

Program Complot
(Version 2021-1)

by

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(Present Contact Information)

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U.S.A.

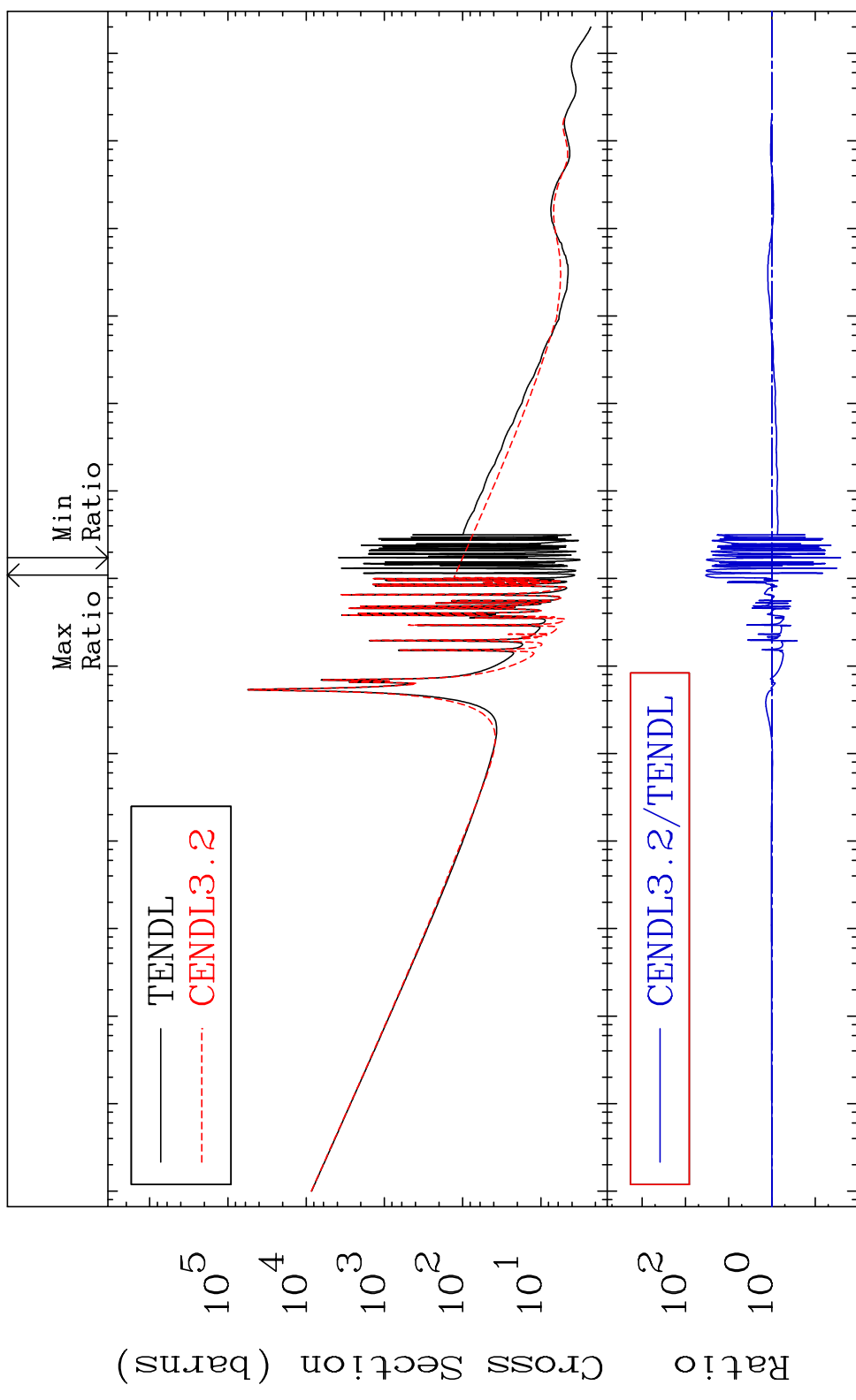
Tele: 925-443-1911

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

Press Mouse Button to Start

MAT 6149

Total Cross Section -97.40 To 3284. %
61-Pm-147



10⁵ 10⁴ 10³ 10² 10¹ 10⁰ 10⁻¹ 10⁻² 10⁻³ 10⁻⁴ 10⁻⁵ 10⁸ 10⁷ 10⁶ 10⁵ 10⁴ 10³ 10² 10¹ 10⁰ 10⁻¹ 10⁻² 10⁻³ 10⁻⁴ 10⁻⁵

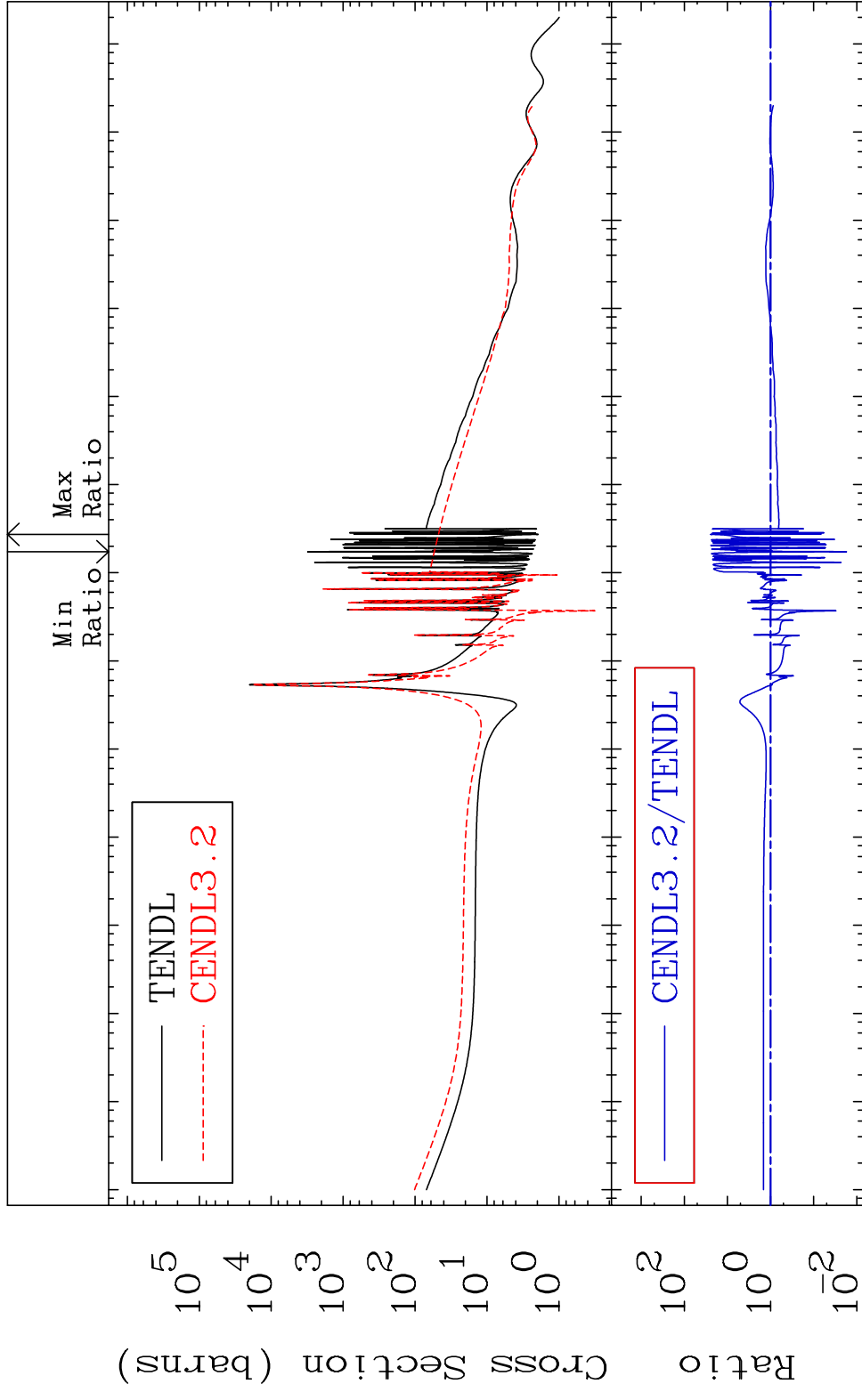
Ratio Incident Energy (eV) 61-Pm-147

MAT 6149

Elastic

61-Pm-147

Cross Section -98.26 To 2337. %



2

Incident Energy (eV)

61-Pm-147

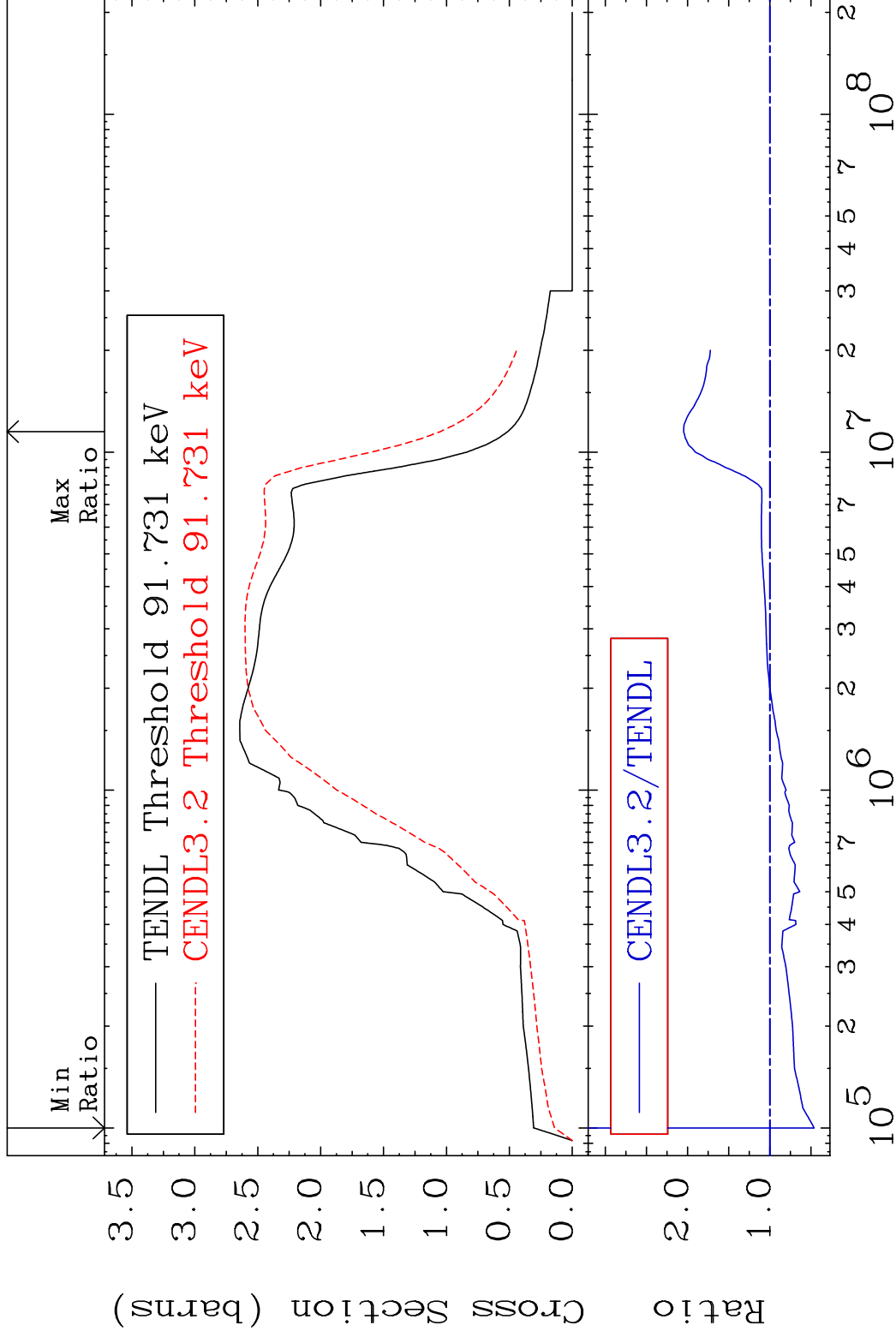
MAT 6149

Inelastic

61-Pm-147

Cross Section

-53.83 To 104.7 %



3

Incident Energy (eV)

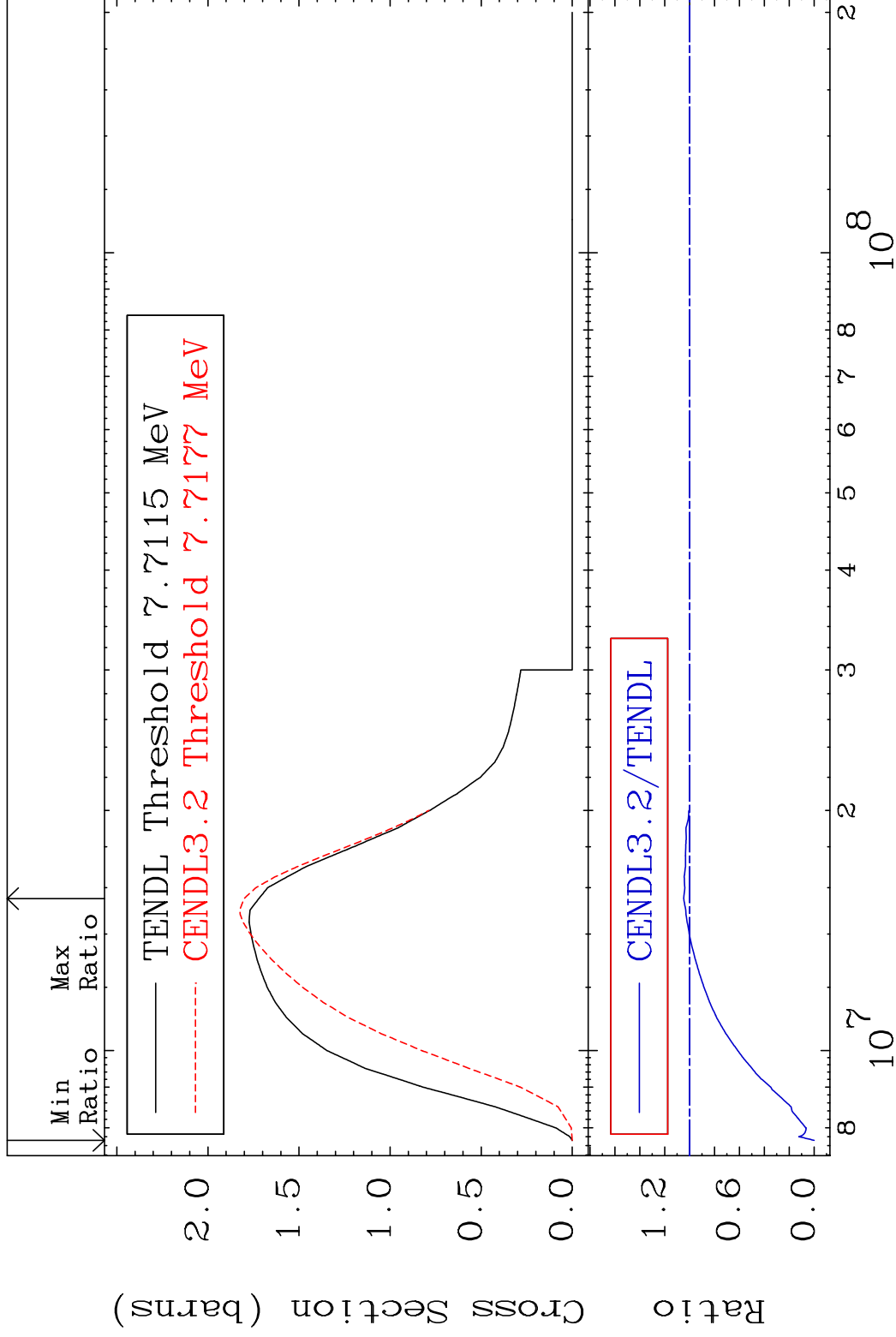
61-Pm-147

MAT 6149

(n,2n)

61-Pm-147

Cross Section -100.0 To 4.755 %



4

Incident Energy (eV)

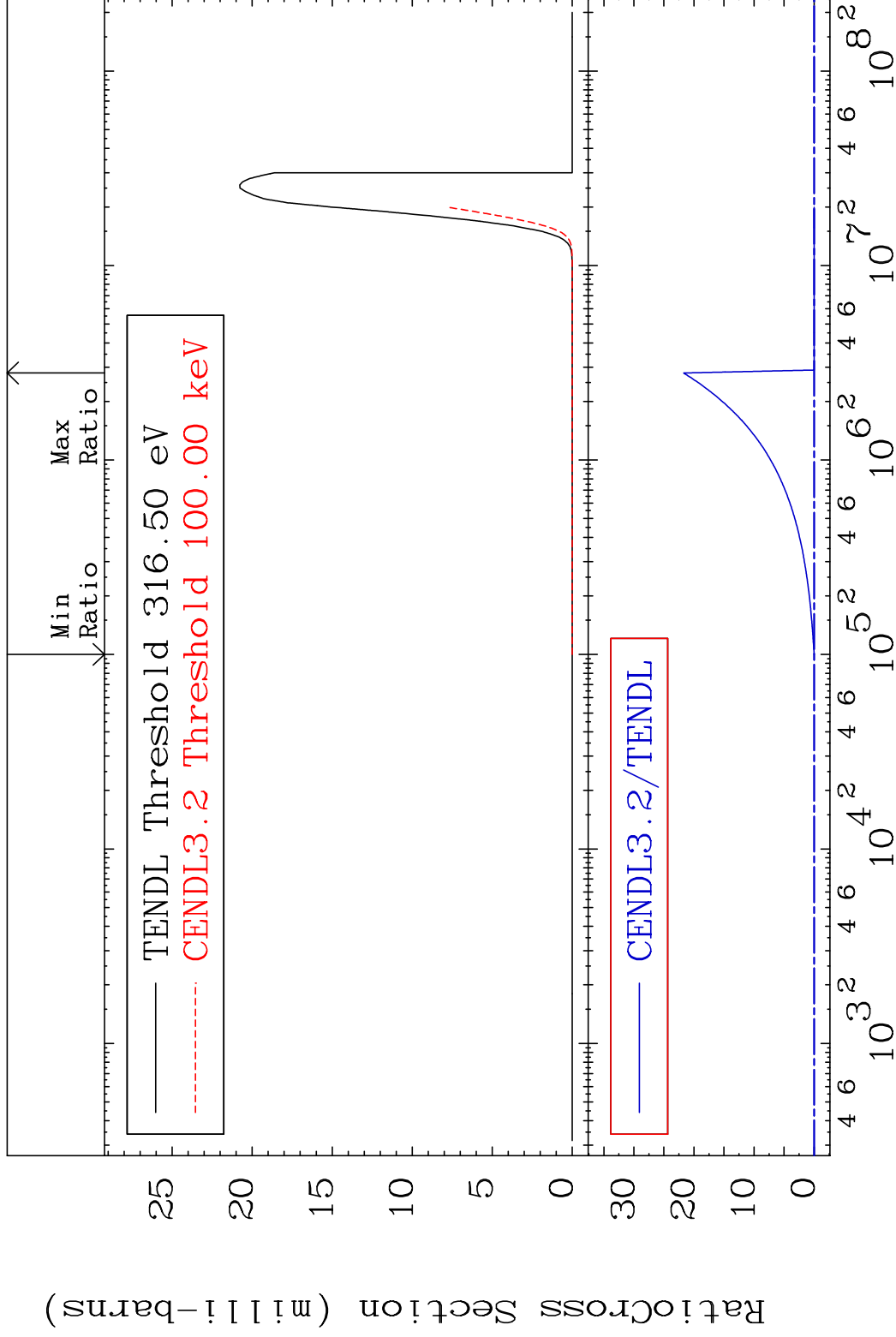
61-Pm-147

MAT 6149

(n, n') α

61-Pm-147

Cross Section -100.0 To 9999. %



6

Incident Energy (eV)

