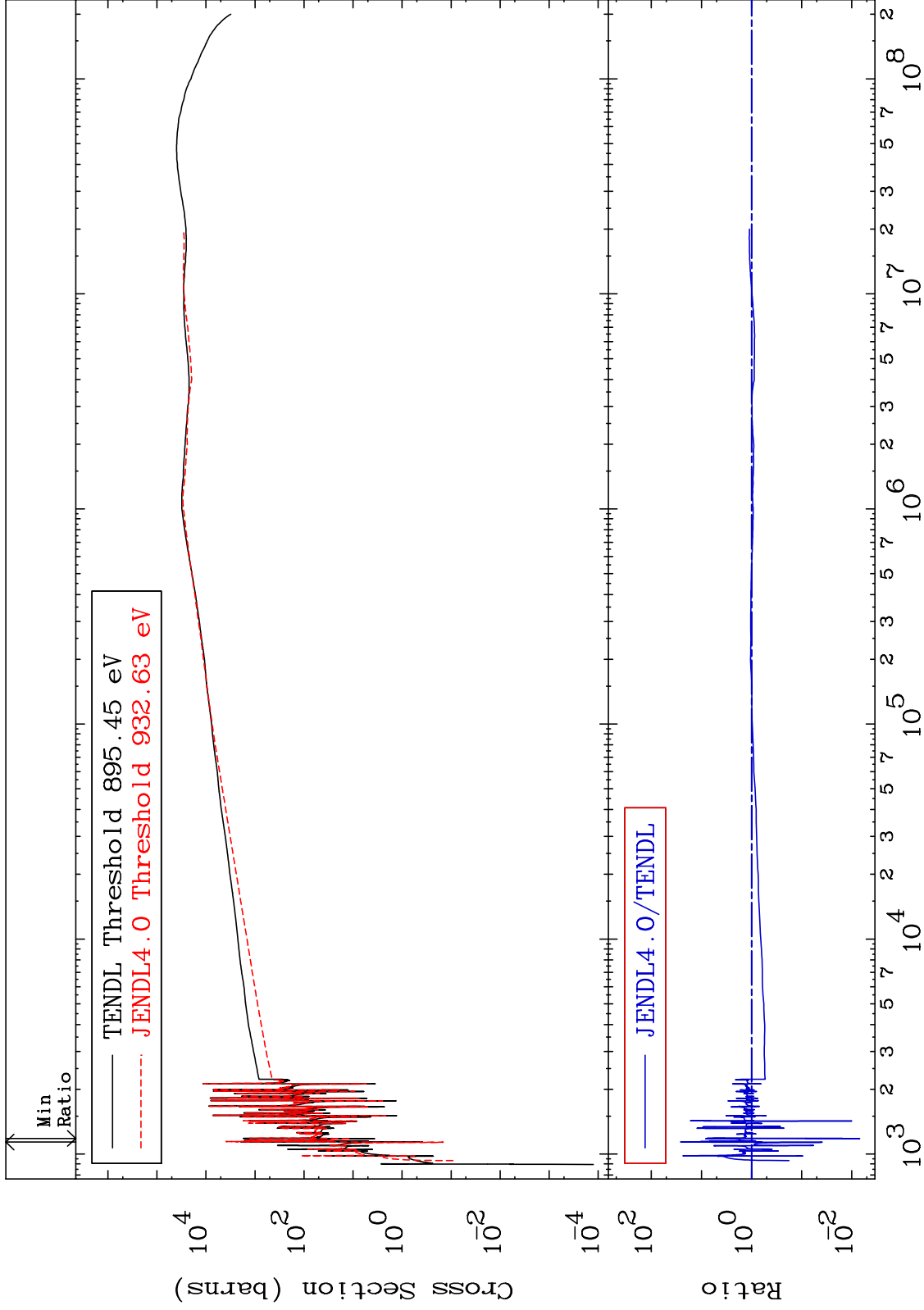
64-Gd-156
-98.56 To 9999. %



MAT 6437

Dpa elastic (mt2)
Cross Section

64-Gd-156
-99.31 To 2480. %

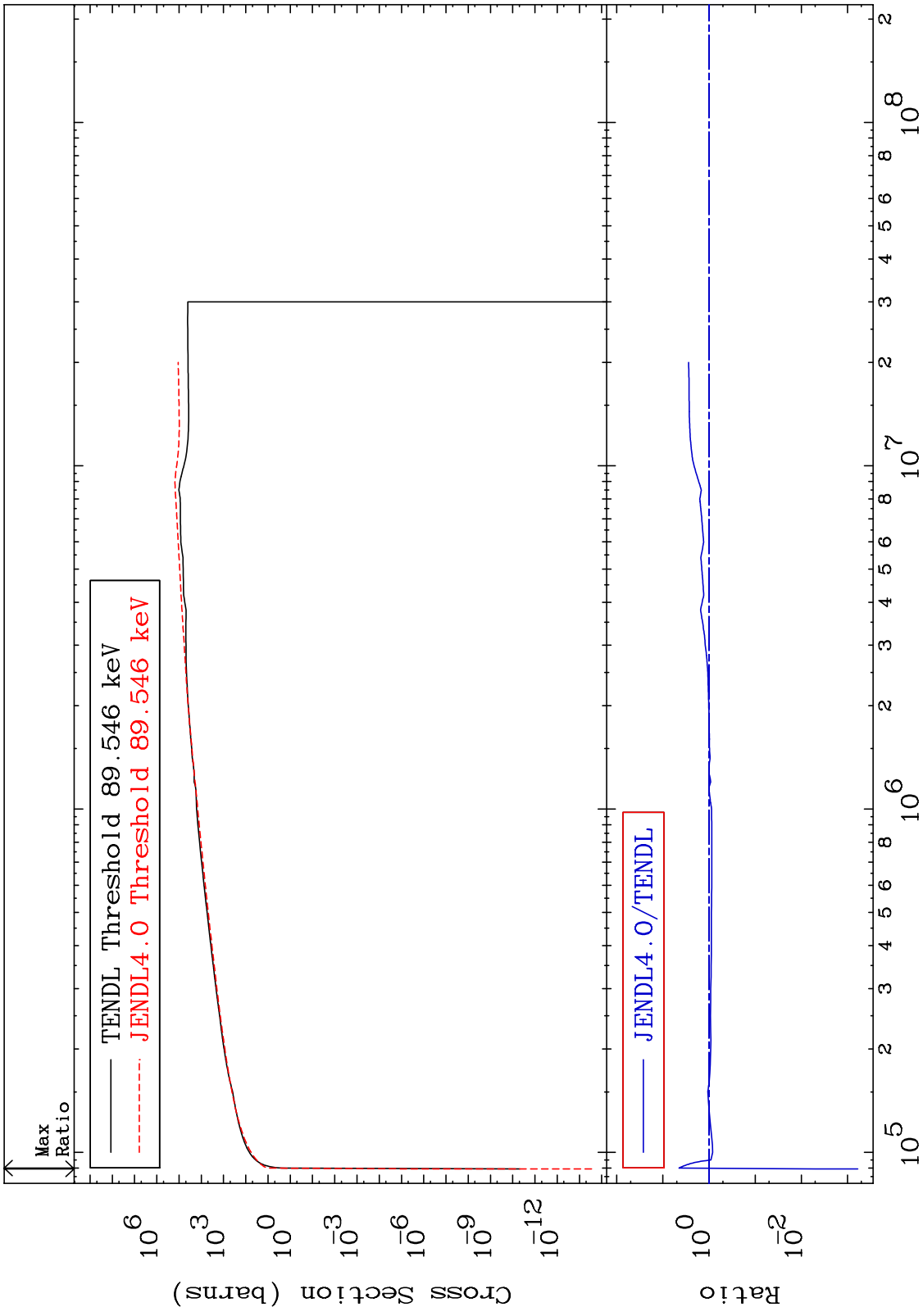


60

64-Gd-156

64-Gd-156

MAT 6437 Dpa inelastic (mt51-91) 64-Gd-156
Cross Section -99.94 To 346.7 %



61 Incident Energy (eV) 64-Gd-156

MAT 6437 Dpa disappearance (mt102 -120) 64-Gd-156
 Cross Section -99.41 To 9999. %