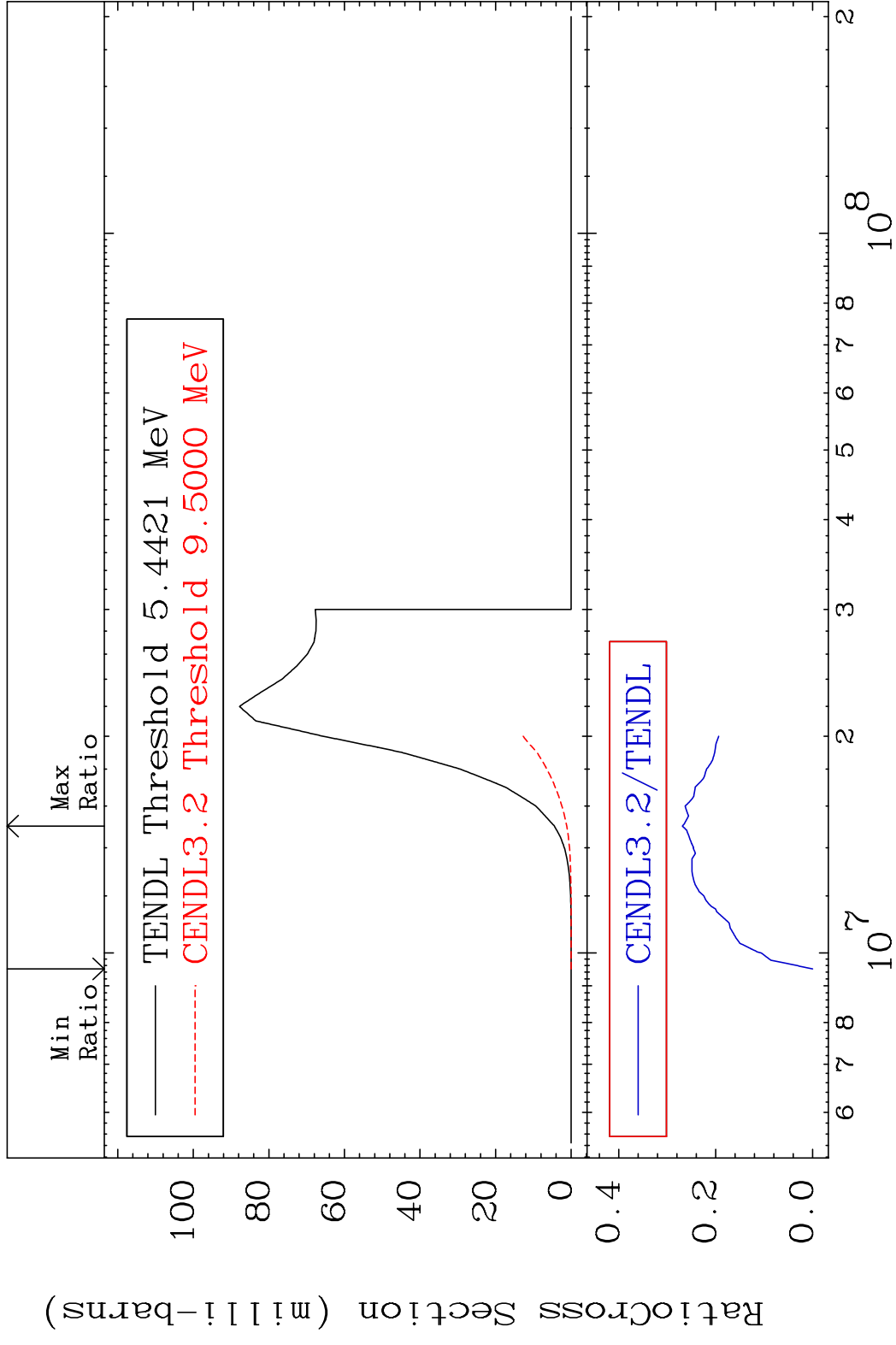
61-Pm-147

MAT 6149

(n, n') p

61-Pm-147

Cross Section -100.0 To -73.12%

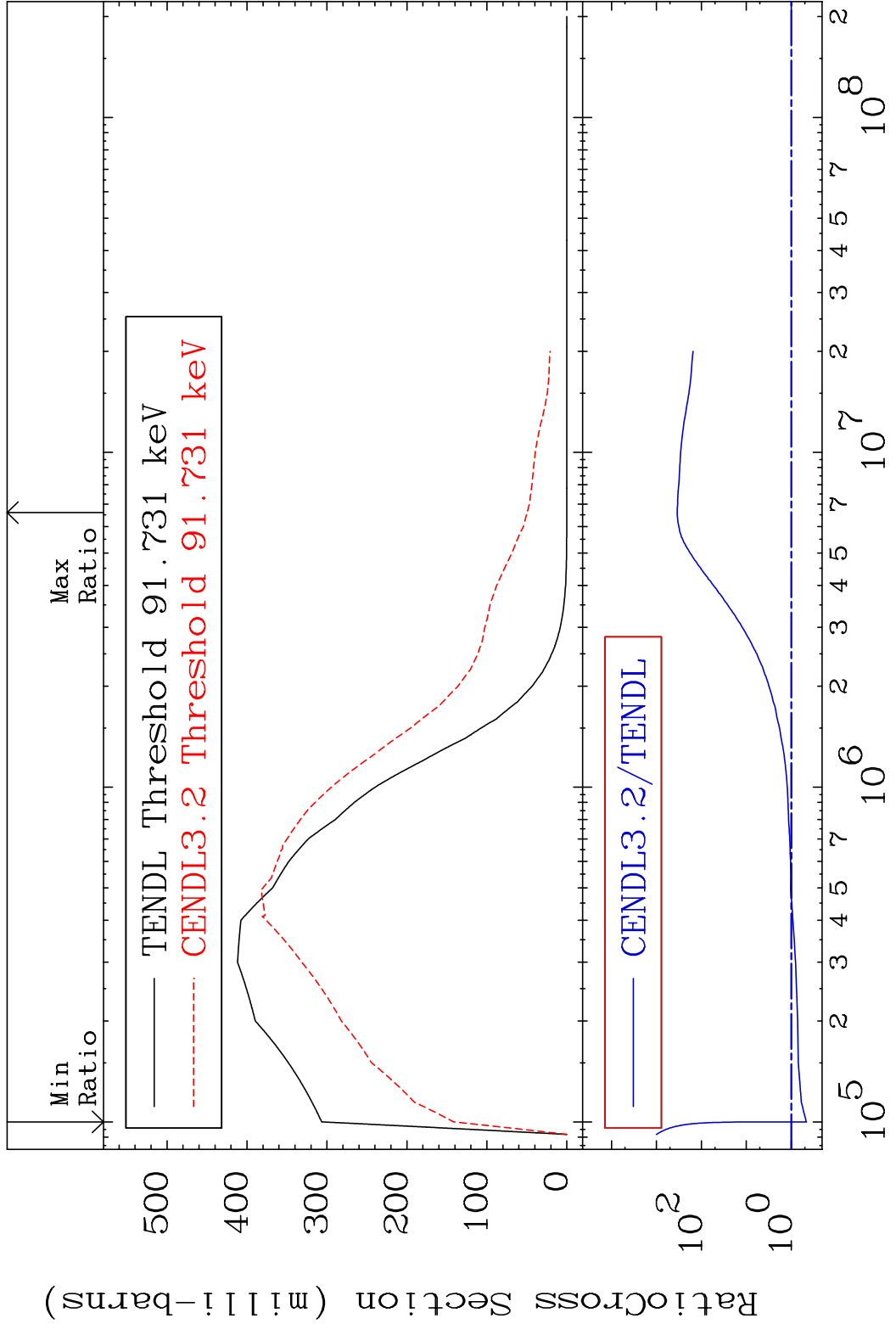


7

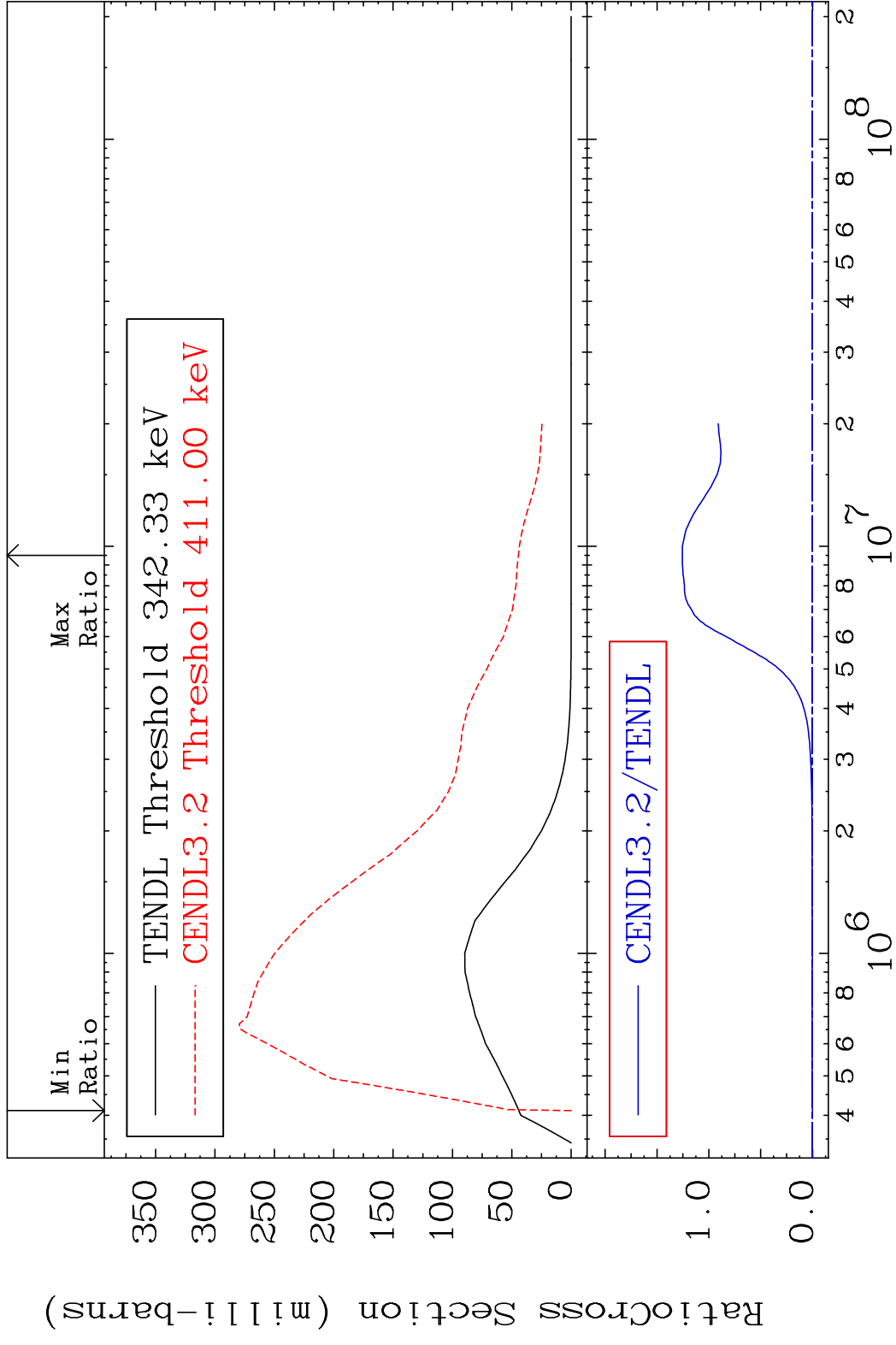
Incident Energy (eV)

61-Pm-147

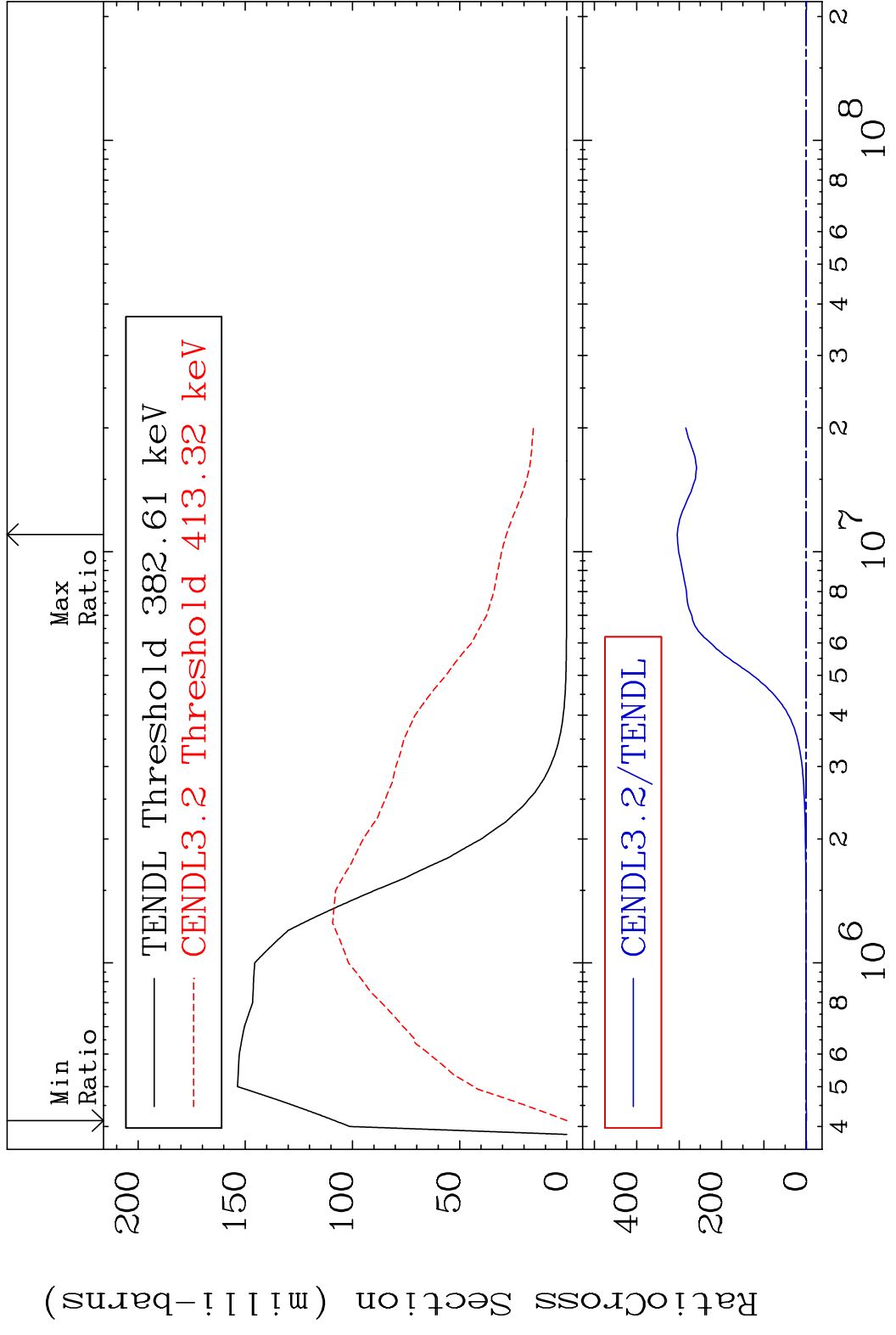
MAT 6149 MT= 51 (n, n') Level 61-Pm-147
 Cross Section -53.83 To 9999. %



MAT 6149 MT= 52 (n, n') Level 61-Pm-147
 Cross Section -100.0 To 9999. %

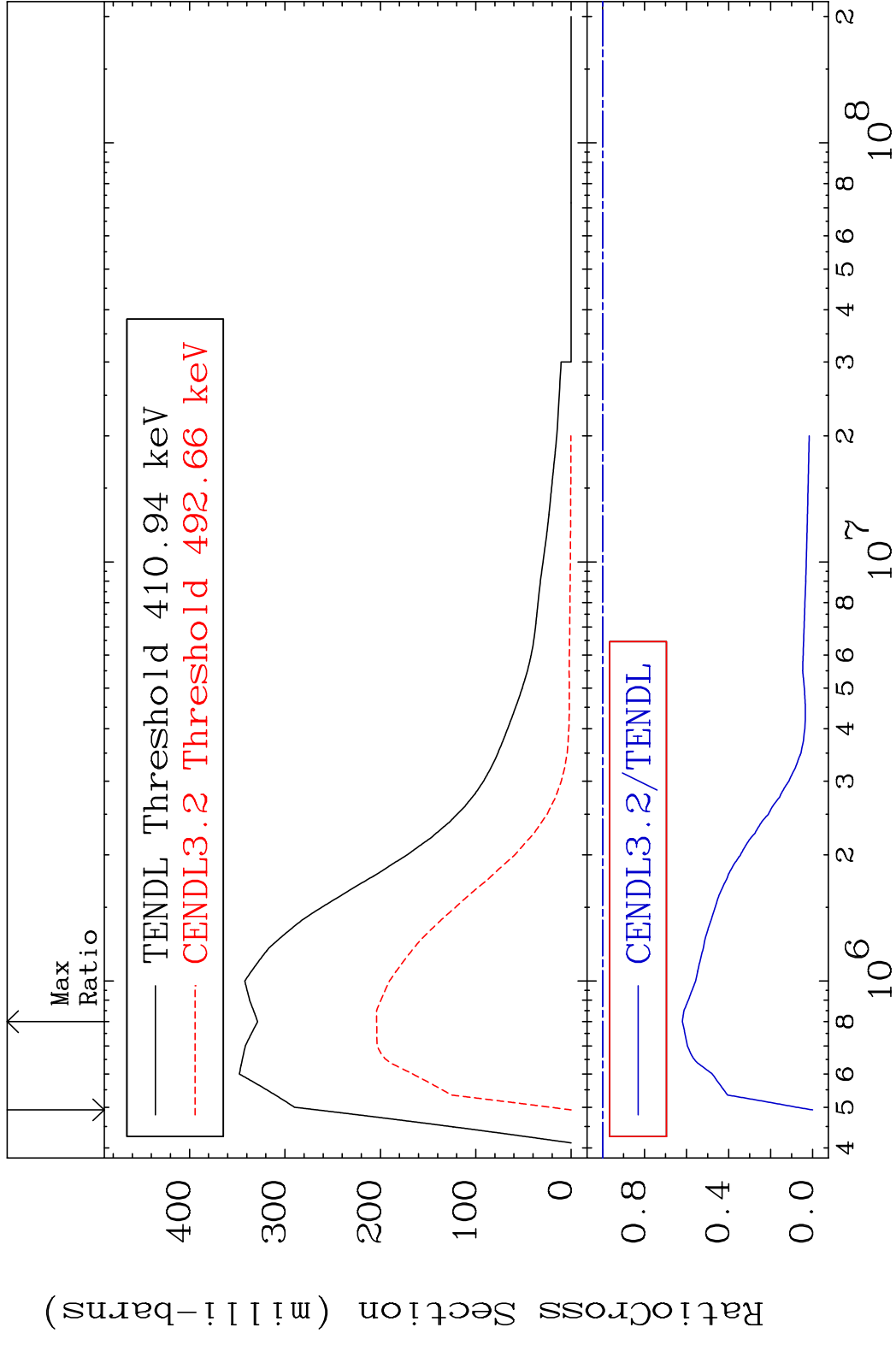


MAT 6149 MT= 53 (n, n') Level 61-Pm-147
 Cross Section -100.0 To 9999. %

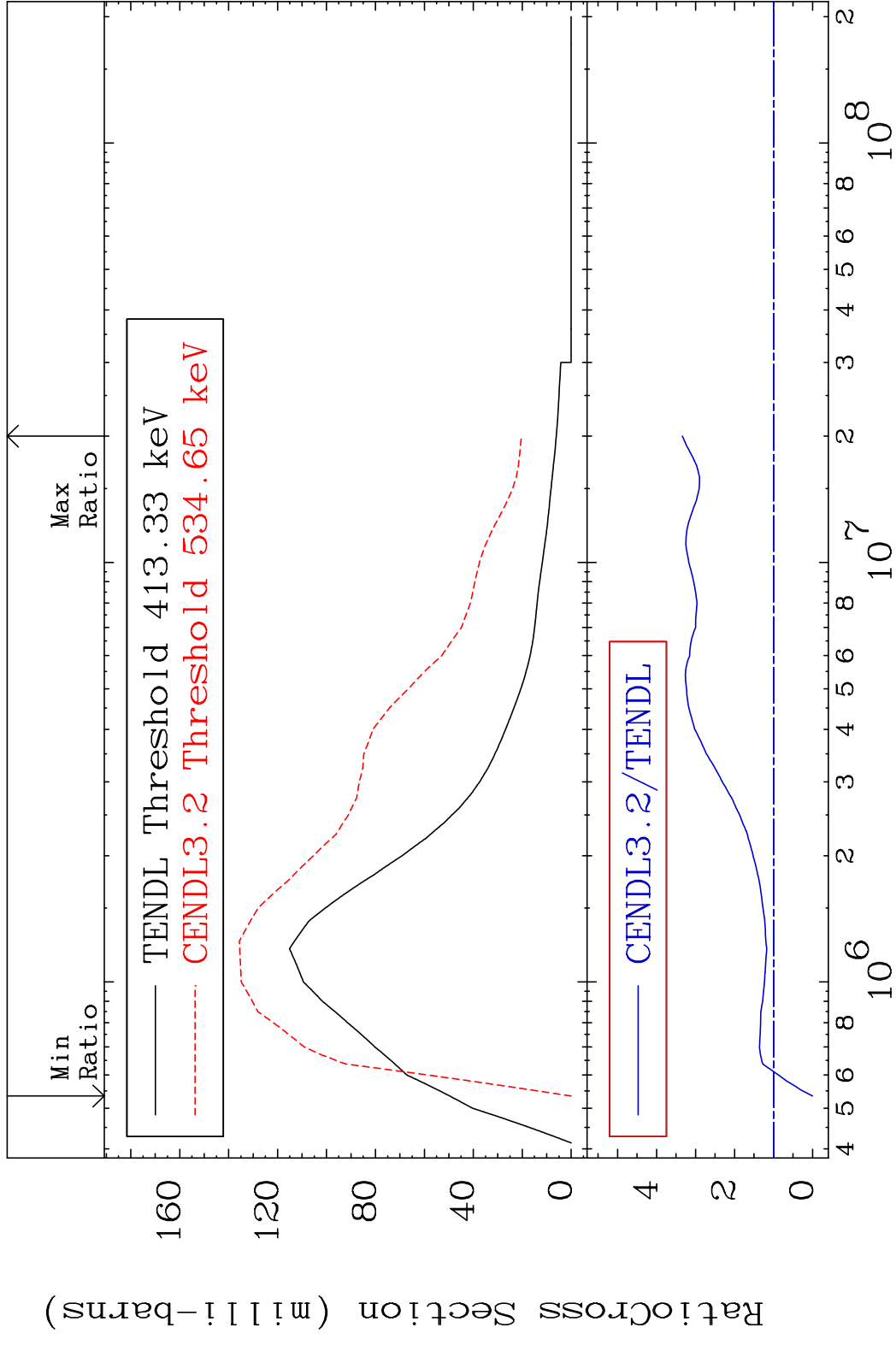


10 Incident Energy (eV) 61-Pm-147

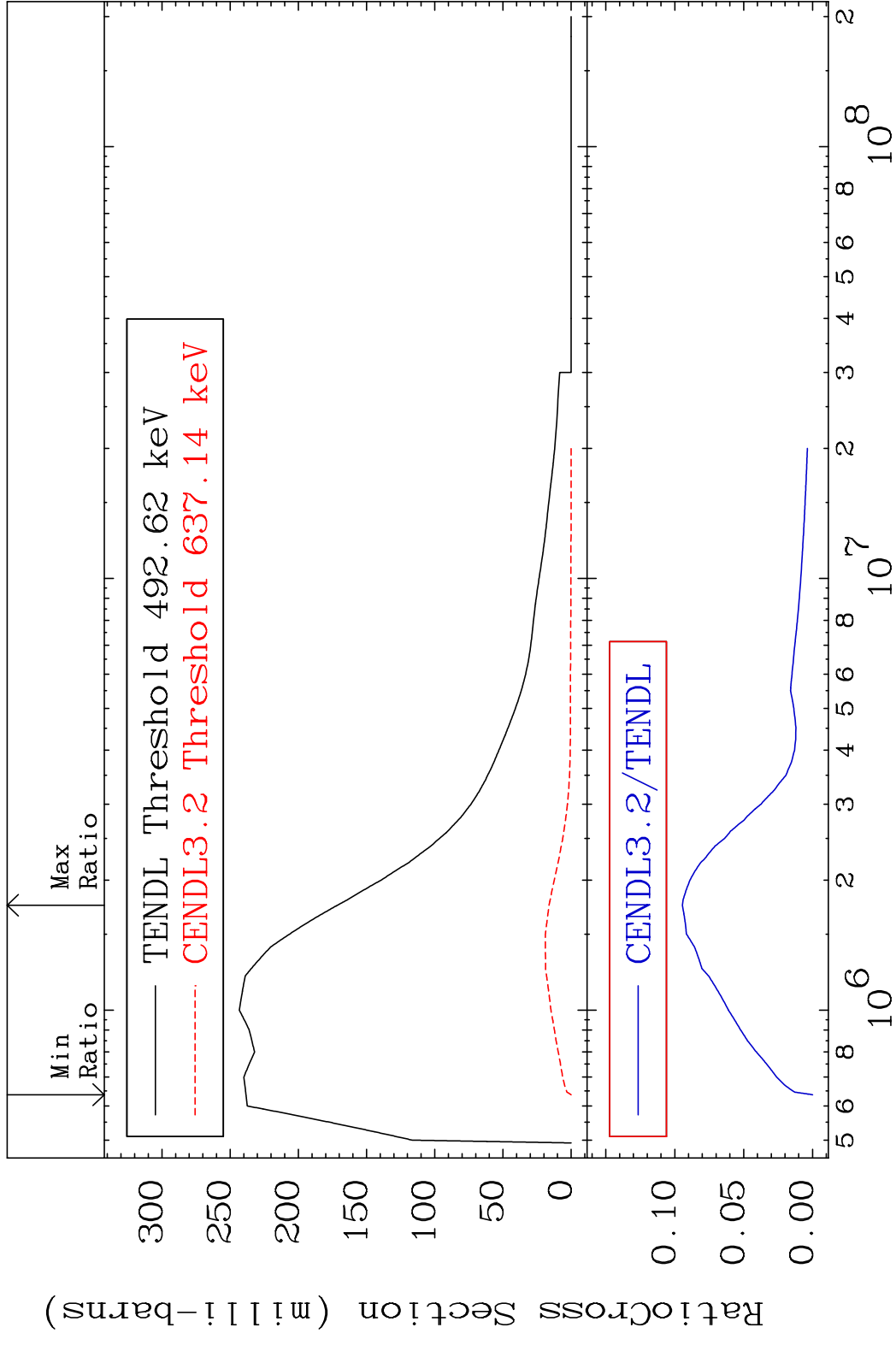
MAT 6149 MT= 54 (n, n') Level 61-Pm-147
 Cross Section -100.0 To -37.98%



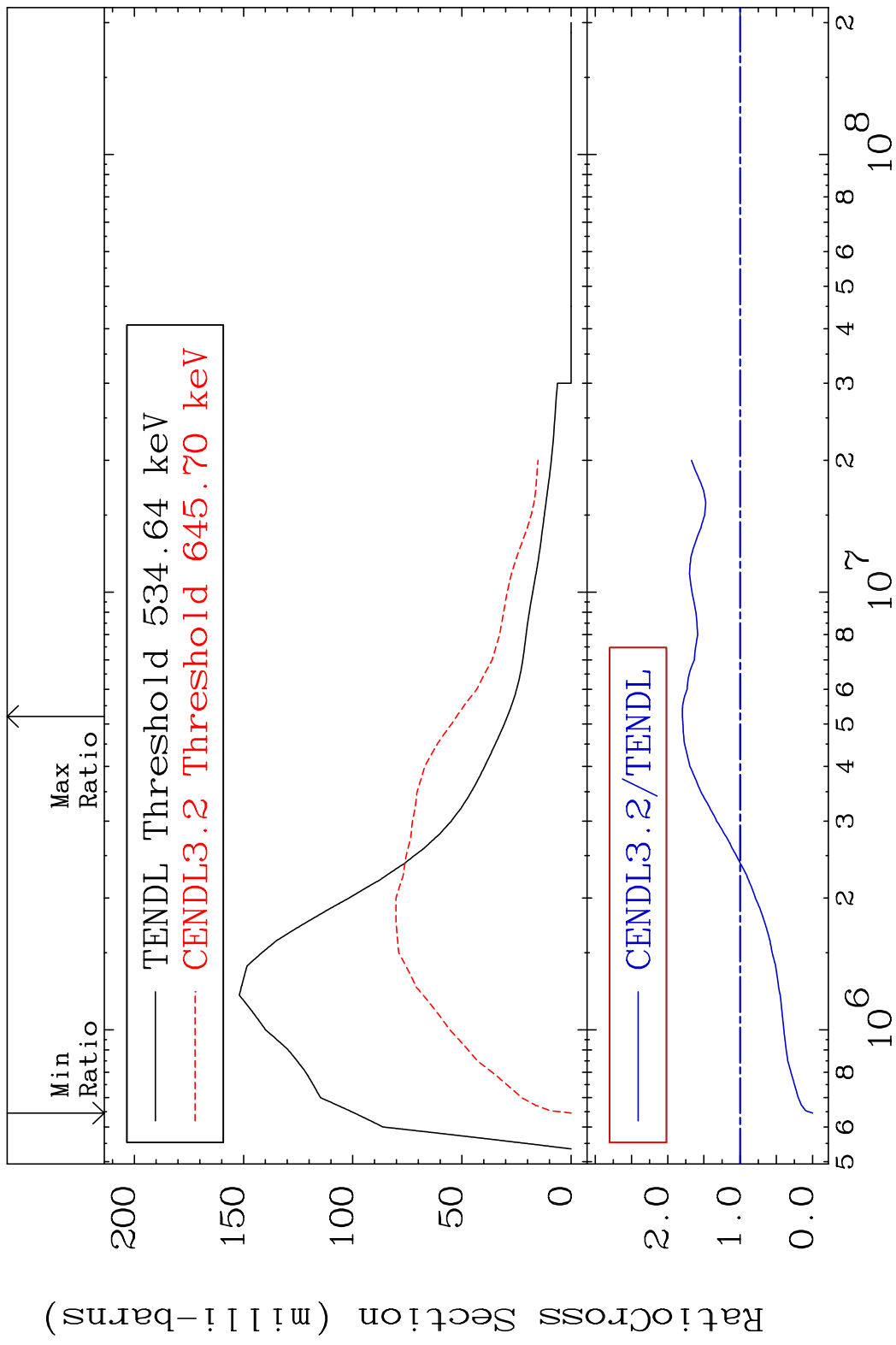
MAT 6149 MT= 55 (n, n') Level 61-Pm-147
 Cross Section -100.0 To 233.9 %



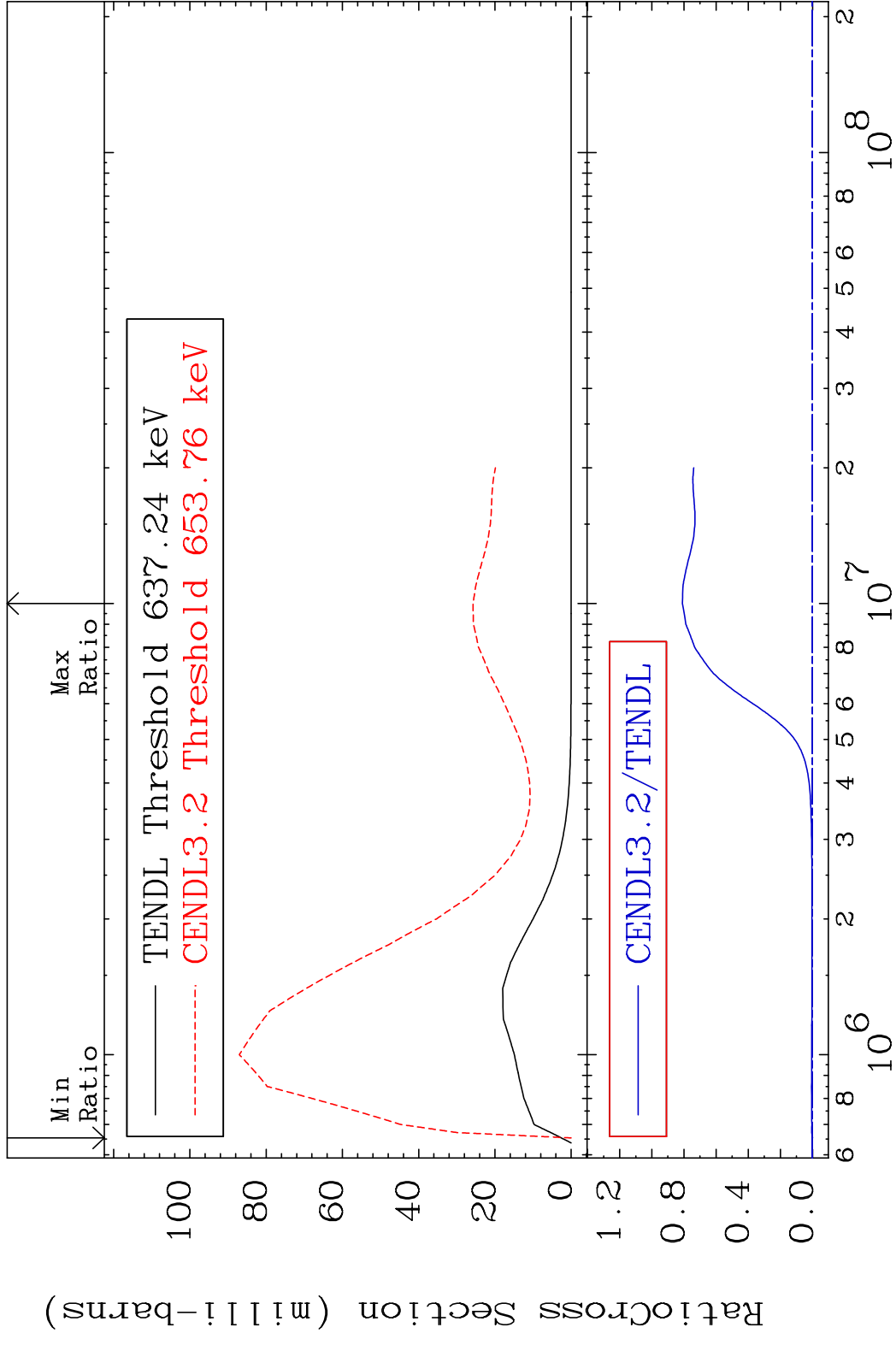
MAT 6149 MT= 56 (n, n') Level 61-Pm-147
 Cross Section -100.0 To -90.55%



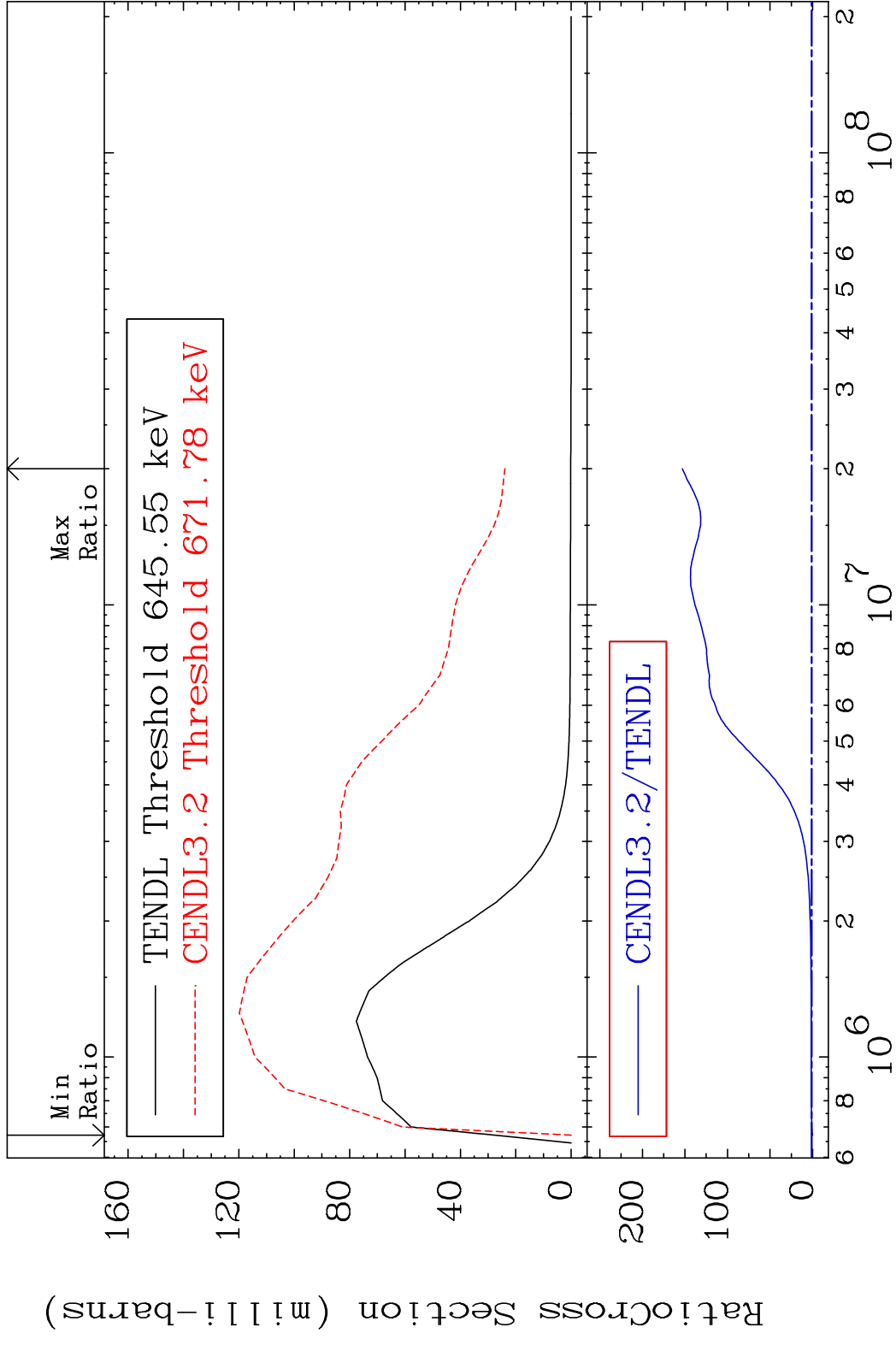
MAT 6149 MT= 57 (n, n') Level 61-Pm-147
 Cross Section -100.0 To 79.78 %



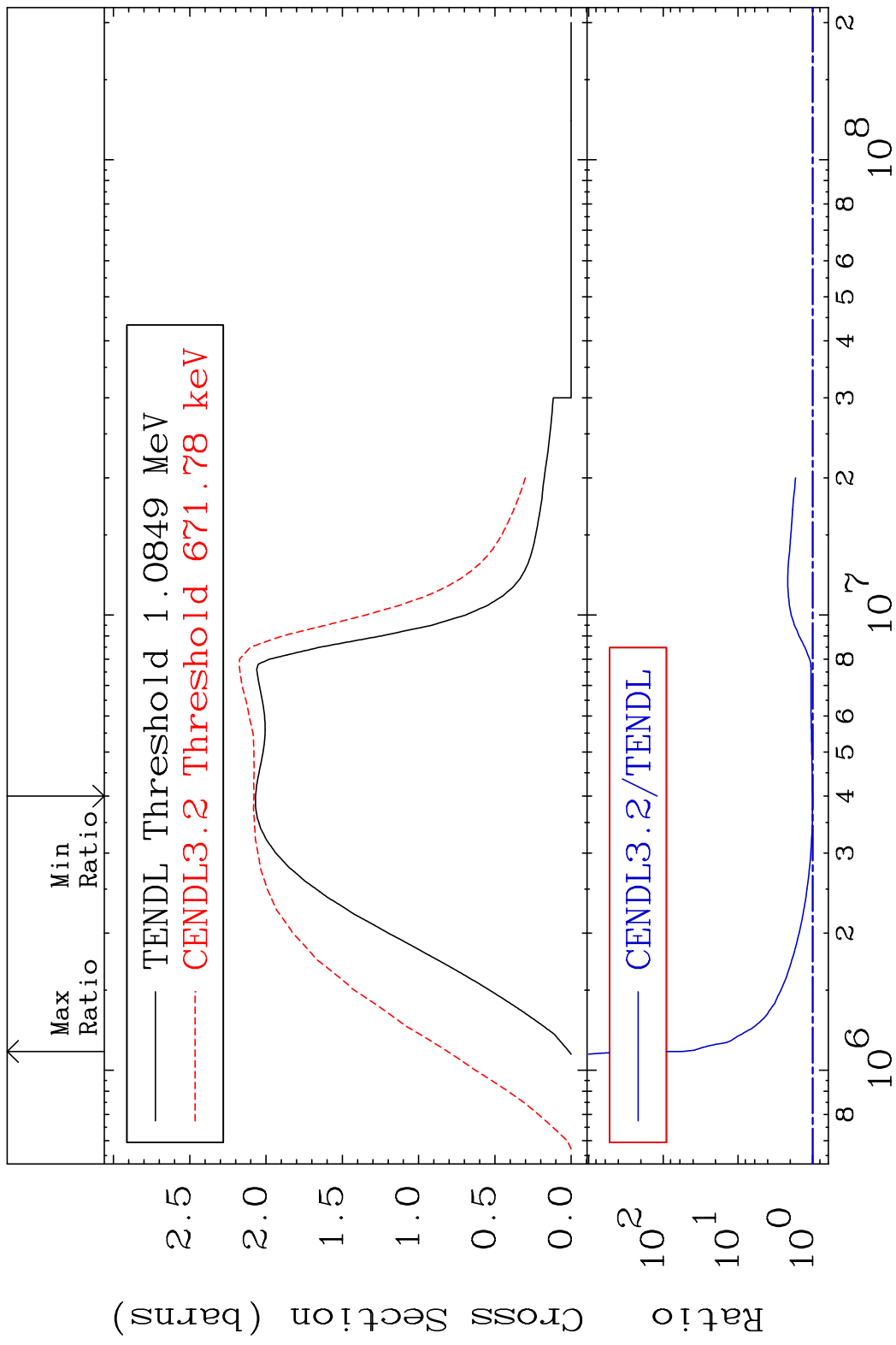
MAT 6149 MT= 58 (n, n') Level 61-Pm-147
 Cross Section -100.0 To 9999. %



MAT 6149 MT= 59 (n, n') Level 61-Pm-147
 Cross Section -100.0 To 9999. %



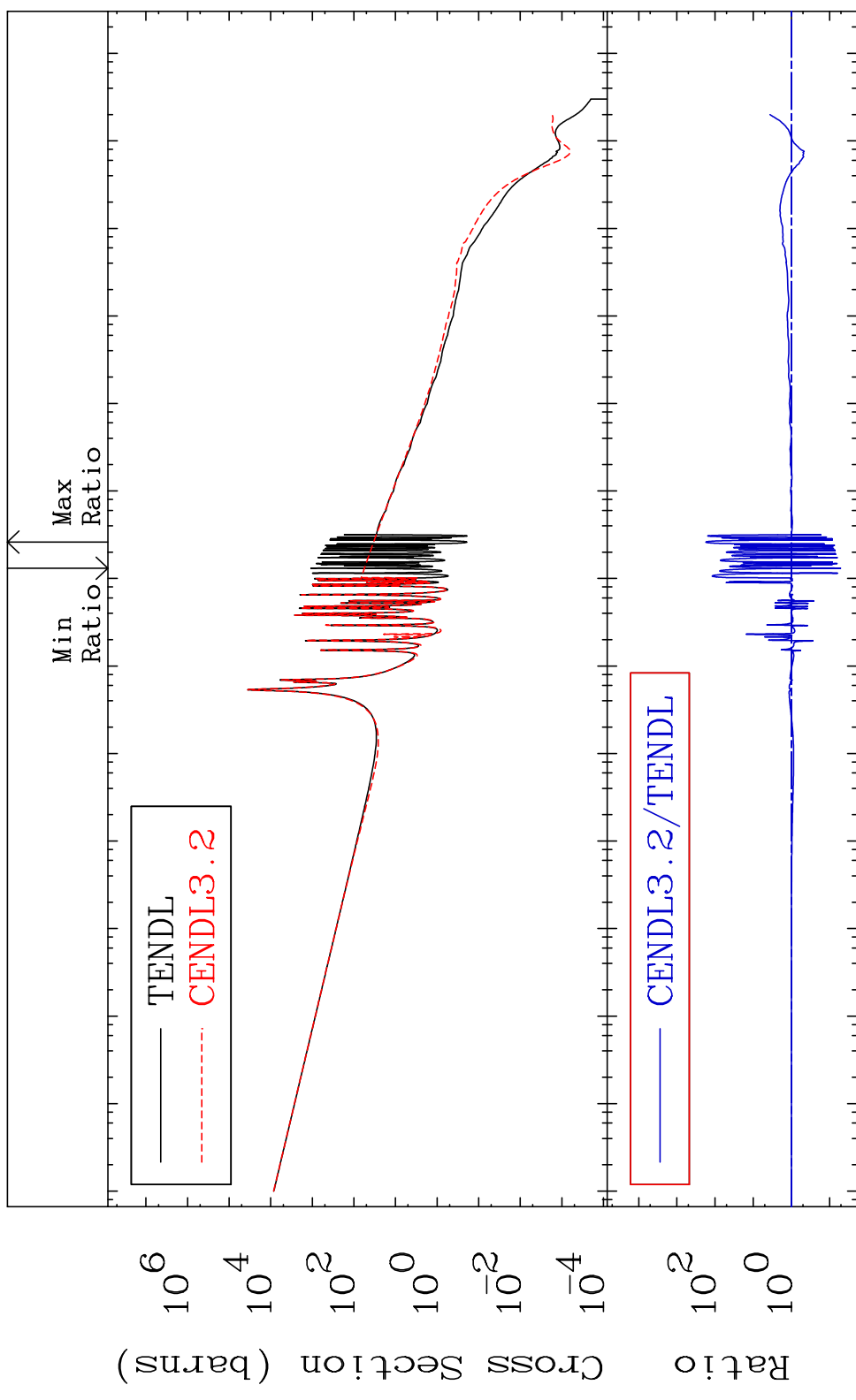
MAT 6149 (n,n') Continuum 61-Pm-147
 Cross Section 0.504 To 5463. %



MAT 6149

(n, γ)
Cross Section -94.81 To 9999. %

61-Pm-147

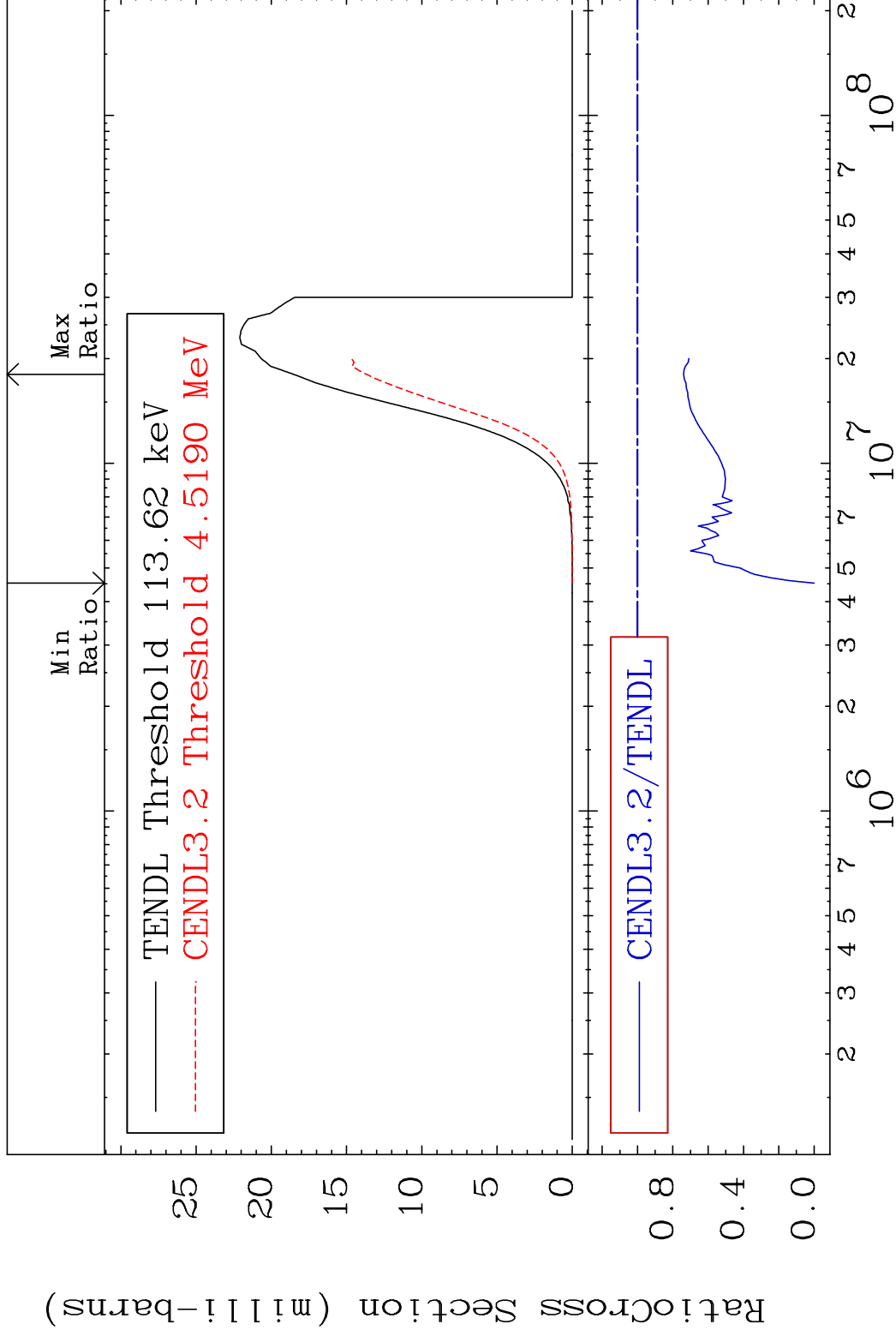


MAT 6149

(n, p)

61-Pm-147

Cross Section -100.0 To -26.13%

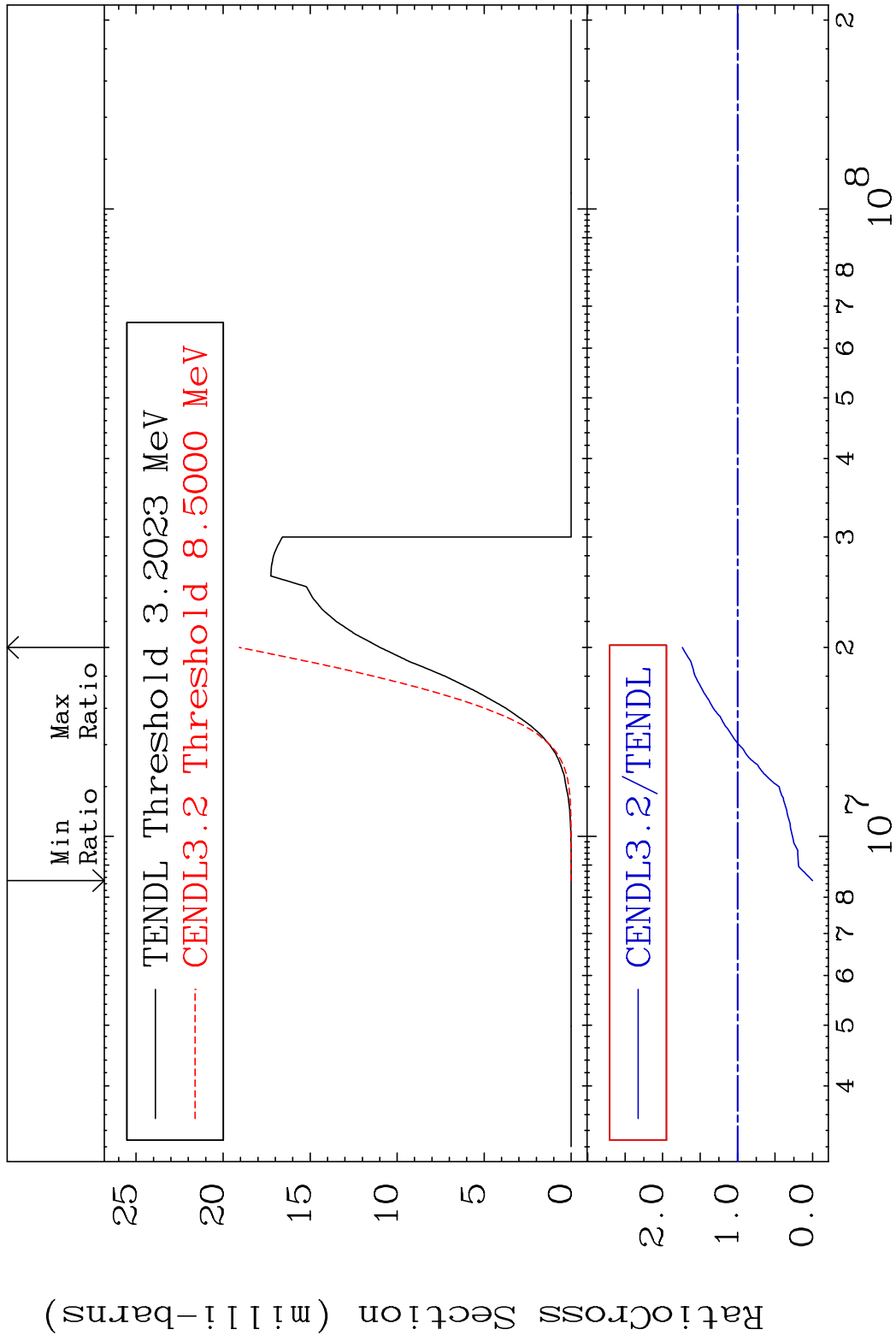


MAT 6149

(n, d)

61-Pm-147

Cross Section -100.0 To 73.67 %

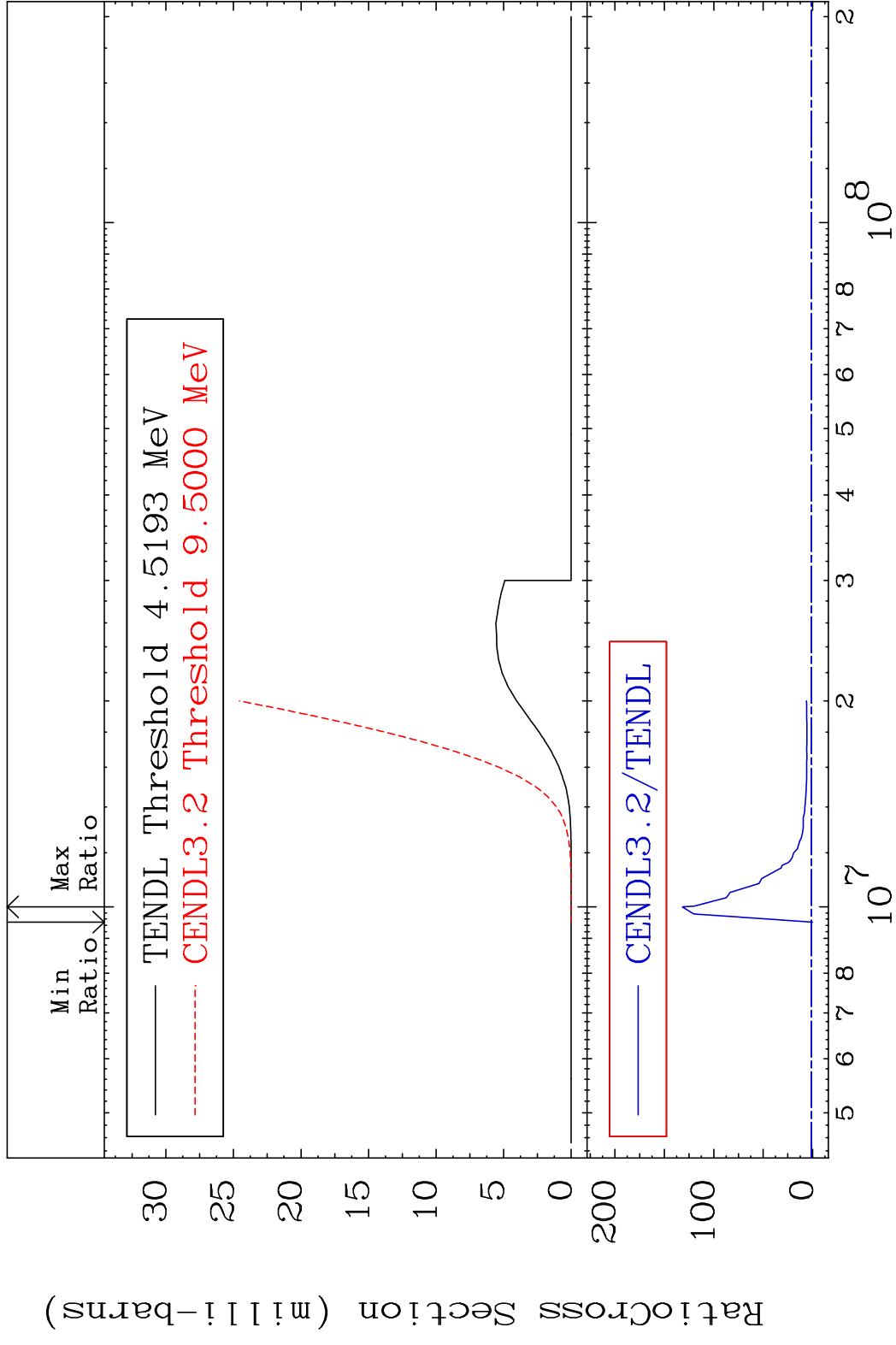


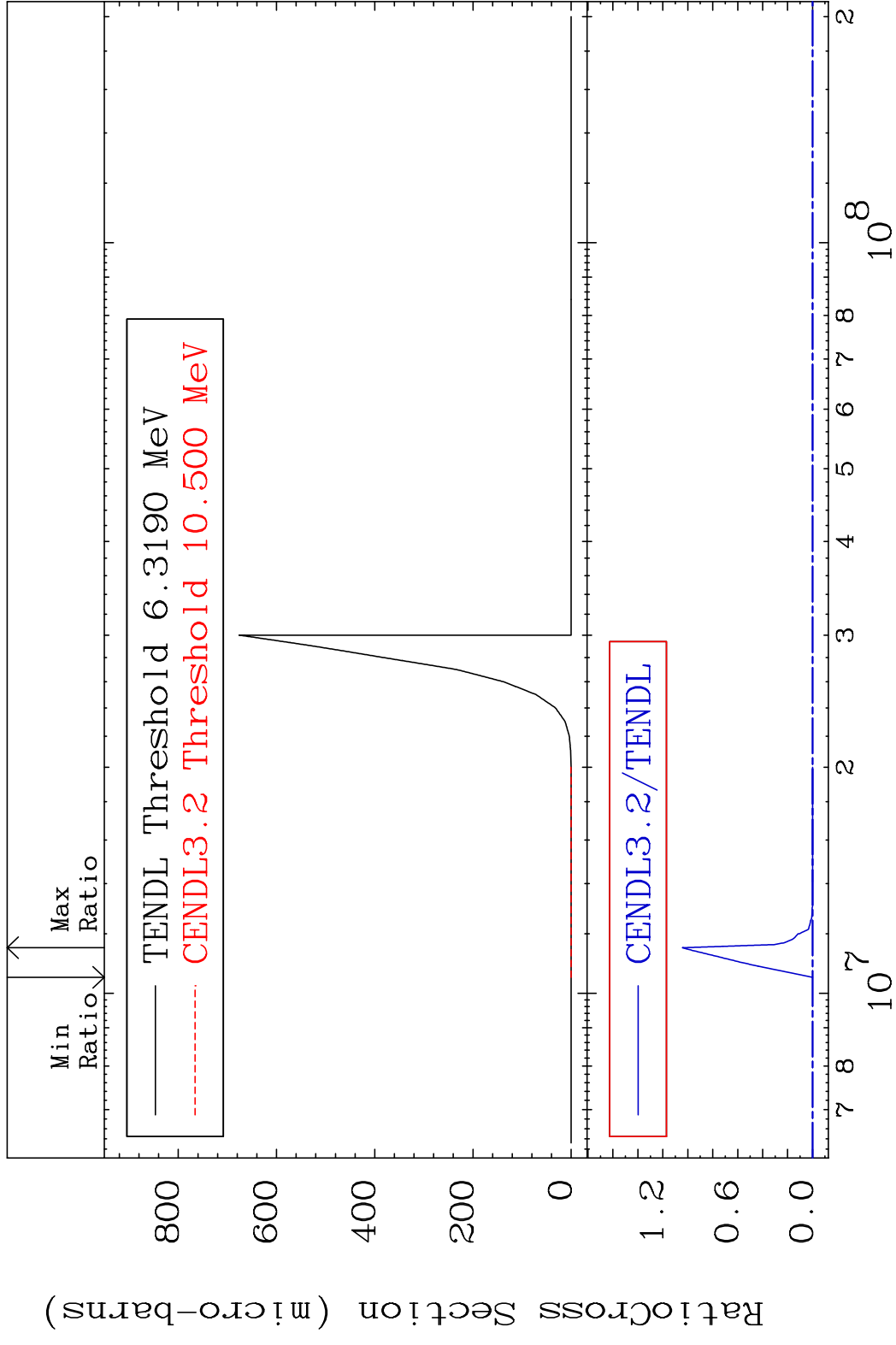
20

Incident Energy (eV)

61-Pm-147

MAT 6149 (n, t) 61-Pm-147
 Cross Section -100.0 To 9999. %



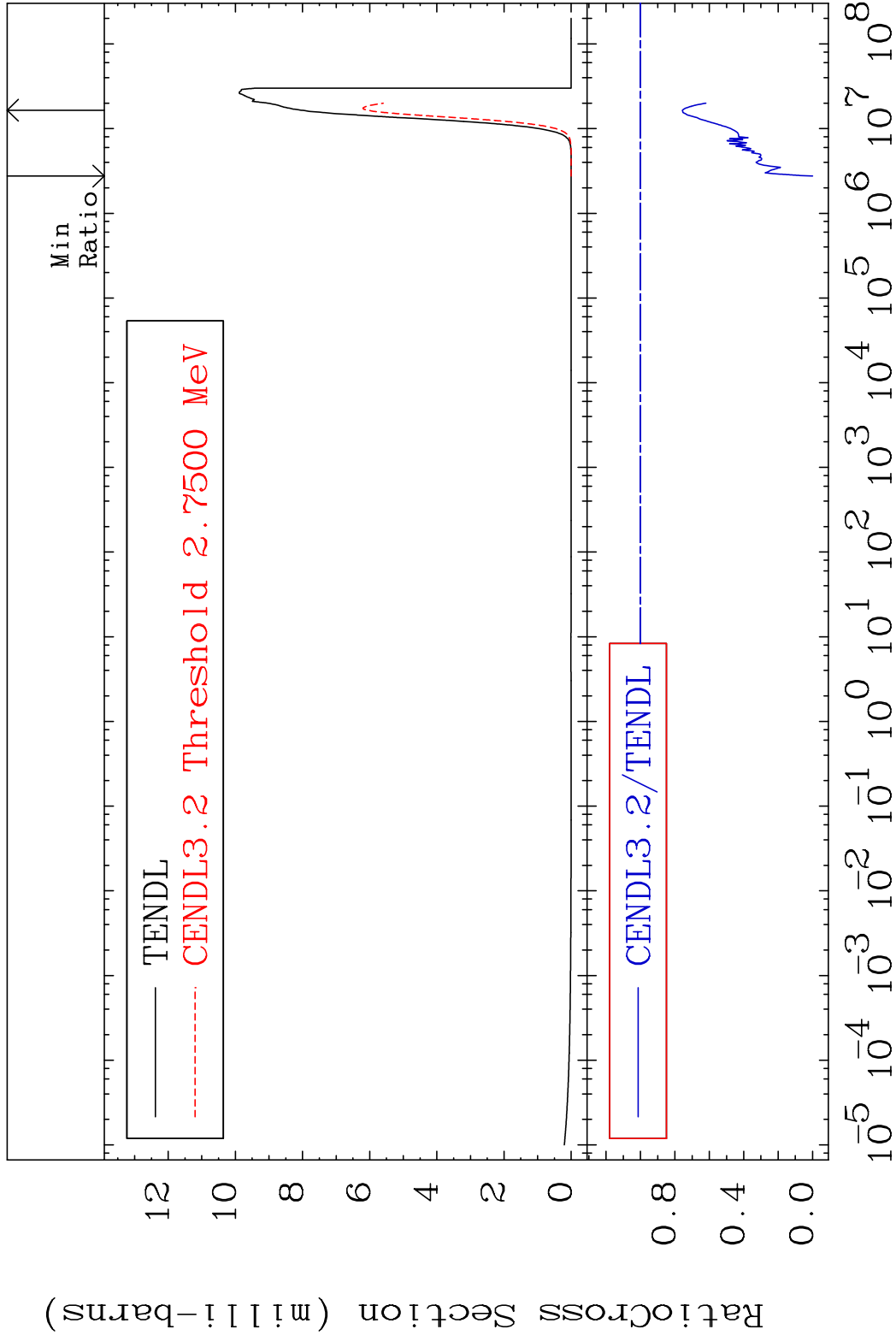


MAT 6149

(n, α)

61-Pm-147

Cross Section -100.0 To -24.33%



23

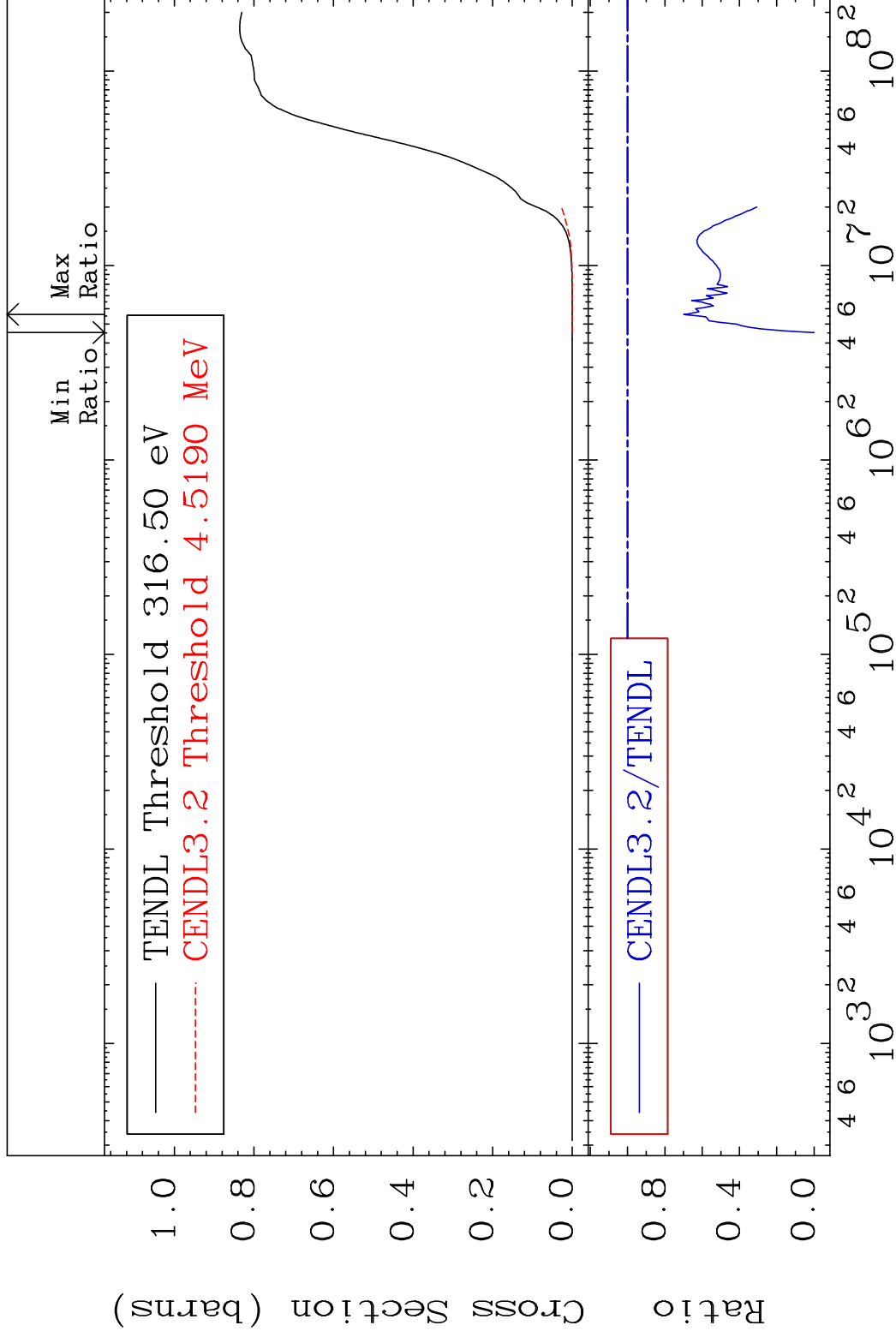
61-Pm-147

MAT 6149

Hydrogen Production

61-Pm-147

Cross Section -100.0 To -30.07%

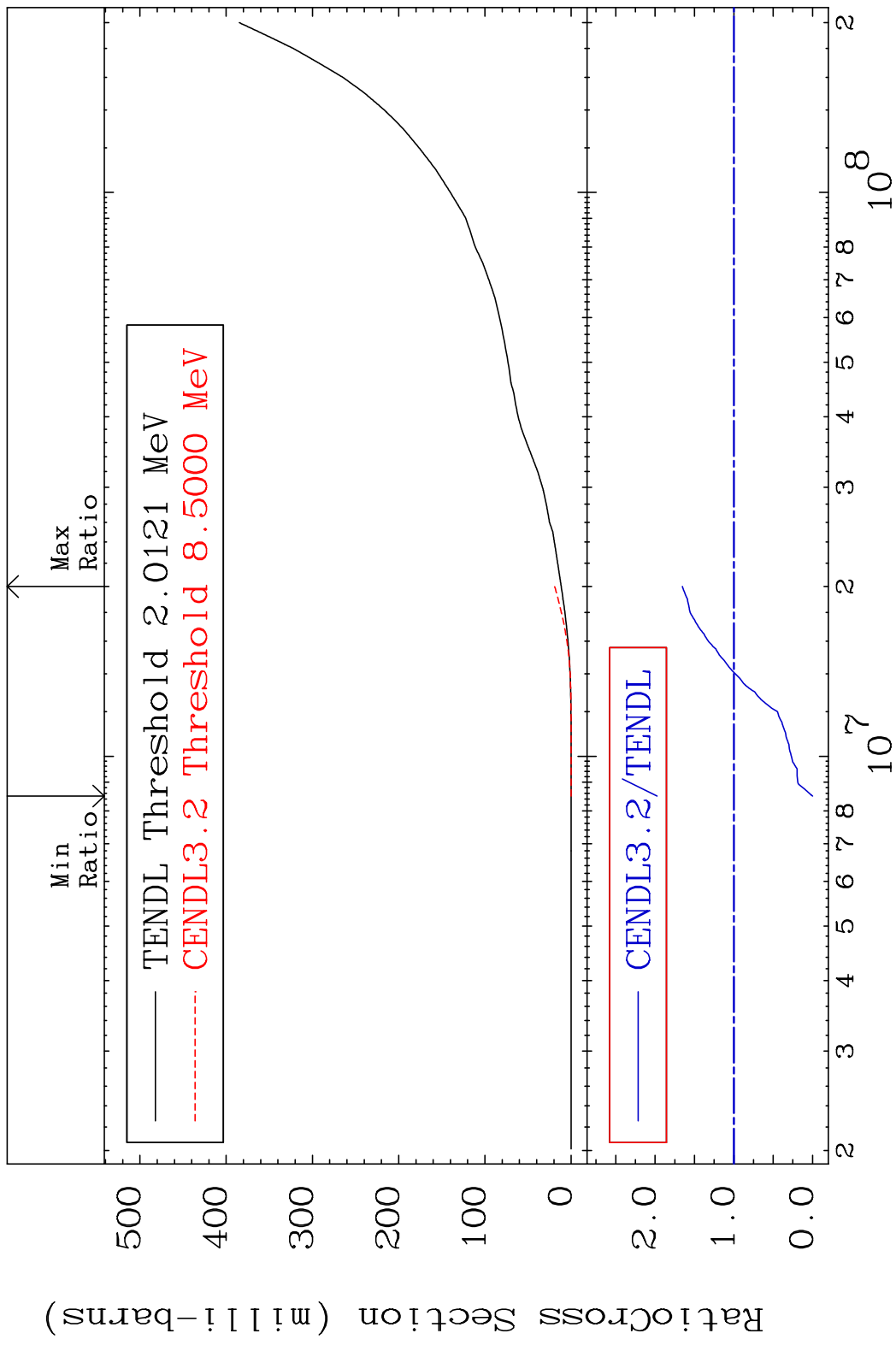


24

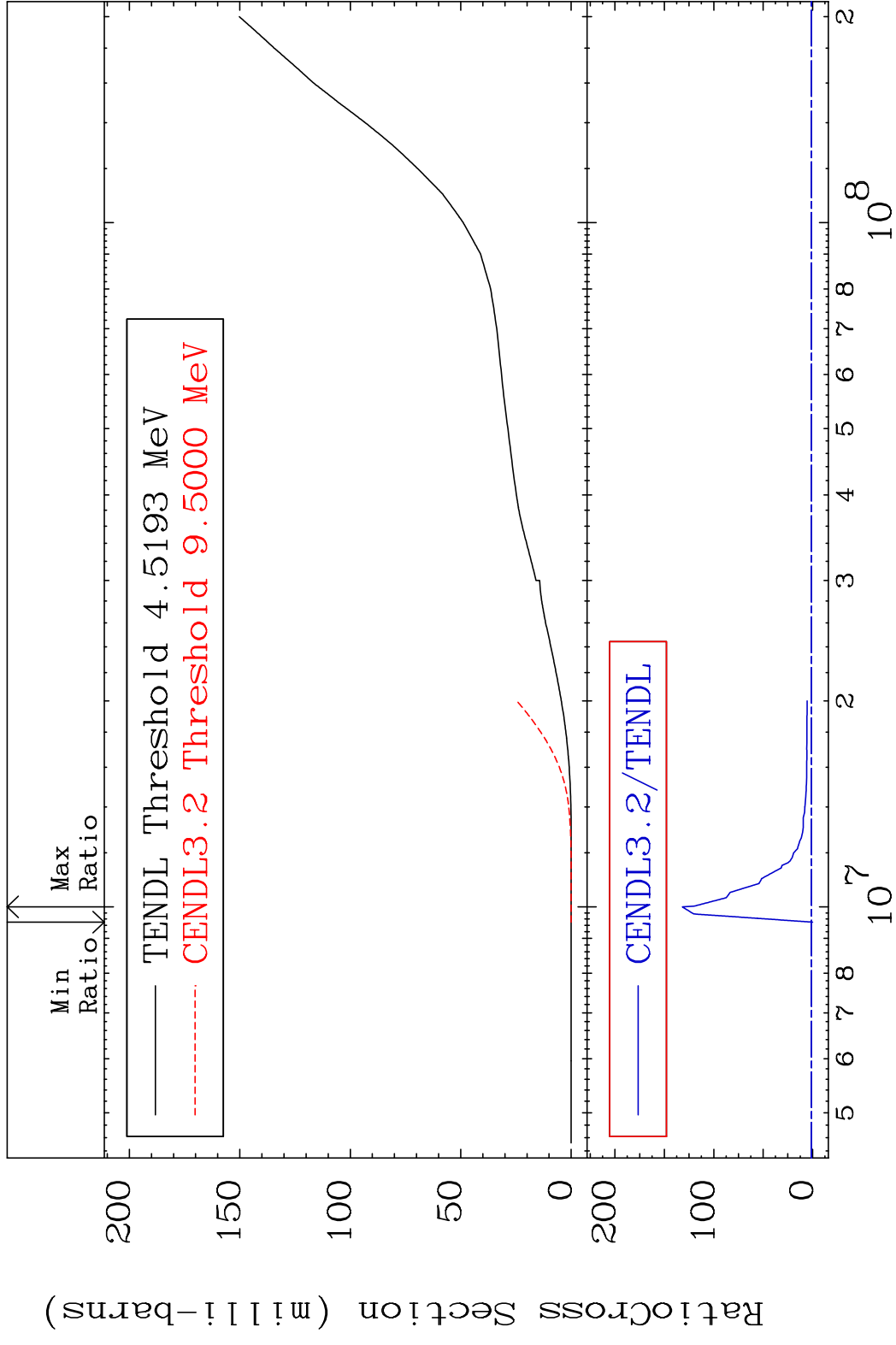
Incident Energy (eV)

61-Pm-147

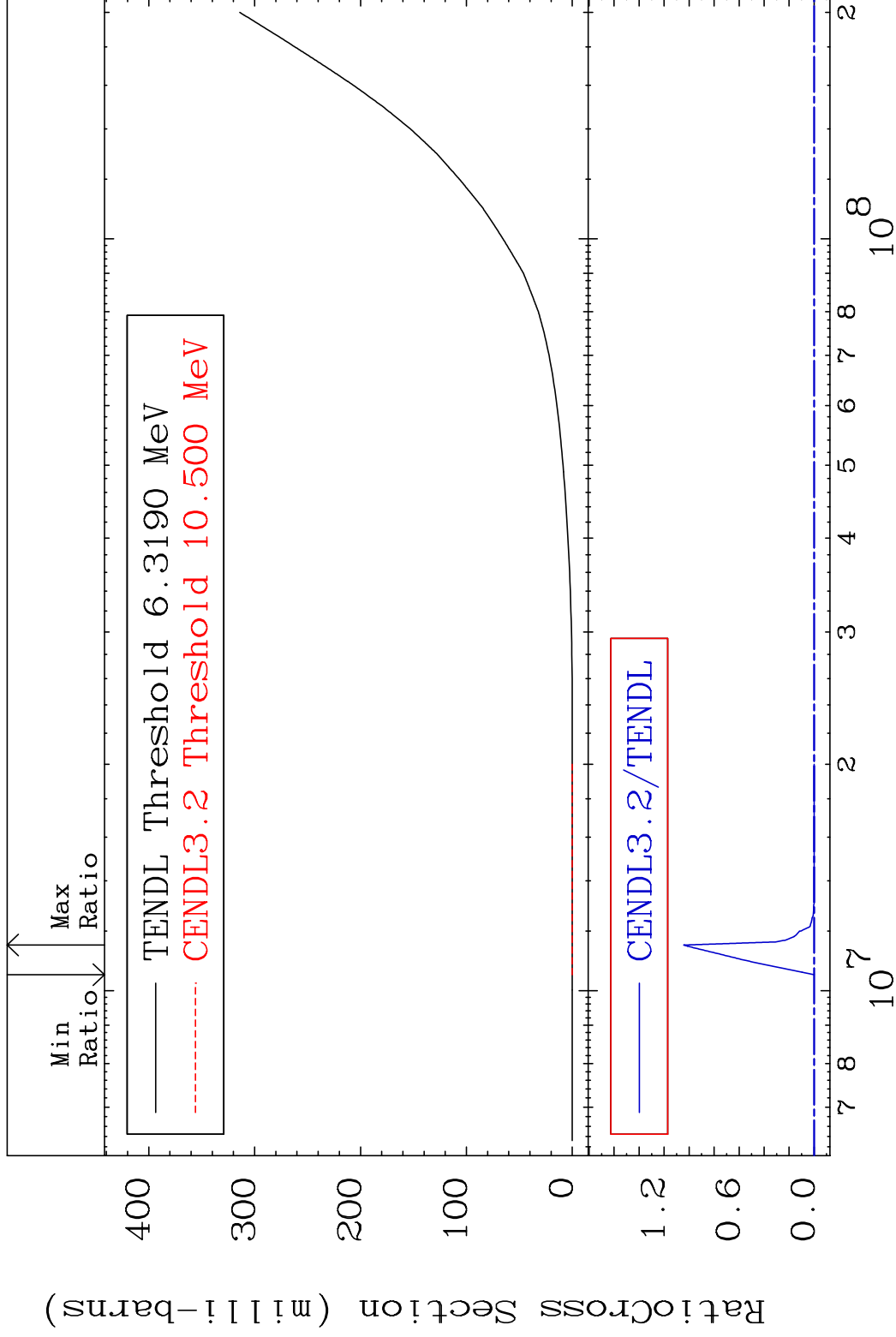
MAT 6149 Deuterium Production 61-Pm-147
 Cross Section -100.0 To 65.37 %



MAT 6149 Tritium Production 61-Pm-147
 Cross Section -100.0 To 9999. %



Cross Section -100.0 To 9999. %

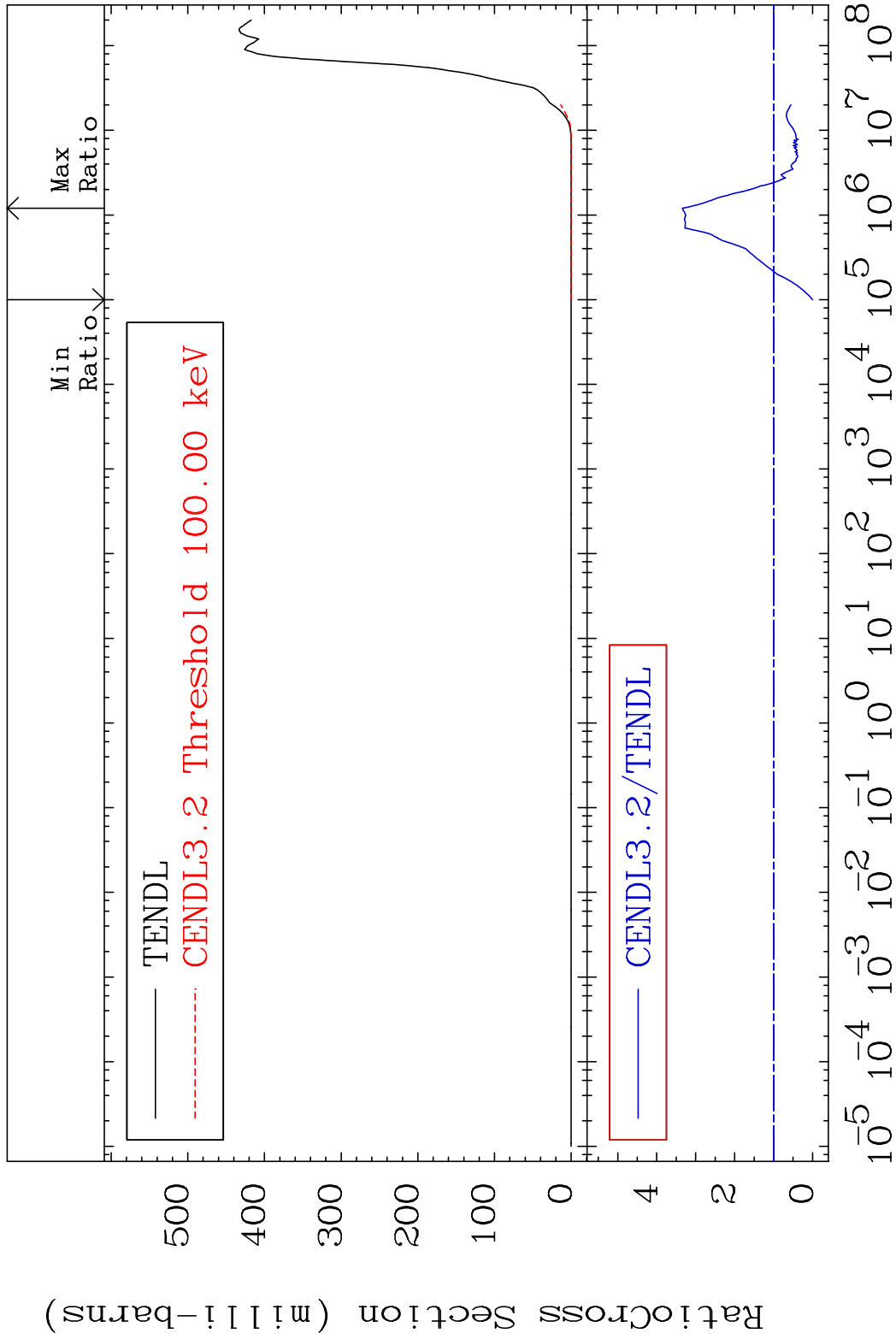


MAT 6149

He-4 Production

61-Pm-147

Cross Section -100.0 To 234.2 %

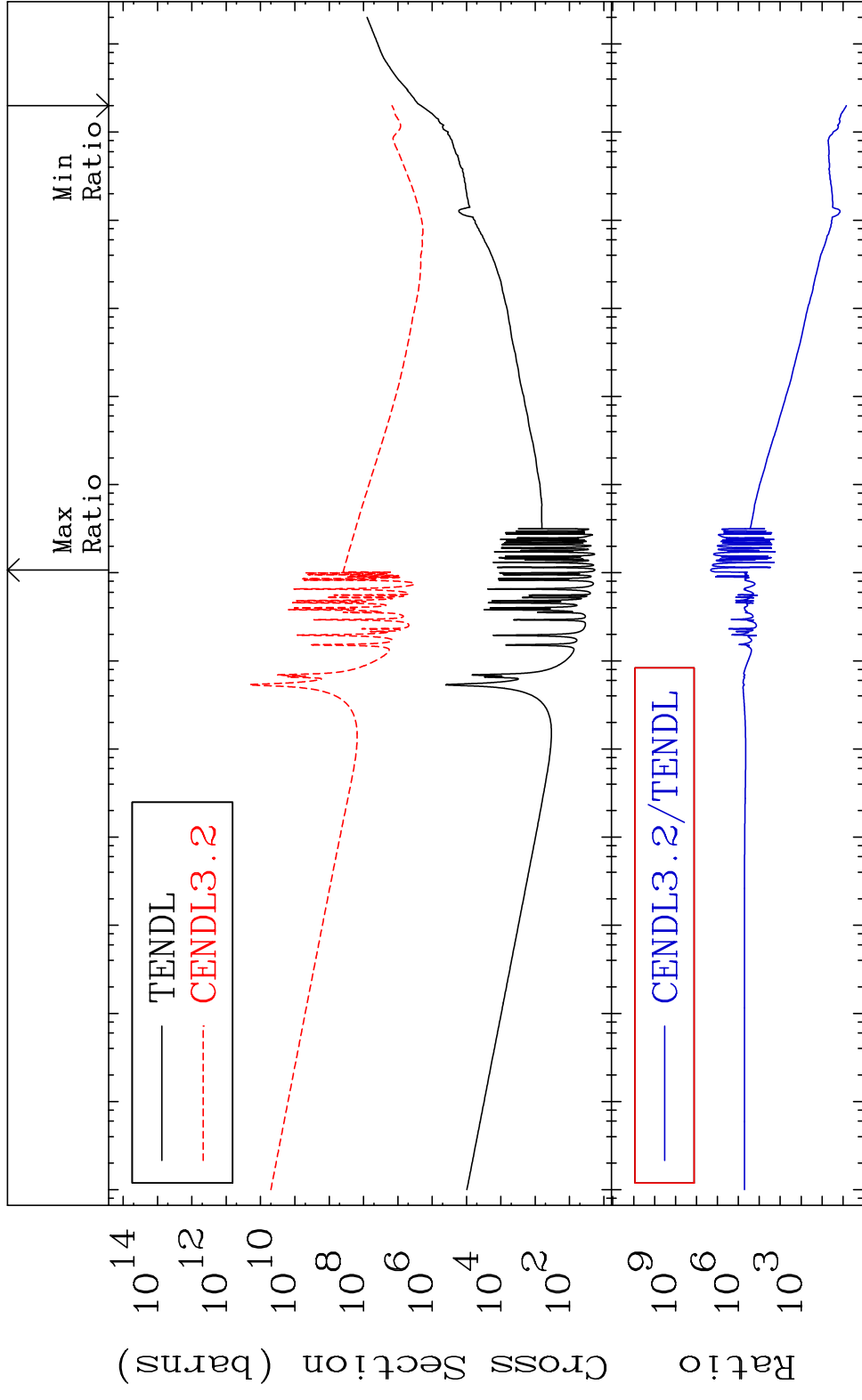


28

Incident Energy (eV)

61-Pm-147

MAT 6149 Kerma total (eV-barns) 61-Pm-147
 Cross Section 594.2 To 9999. %

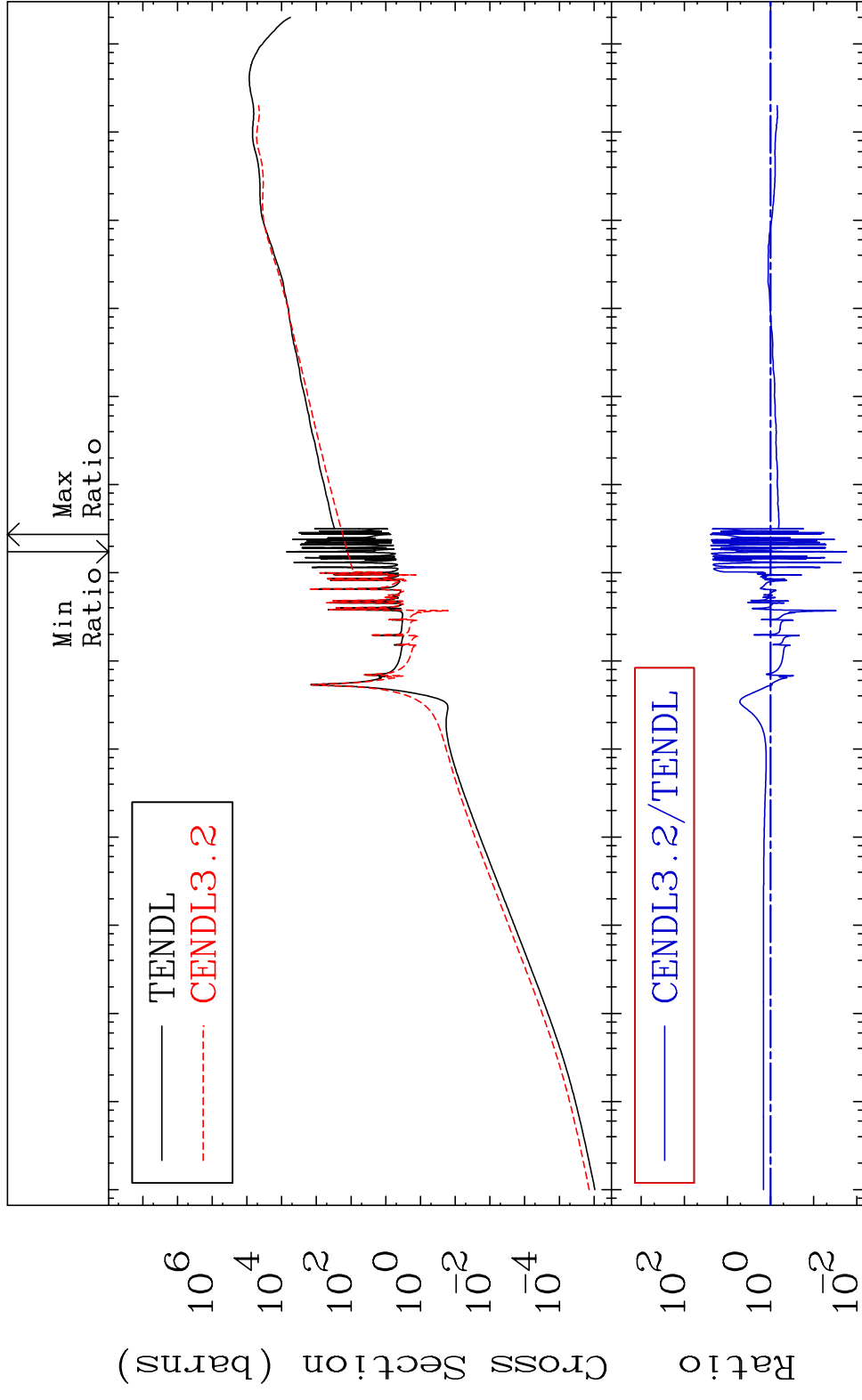


29 Incident Energy (eV) 61-Pm-147

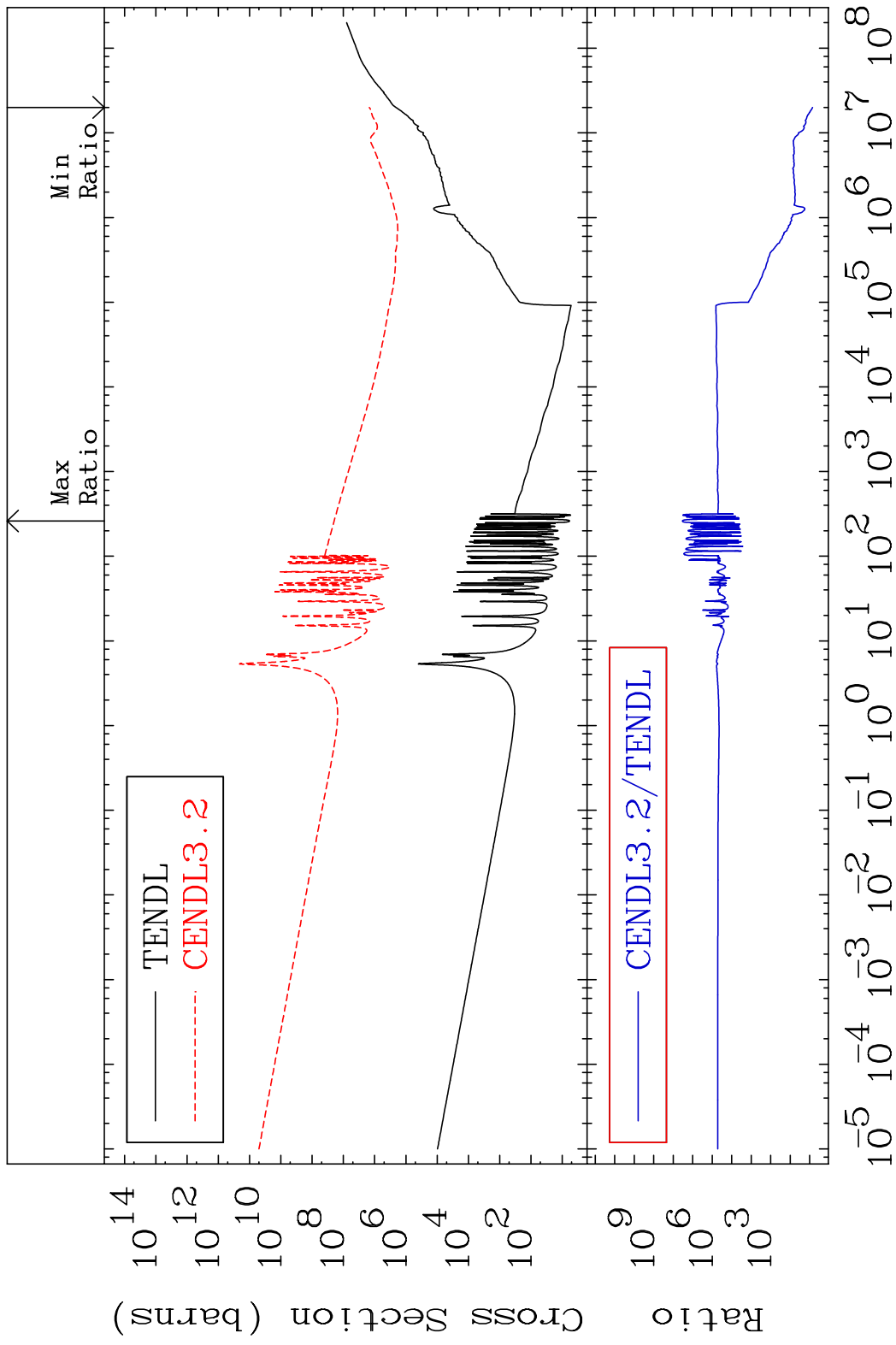
MAT 6149

Kerma elastic
Cross Section -98.26 To 2337. %

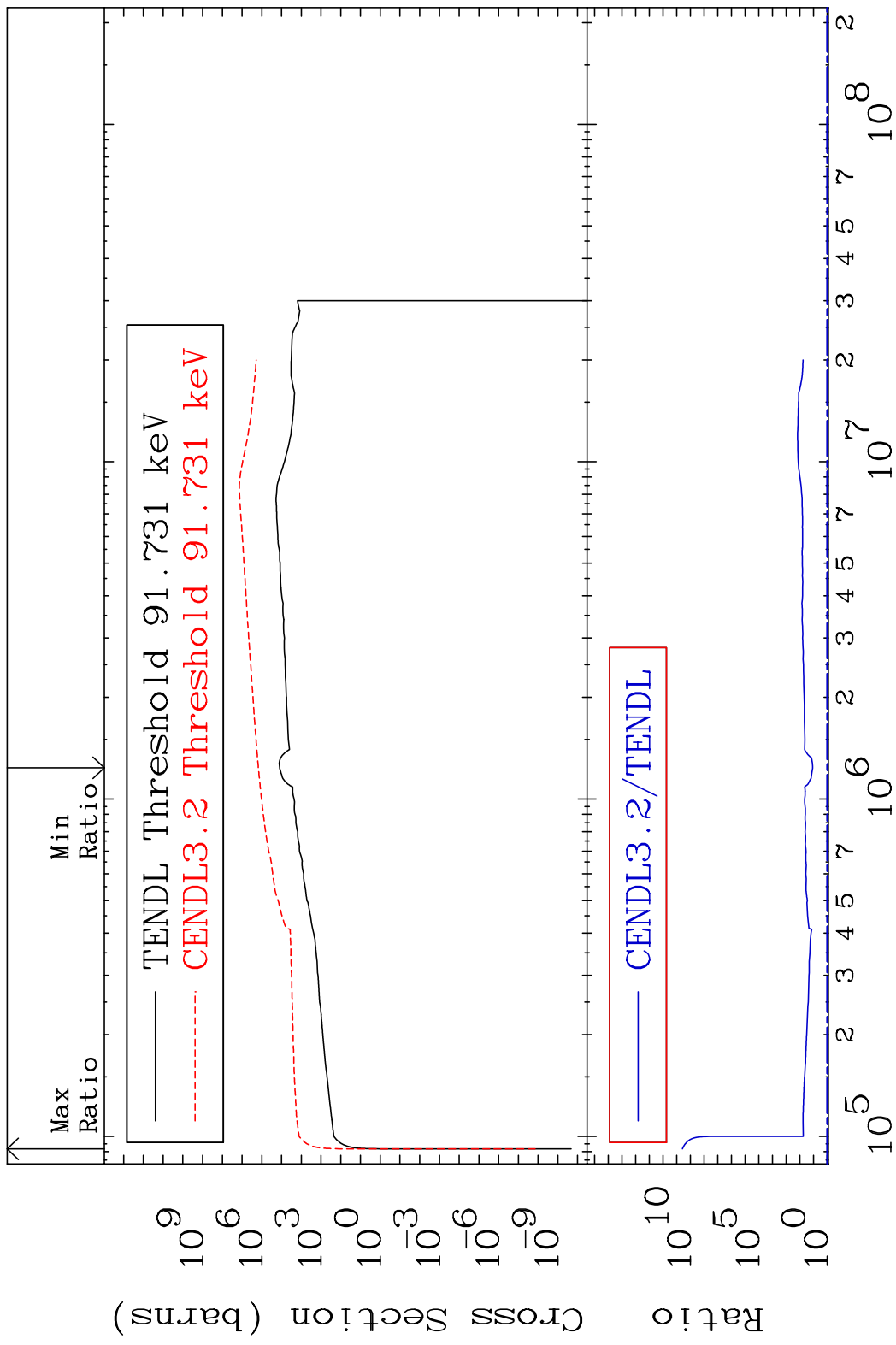
61-Pm-147



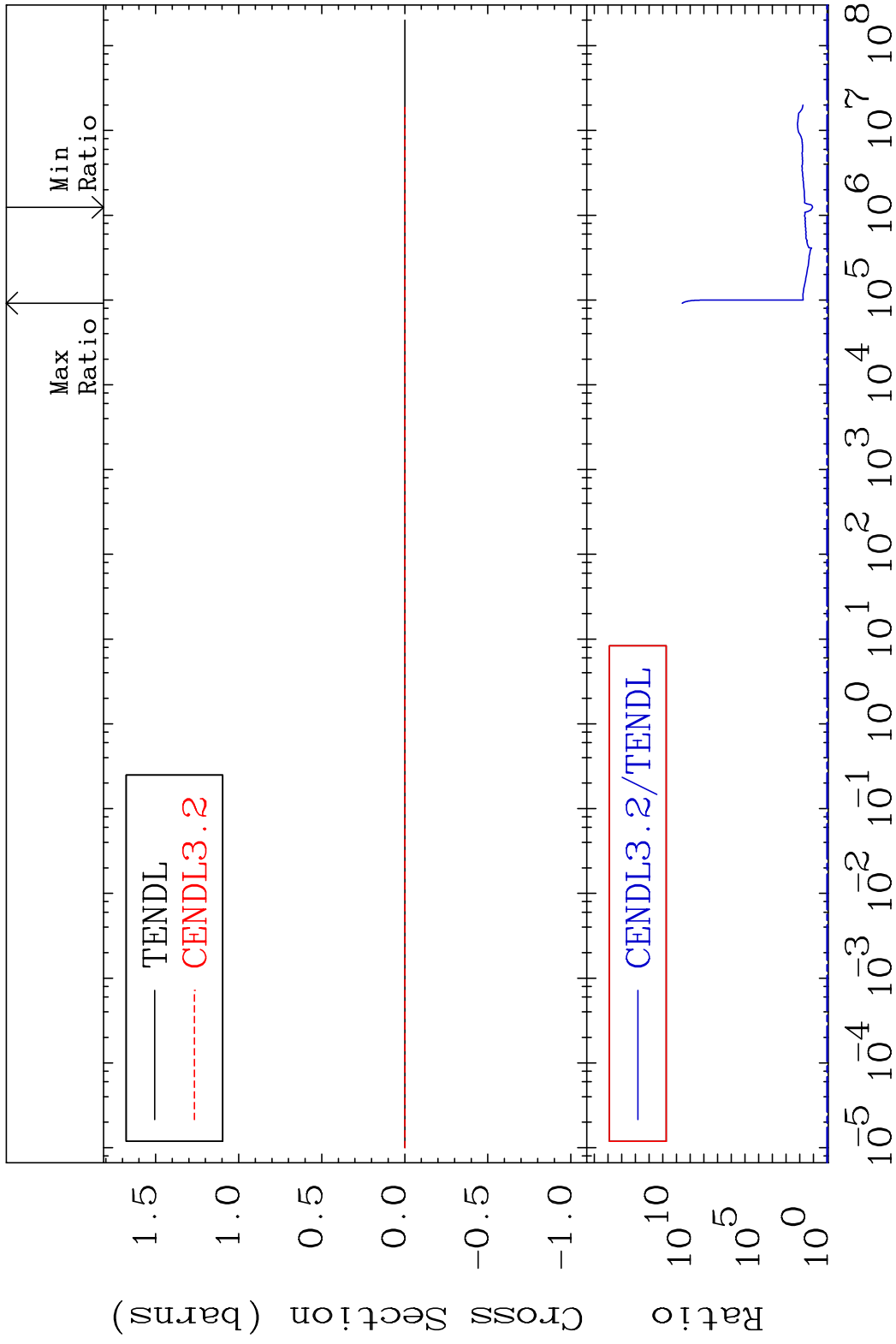
MAT 6149 Kerma non-elastic (all but mt2) 61-Pm-147
 Cross Section 614.0 To 9999. %

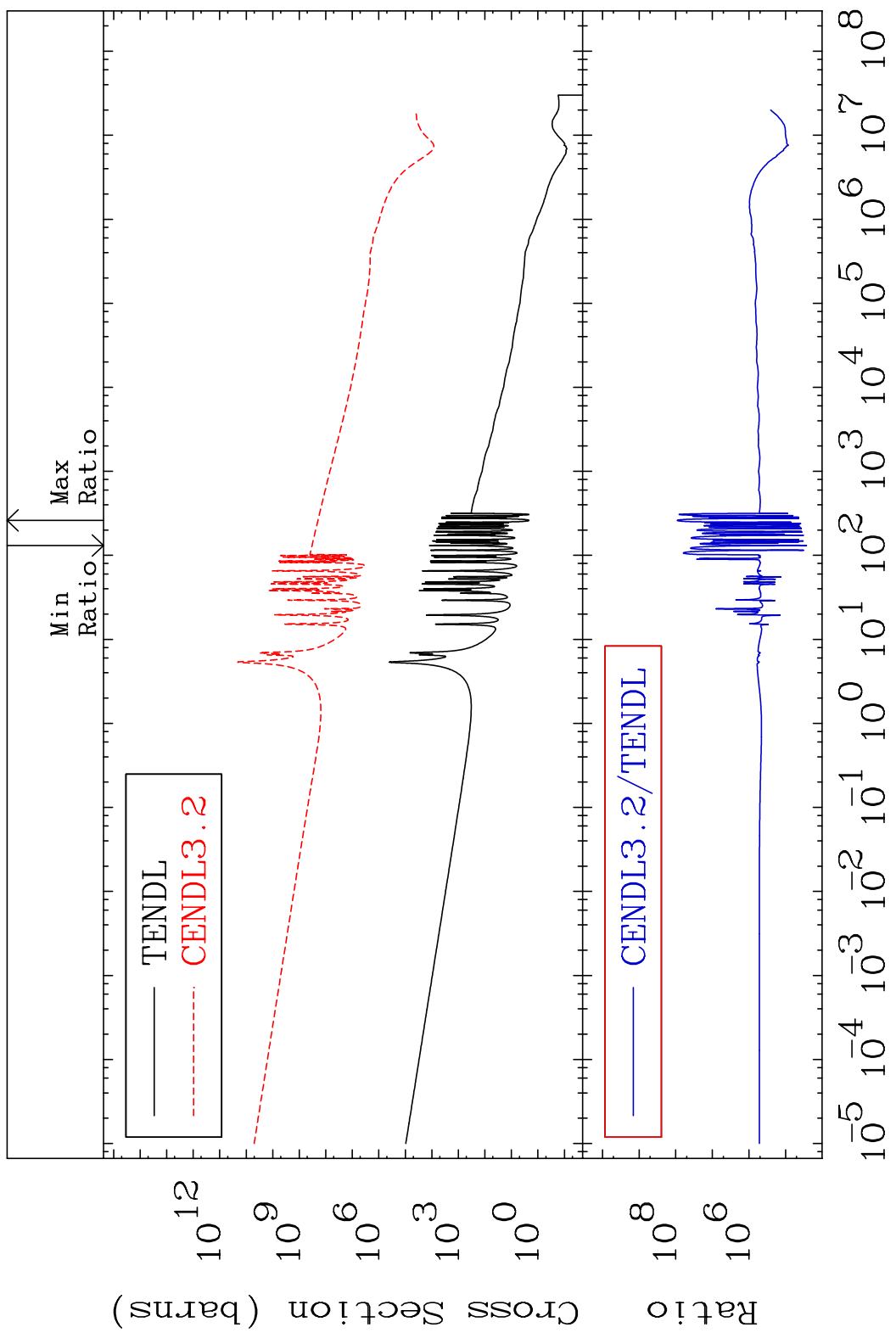


MAT 6149 Kerma inelastic (mt51-91) 61-Pm-147
 Cross Section 1088. To 9999. %

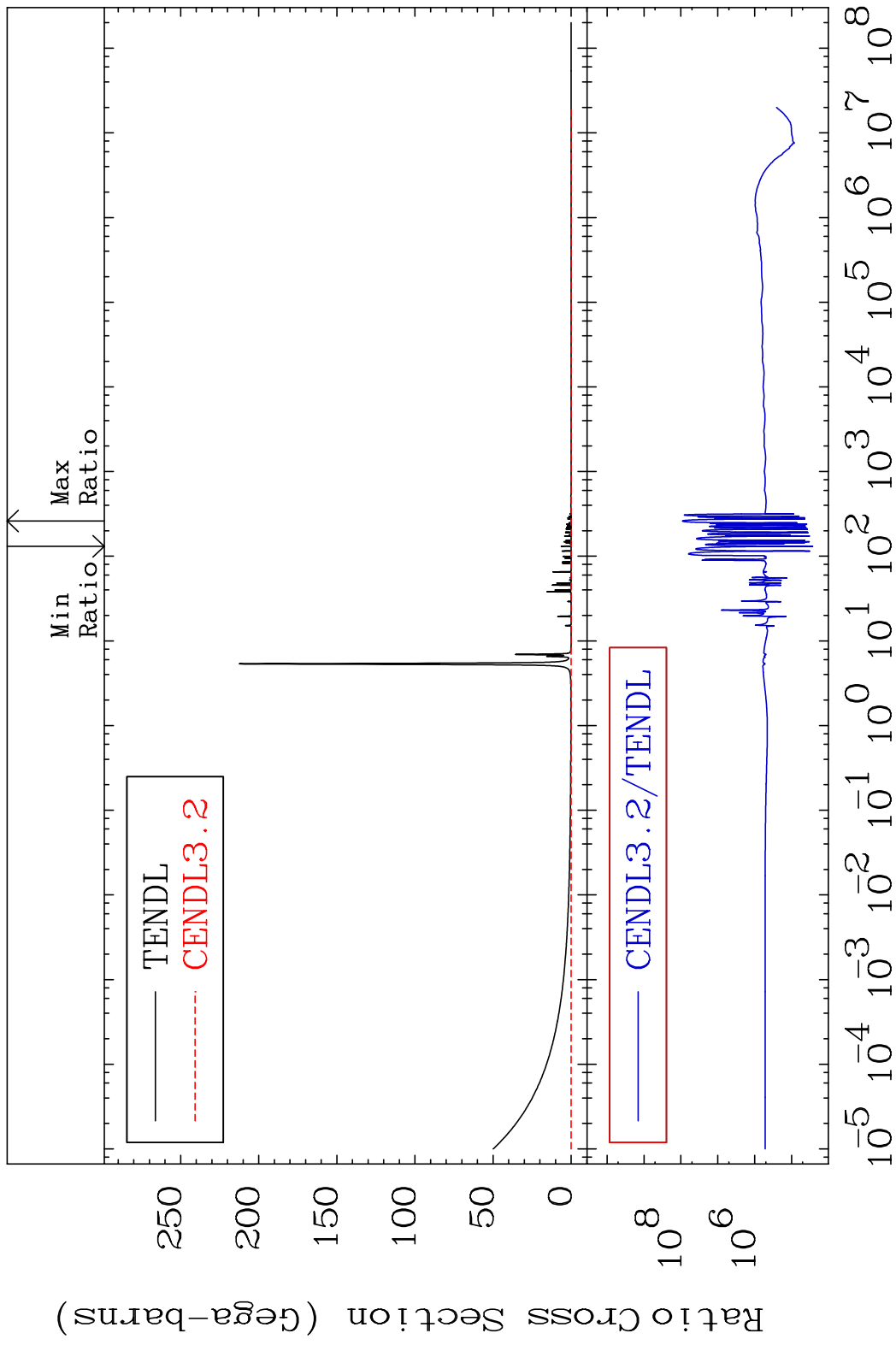


MAT 6149 Kerma fission (mt18 or mt19-20-21-38) 61-Pm-147
 Cross Section 1088. To 9999. %



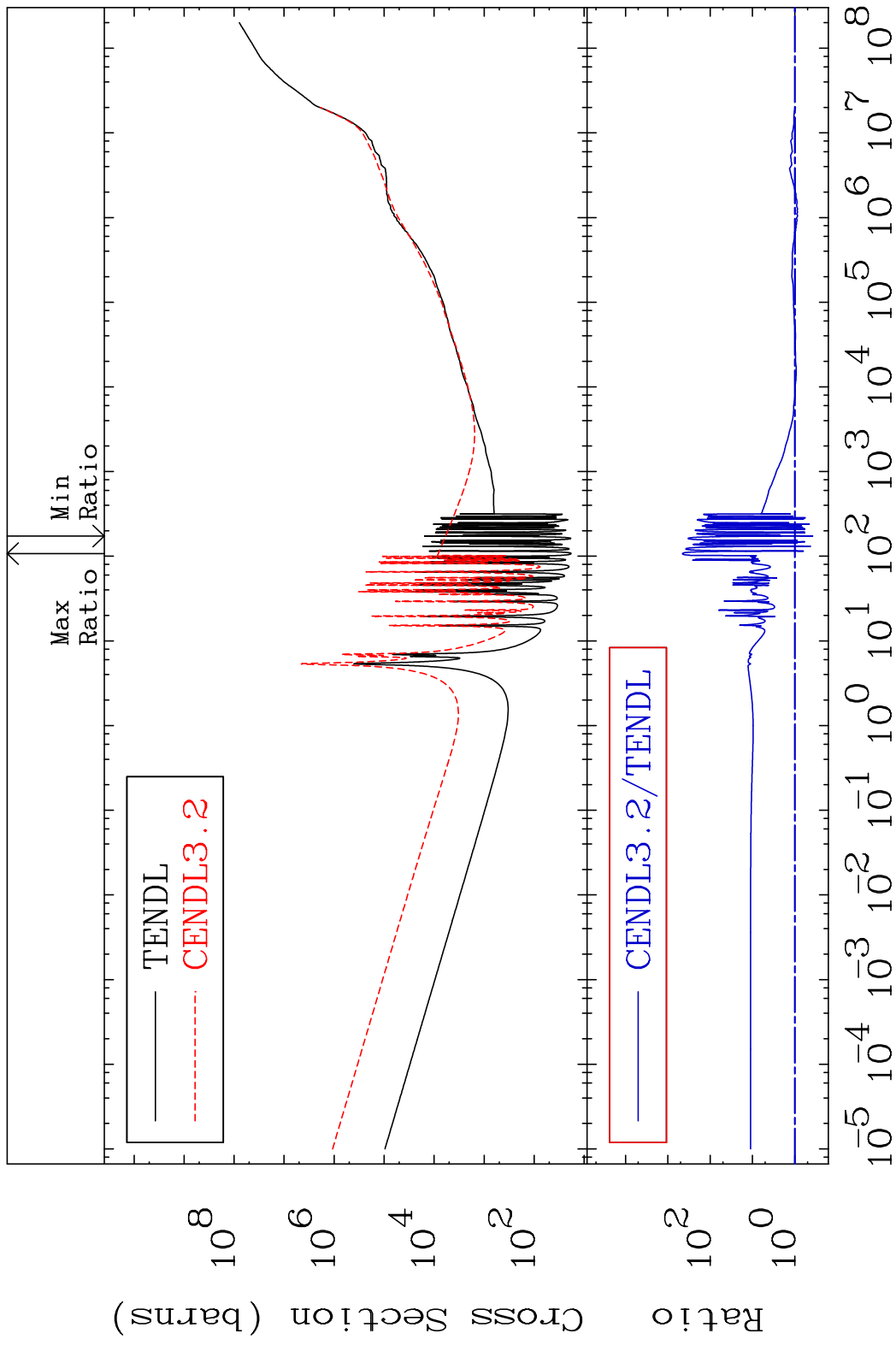


MAT 6149 Total photon (eV-barns) 61-Pm-147
 Cross Section 9999. To 9999. %

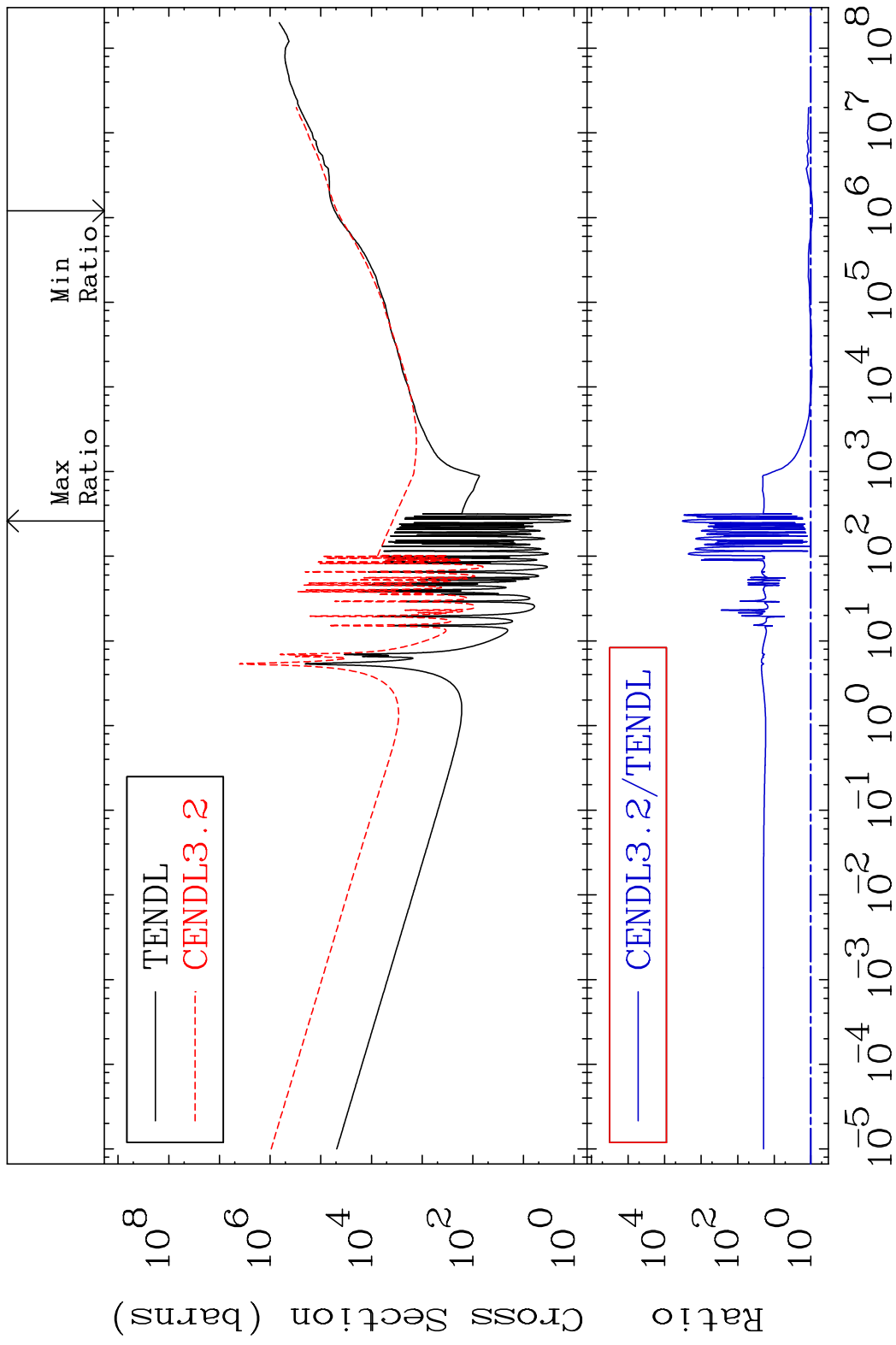


35 Incident Energy (eV) 61-Pm-147

MAT 6149 Total kinematic kerma (high limit) 61-Pm-147
 Cross Section -61.89 To 9999. %



MAT 6149 Dpa total (eV-barns) 61-Pm-147
 Cross Section -10.32 To 9999. %



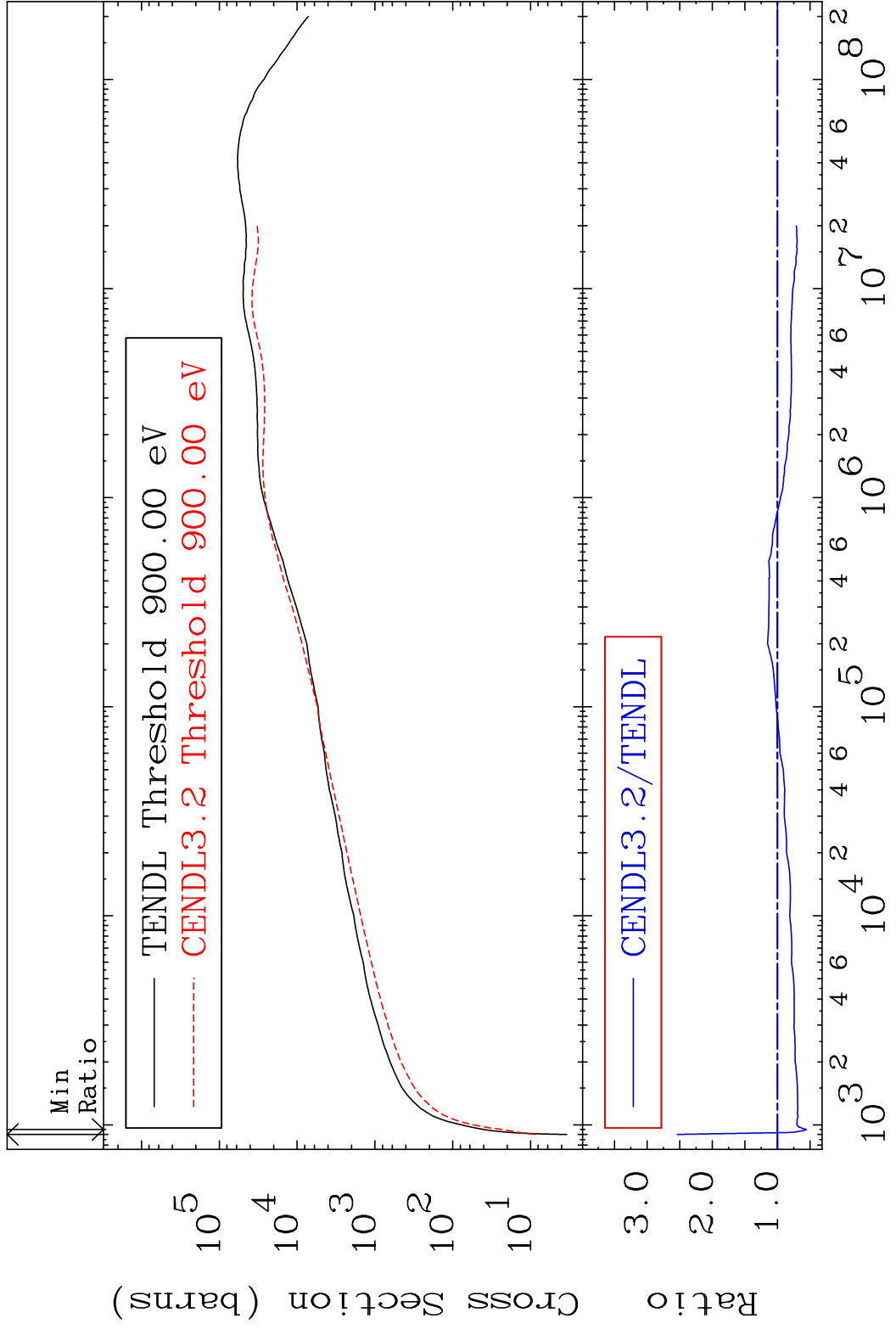
MAT 6149

Dpa elastic (mt2)

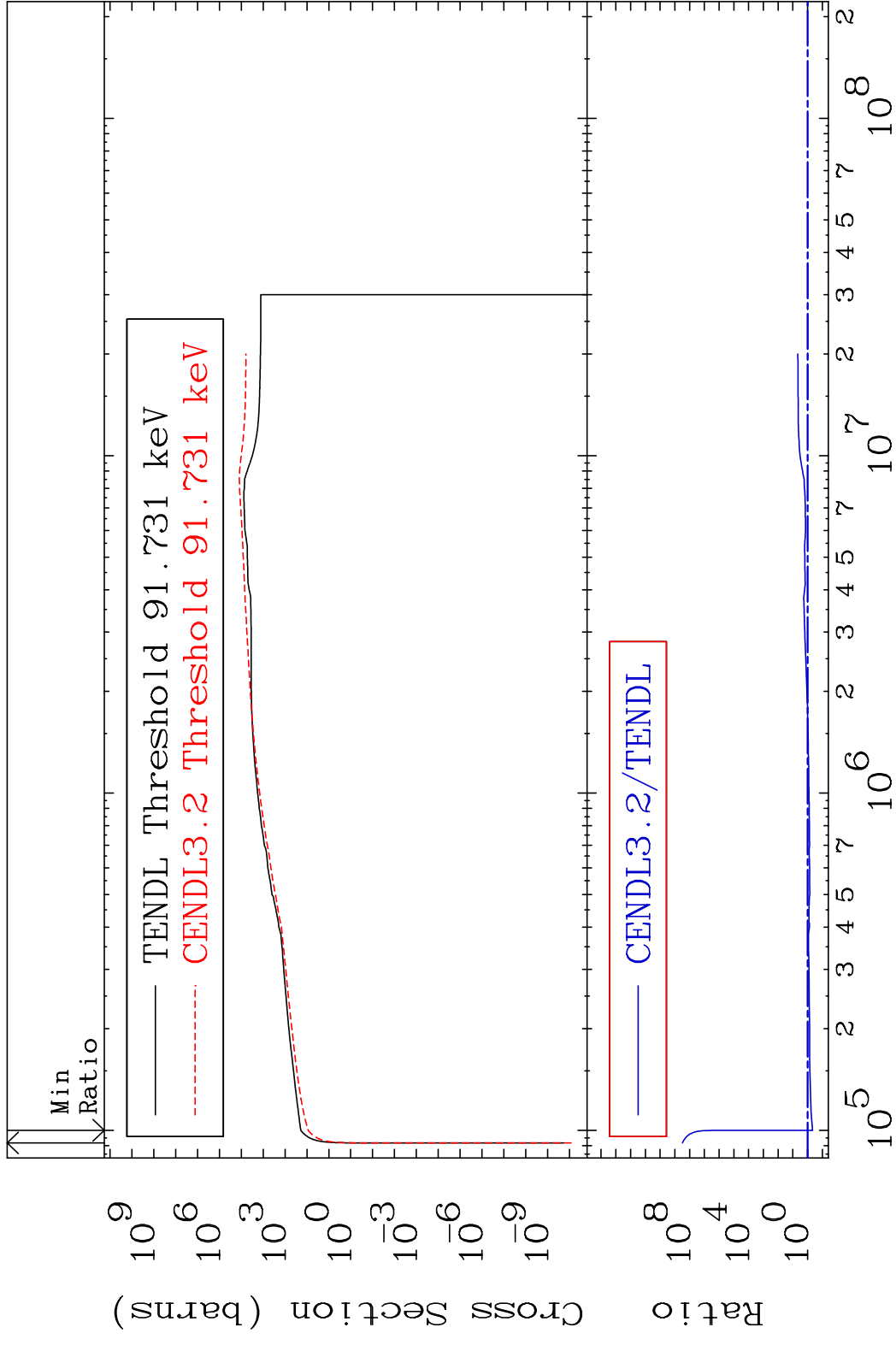
61-Pm-147

Cross Section

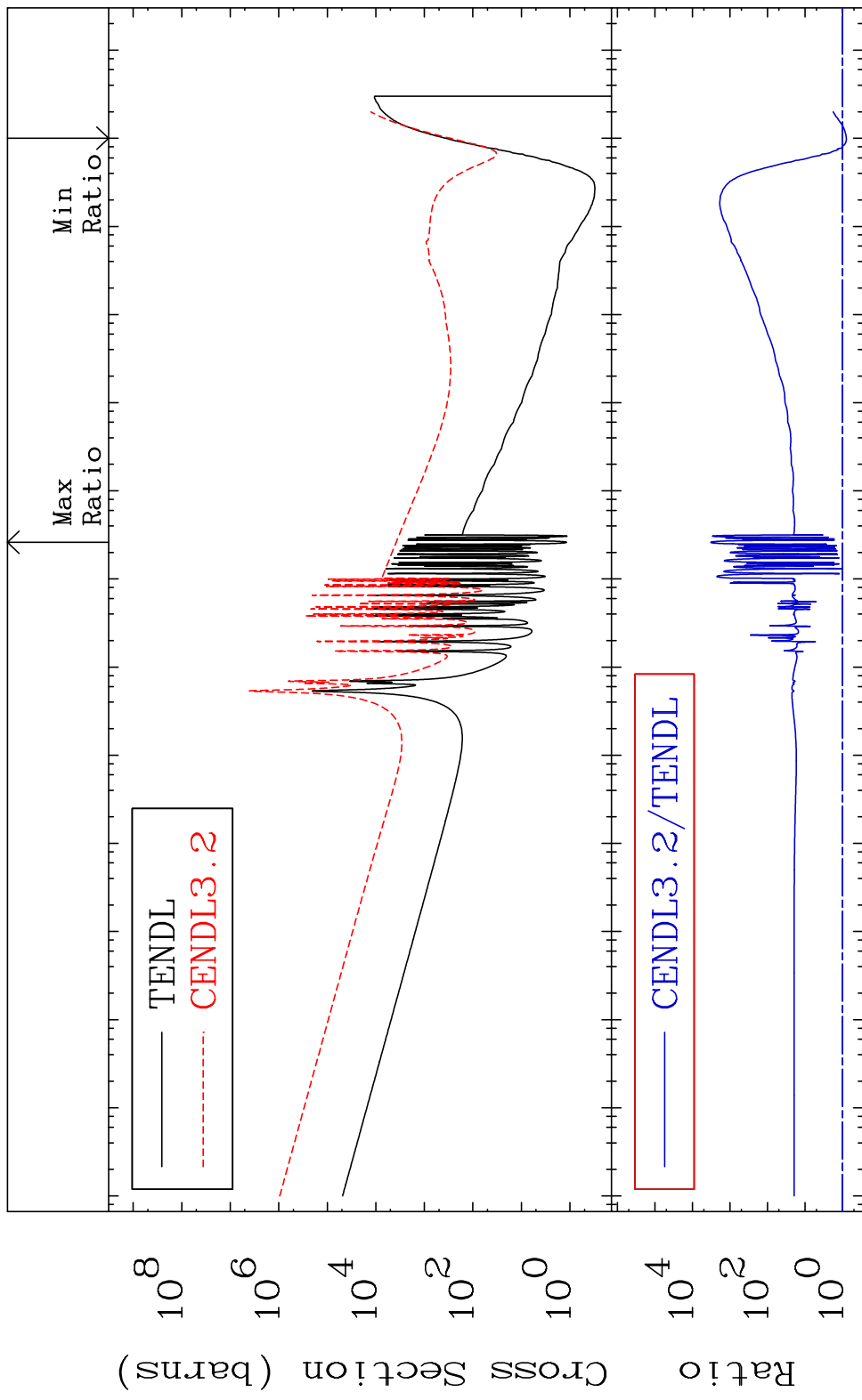
-44.40 To 153.9 %



MAT 6149 Dpa inelastic (mt51-91) 61-Pm-147
 Cross Section -53.83 To 9999. %

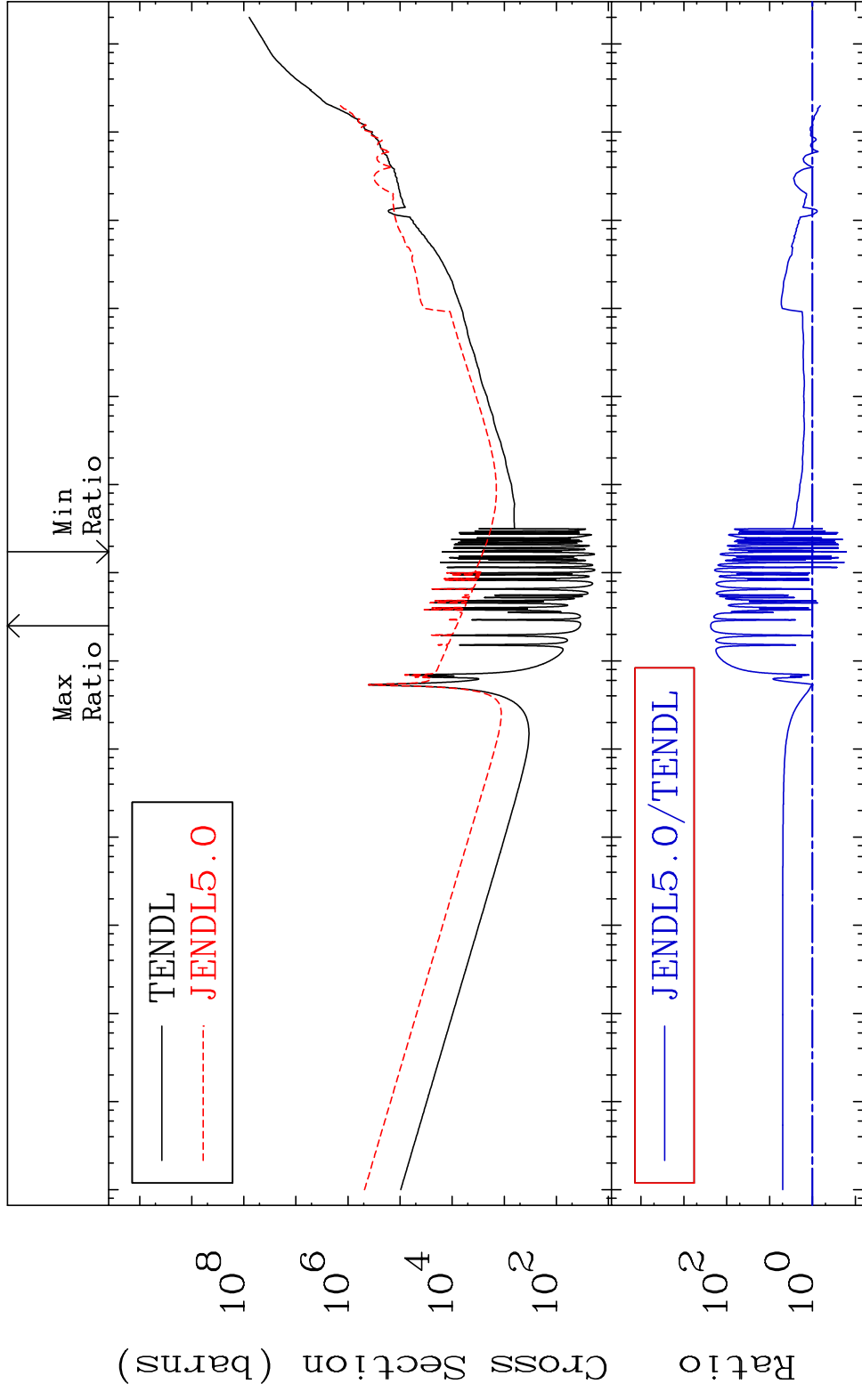


MAT 6149 Dpa disappearance (mt102 -120) 61-Pm-147
 Cross Section -20.50 To 9999. %



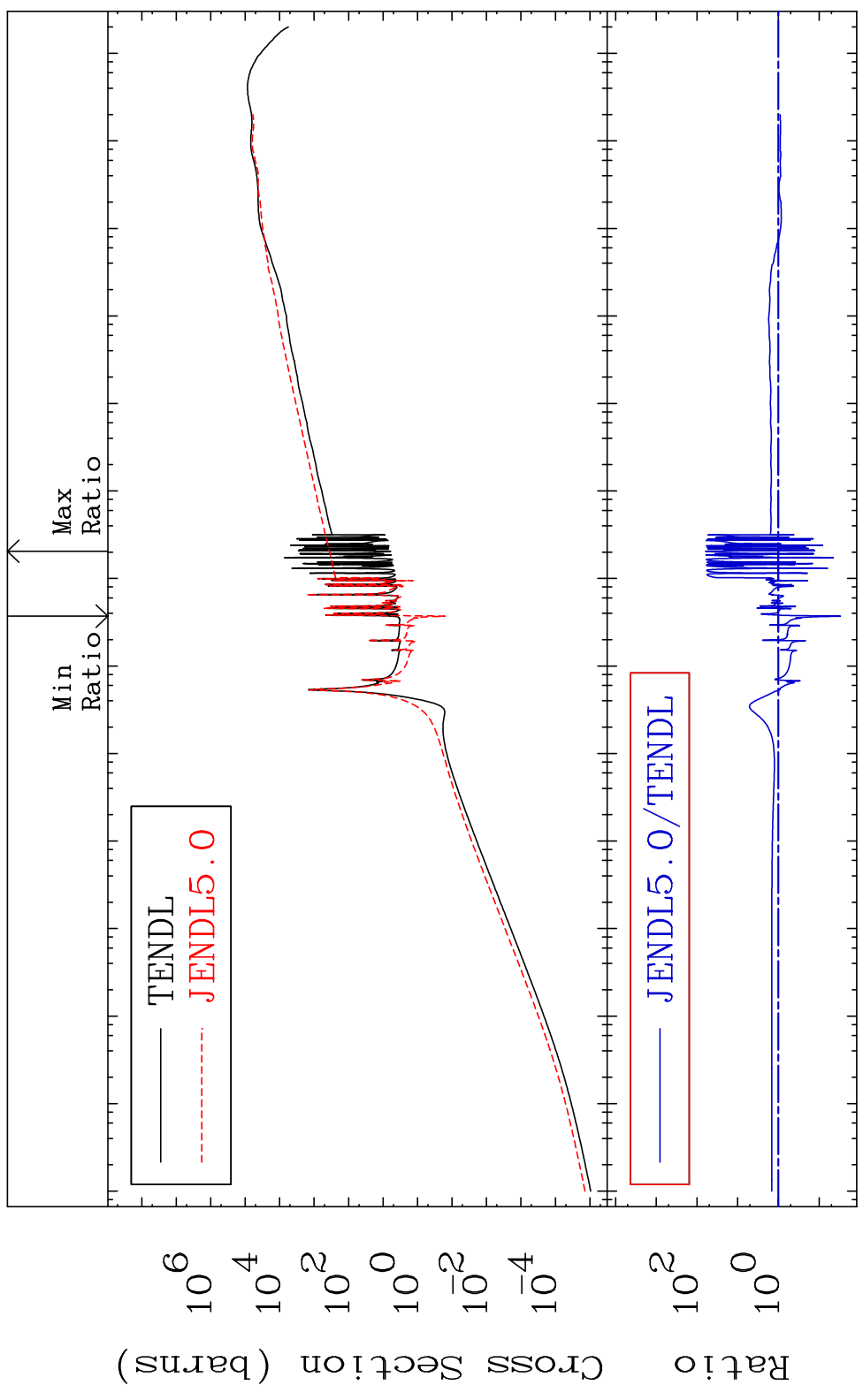
40 Incident Energy (eV) 61-Pm-147

MAT 6149 Kerma total (eV-barns) 61-Pm-147
 Cross Section -83.75 To 9999. %



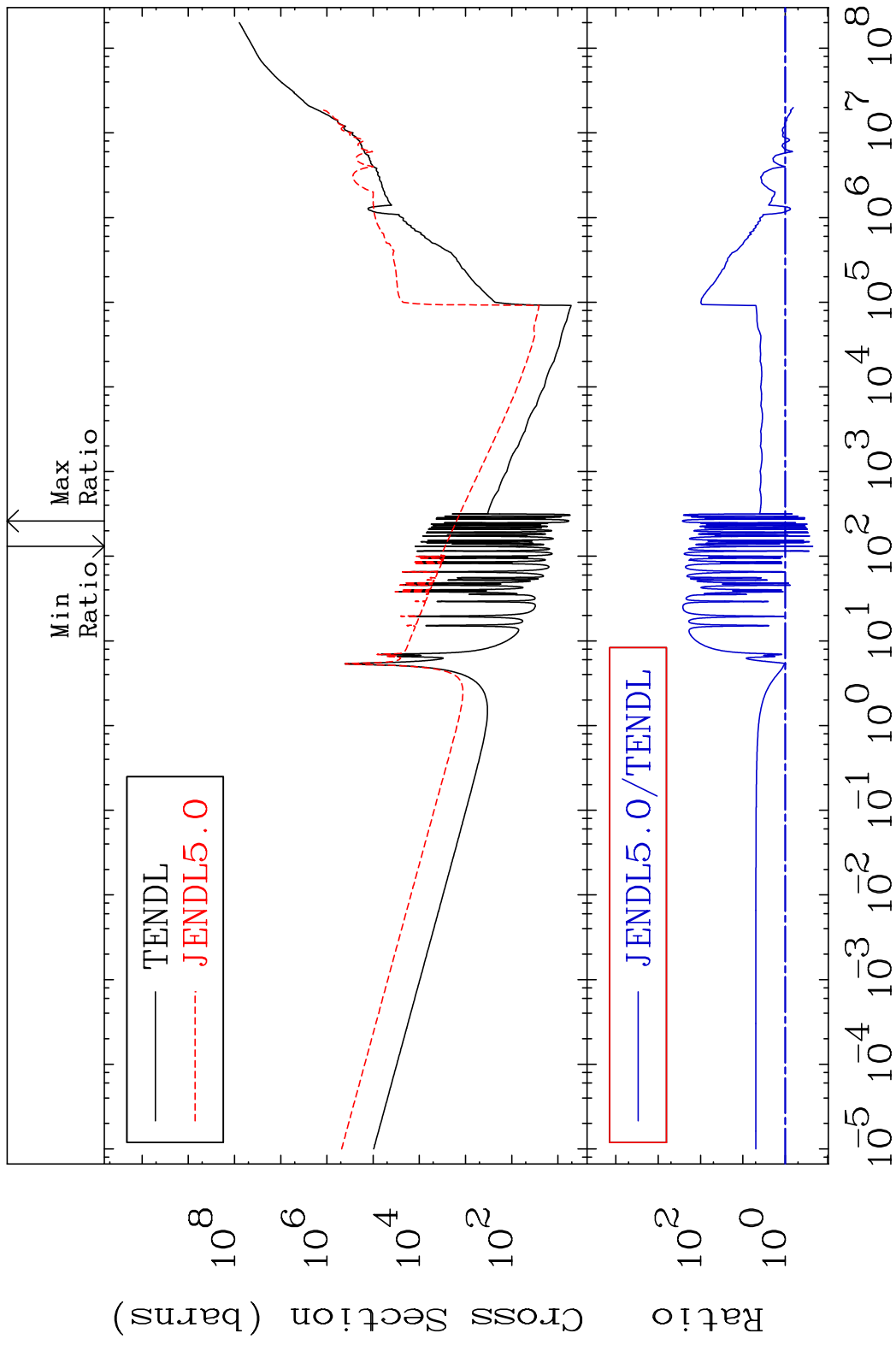
MAT 6149

Kerma elastic Cross Section -96.99 To 6003. %
61-Pm-147

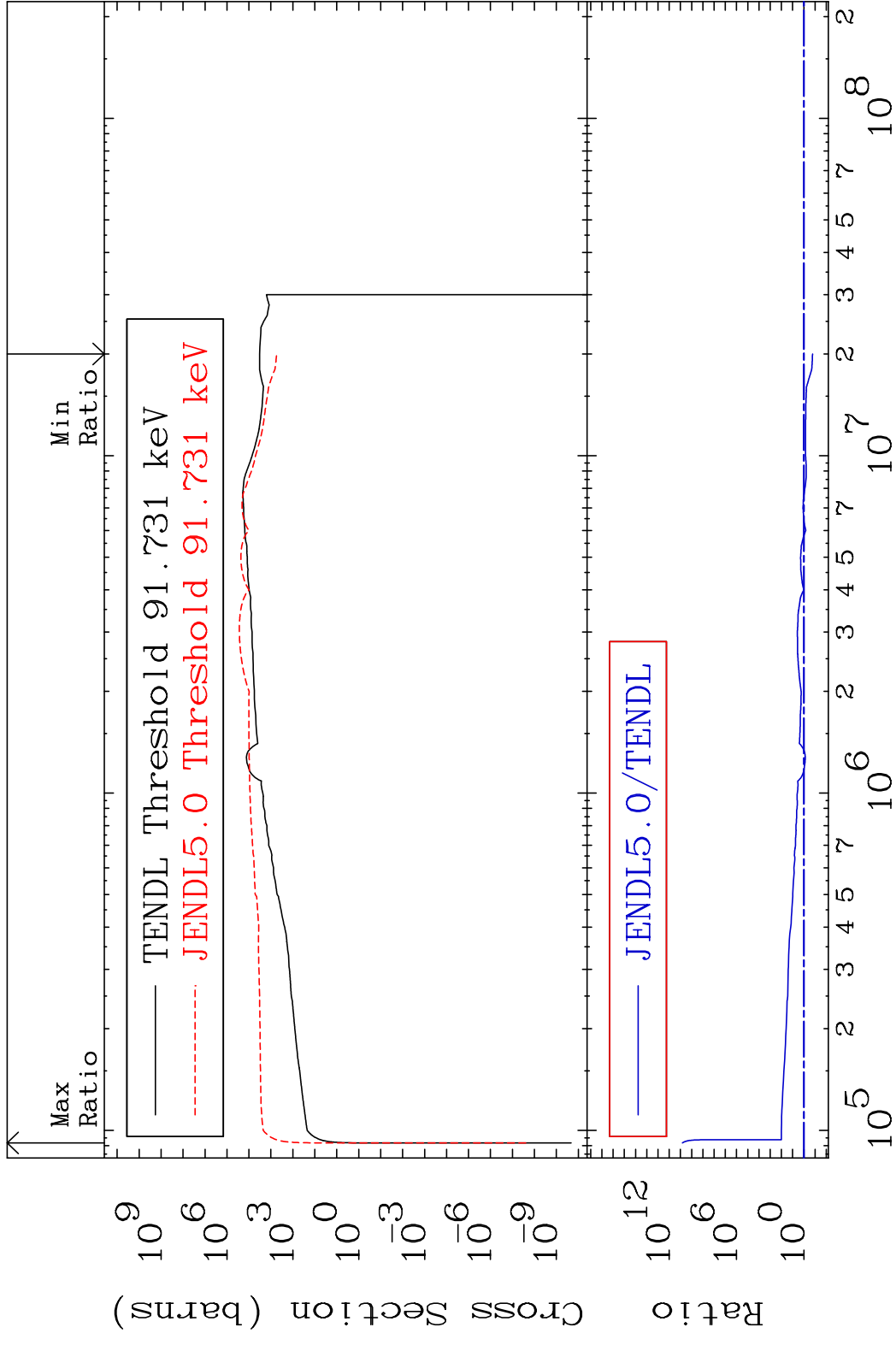


Ratio
 10^2
 10^0
 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8

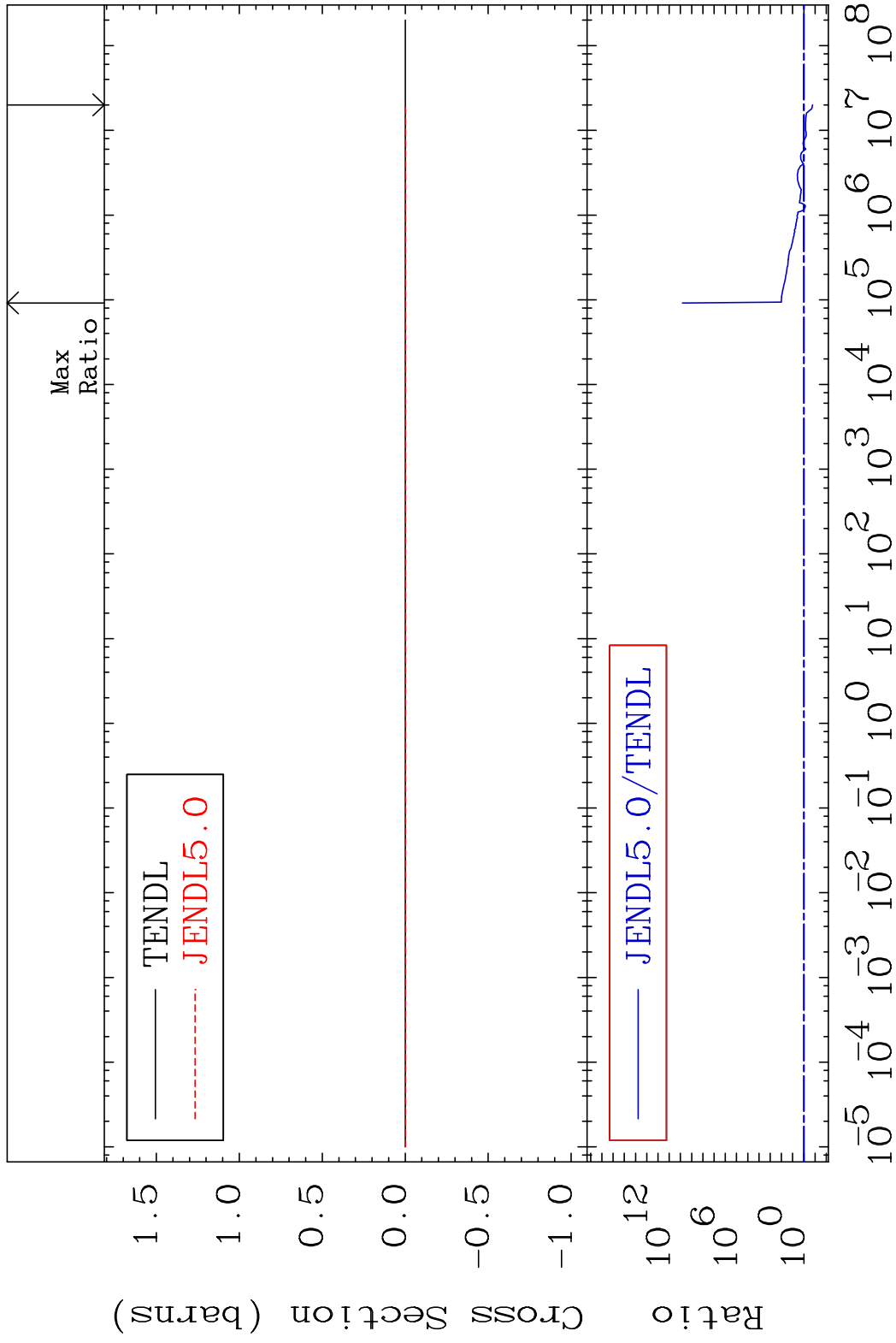
MAT 6149 Kerma non-elastic (all but mt2) 61-Pm-147
 Cross Section -77.32 To 9999. %



MAT 6149 Kerma inelastic (mt51-91) 61-Pm-147
 Cross Section -83.23 To 9999. %

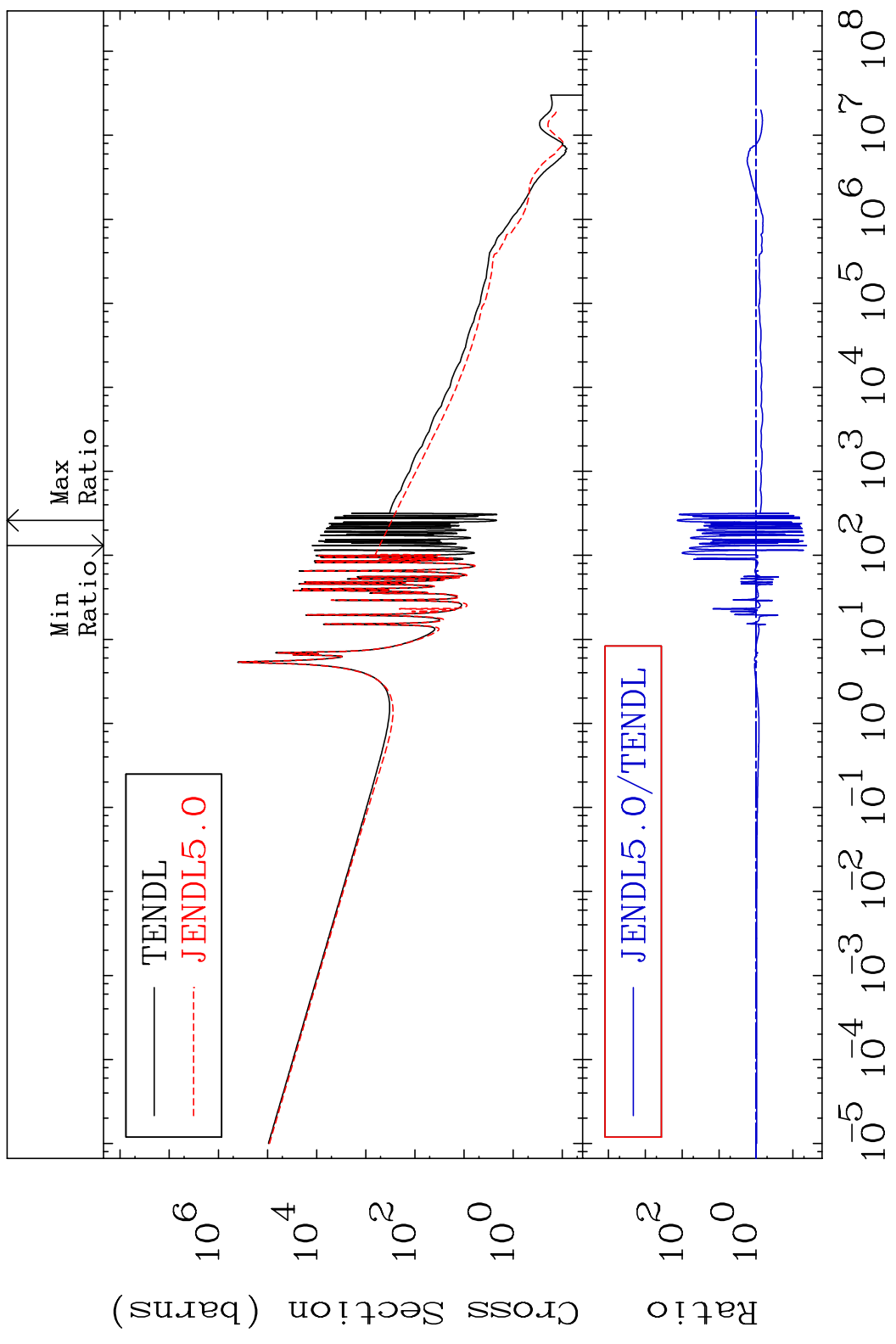


MAT 6149 Kerma fission (mt18 or mt19-20-21-38) 61-Pm-147
 Cross Section -83.23 To 9999. %

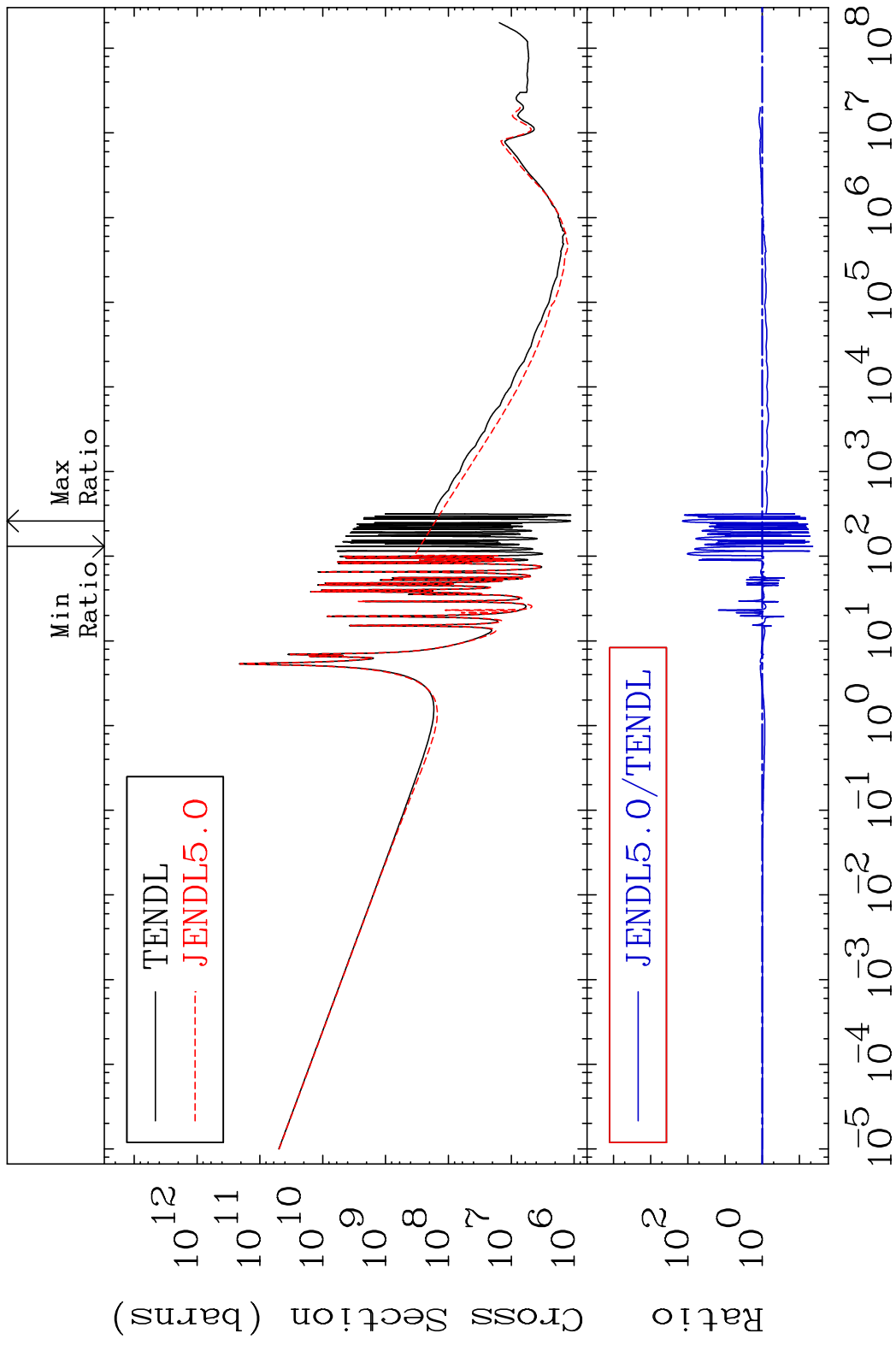


MAT 6149

Kerma capture (mt102) 61-Pm-147
Cross Section -95.71 To 9999. %

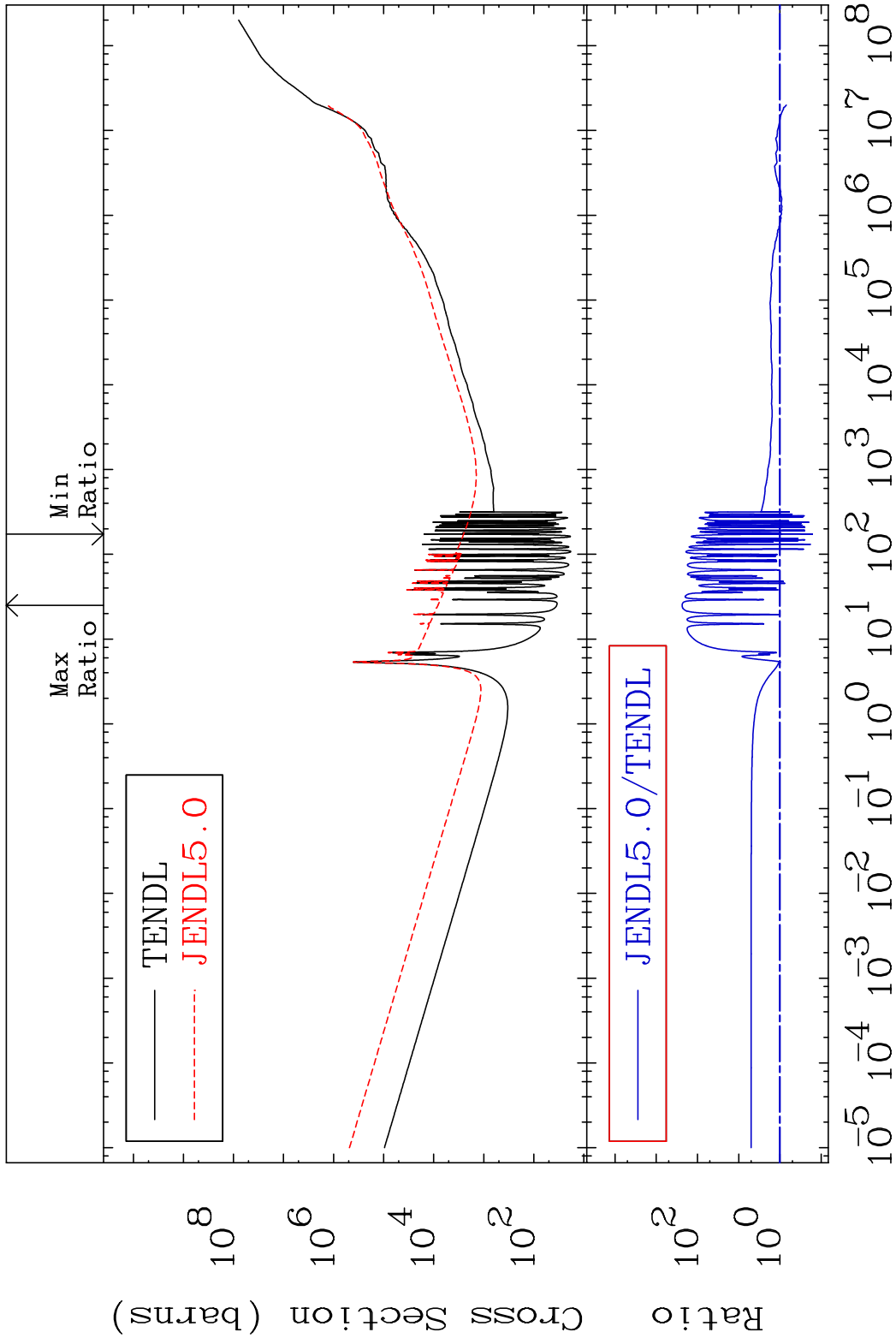


MAT 6149 Total photon (eV-barns) 61-Pm-147
Cross Section -95.55 To 9999. %



47 Incident Energy (eV) 61-Pm-147

MAT 6149 Total kinematic kerma (high limit) 61-Pm-147
 Cross Section -83.75 To 9999. %

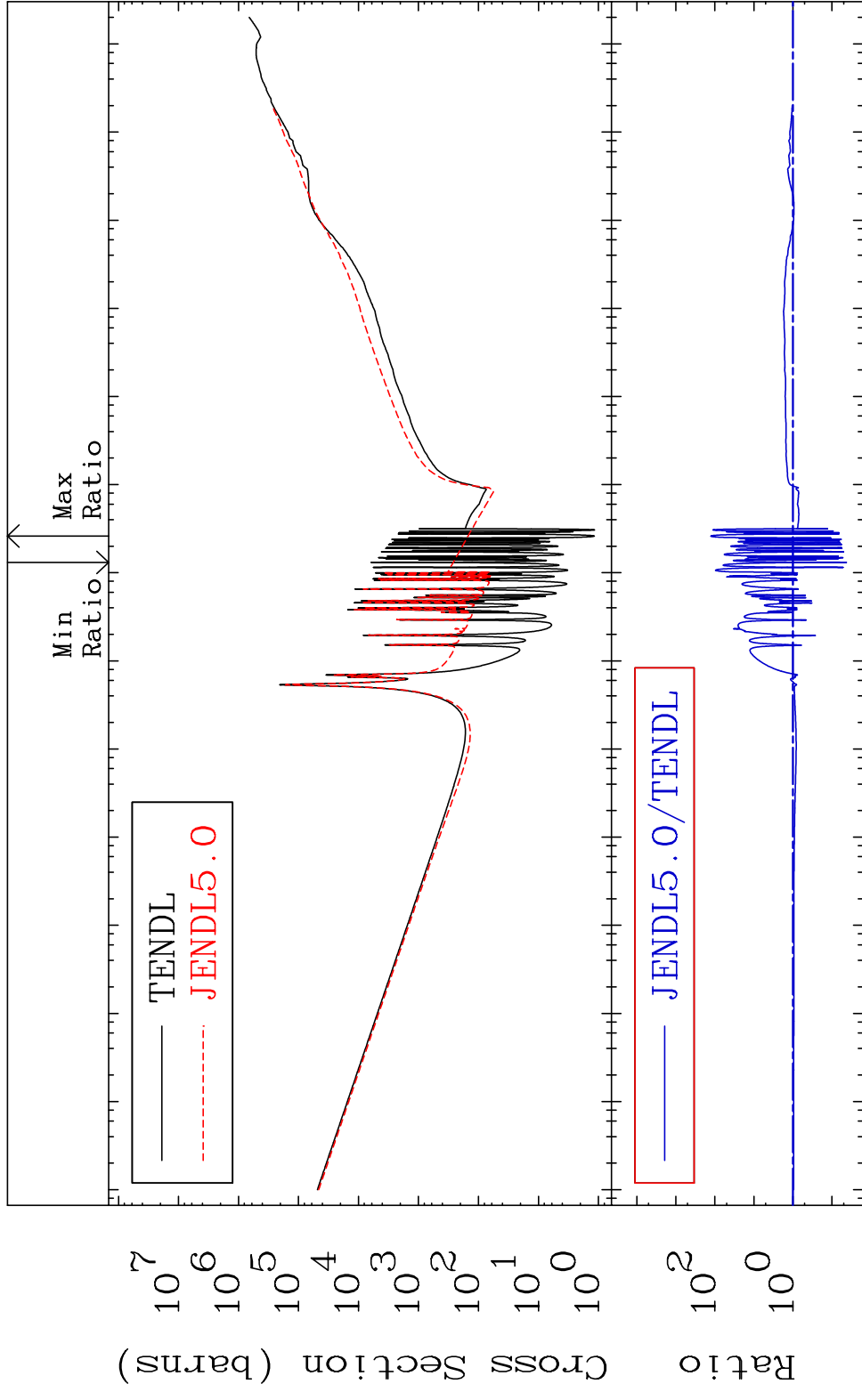


MAT 6149

Dpa total (eV-barns)

61-Pm-147

Cross Section -95.72 To 9999. %



49

Incident Energy (eV)

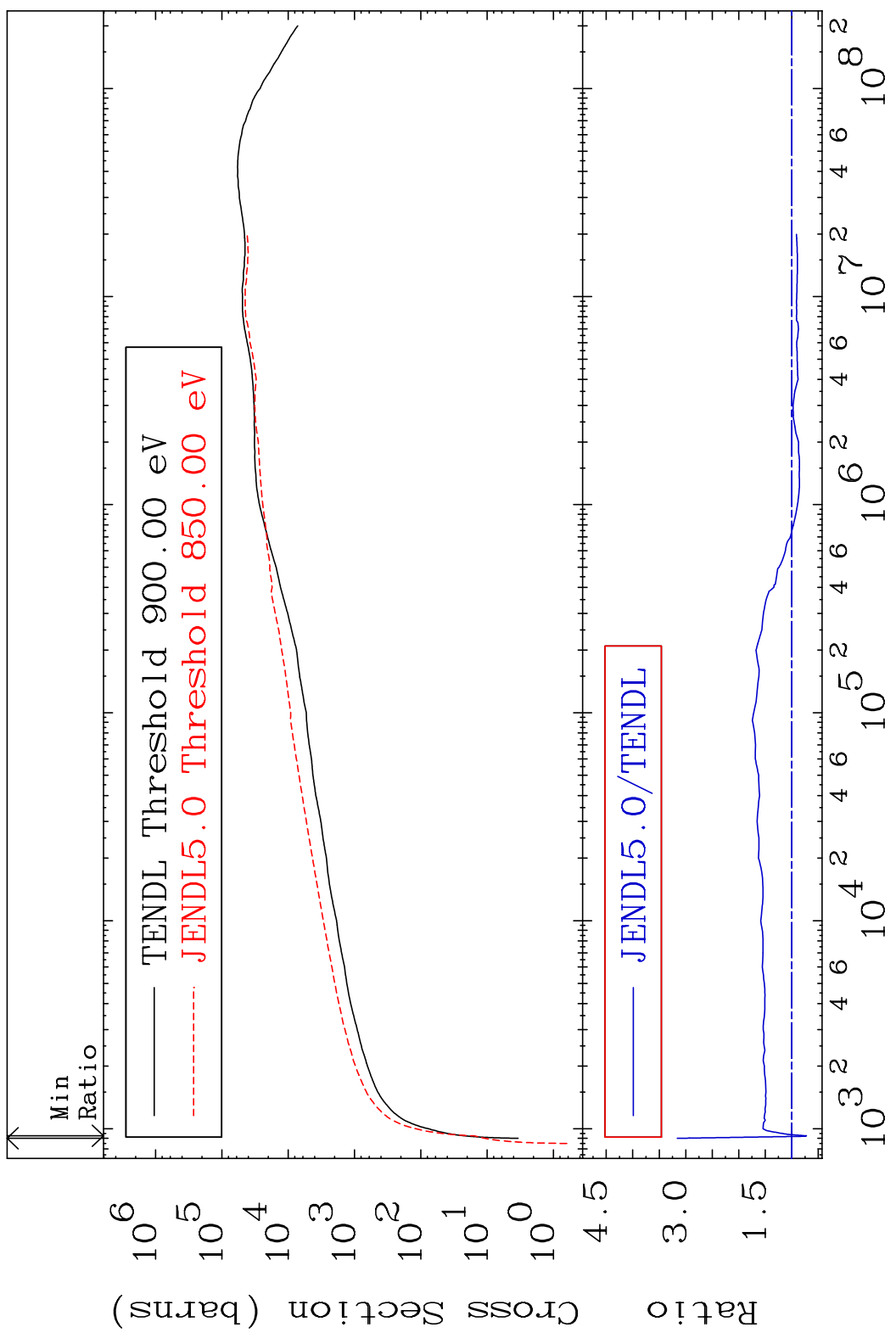
61-Pm-147

MAT 6149

Dpa elastic (mt2)

61-Pm-147

Cross Section -27.65 To 216.1 %

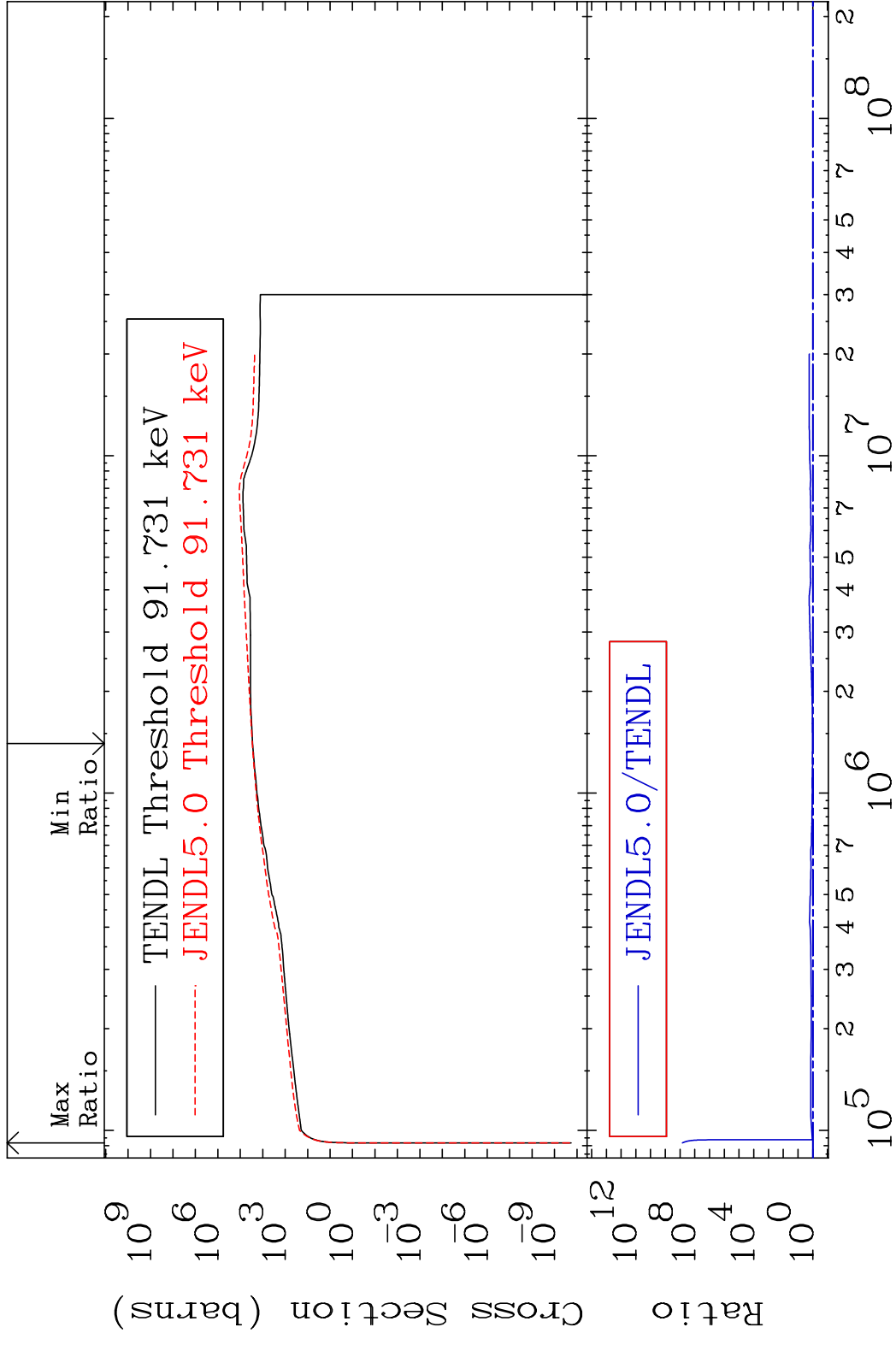


50

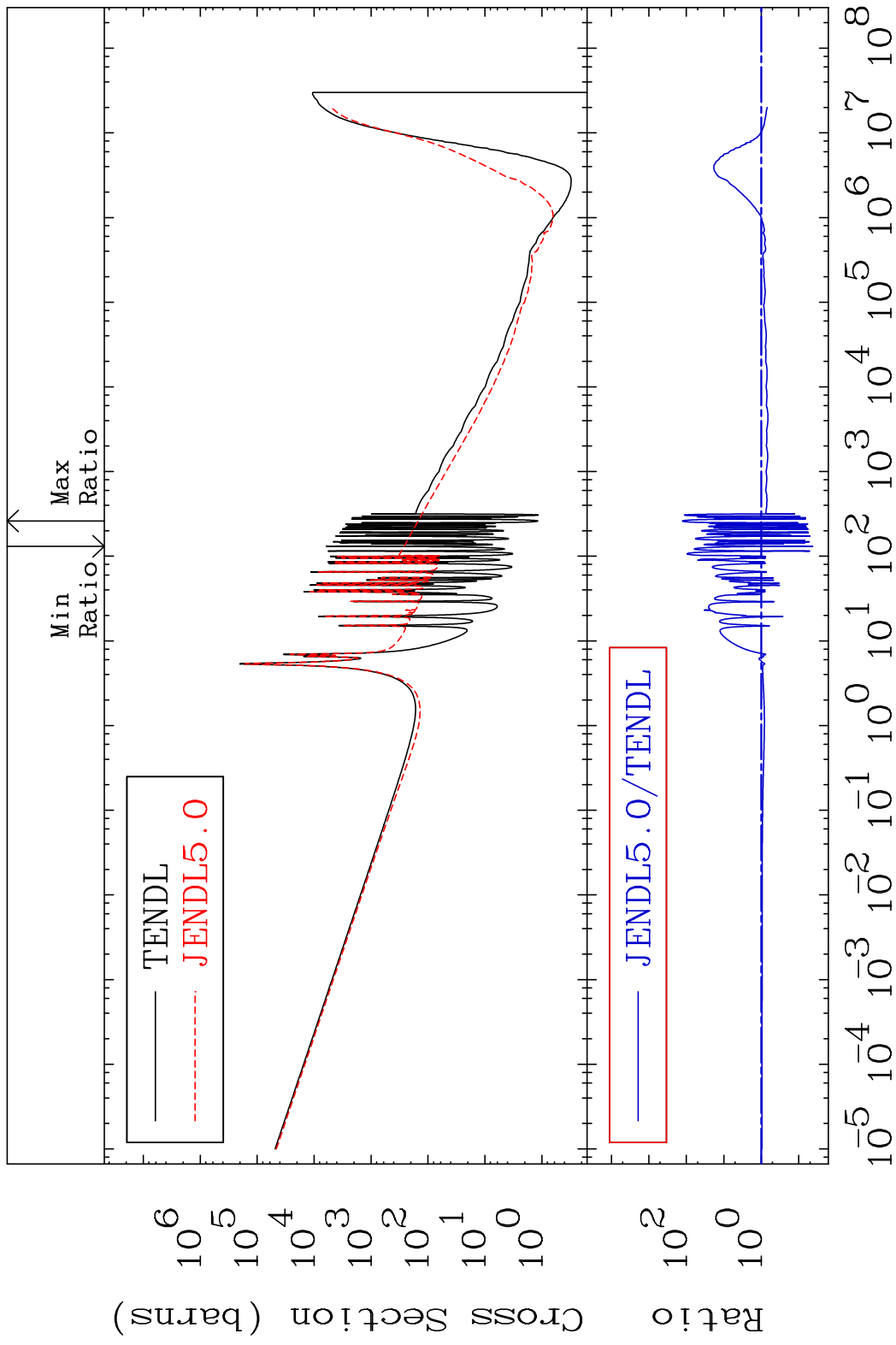
Incident Energy (eV)

61-Pm-147

MAT 6149 Dpa inelastic (mt51-91) 61-Pm-147
 Cross Section 3.039 To 9999. %



MAT 6149 Dpa disappearance (mt102 -120) 61-Pm-147
 Cross Section -95.72 To 9999. %

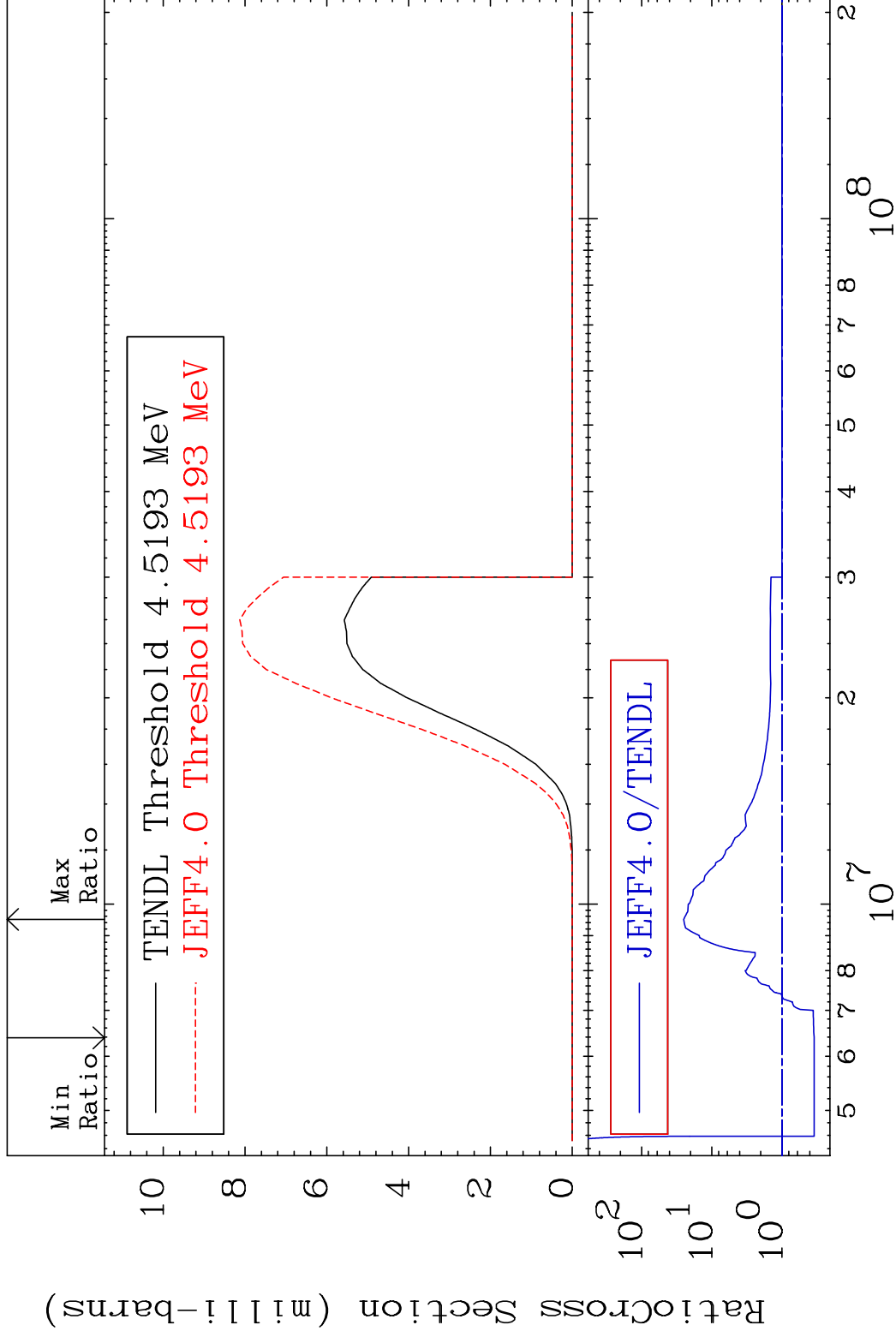


MAT 6149

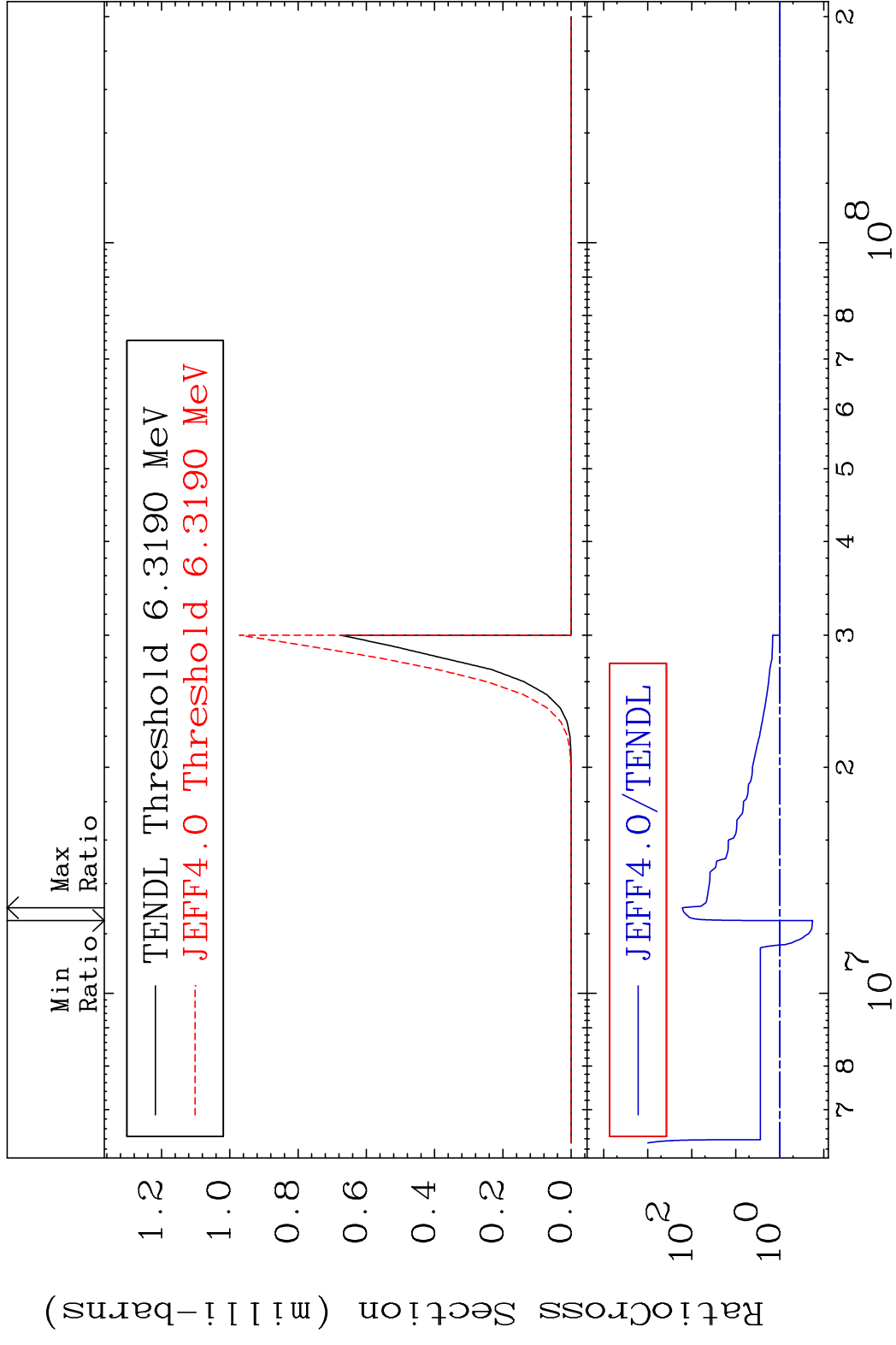
(n, t)

61-Pm-147

Cross Section -65.24 To 2413. %



MAT 6149 (n, He-3) 61-Pm-147
 Cross Section -82.06 To 9999. %

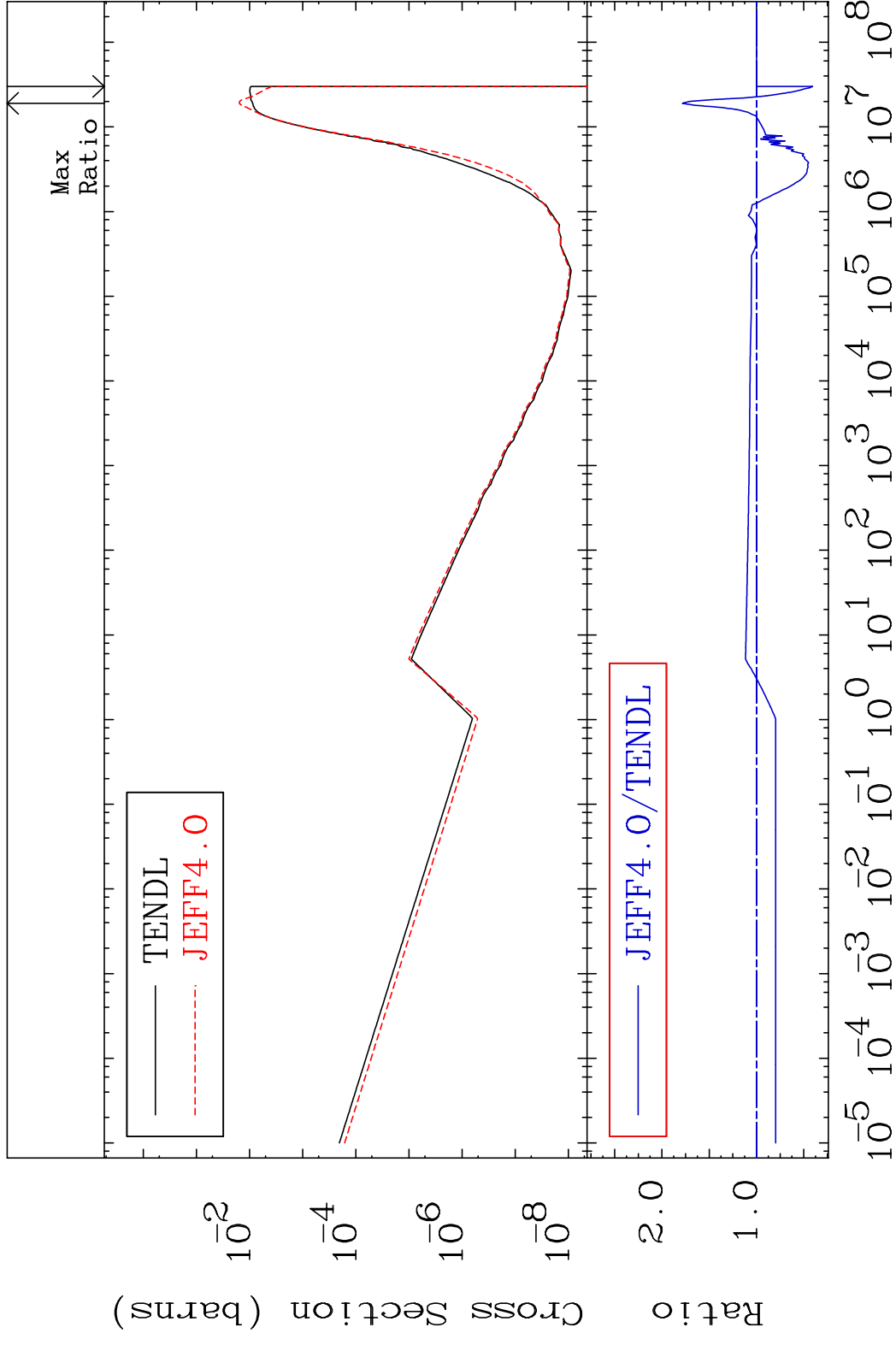


MAT 6149

(n, α)

61-Pm-147

Cross Section -59.28 To 78.41 %

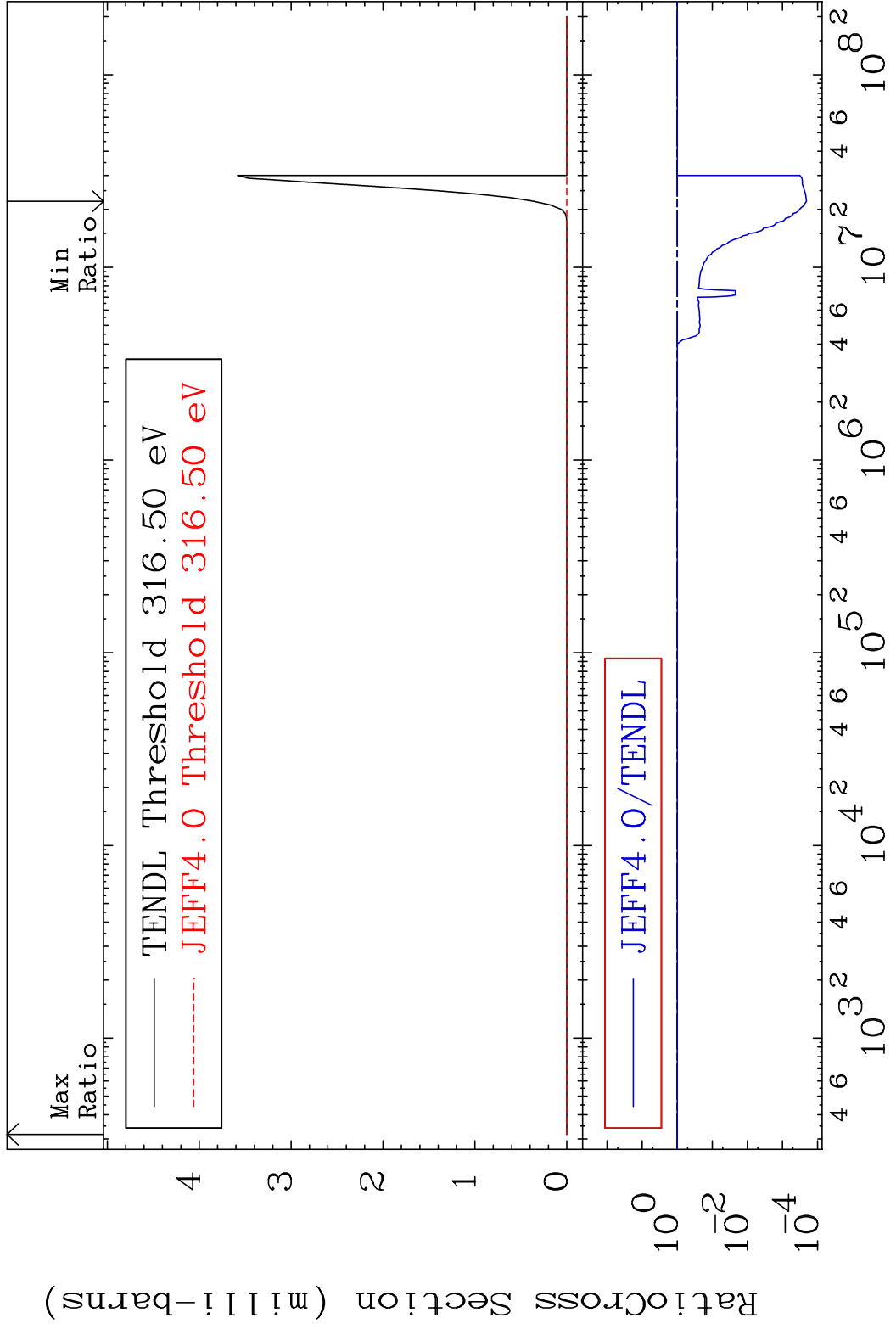


55

Incident Energy (eV)

61-Pm-147

MAT 6149 (n,2α) 61-Pm-147
 Cross Section -99.98 To 0.000 %

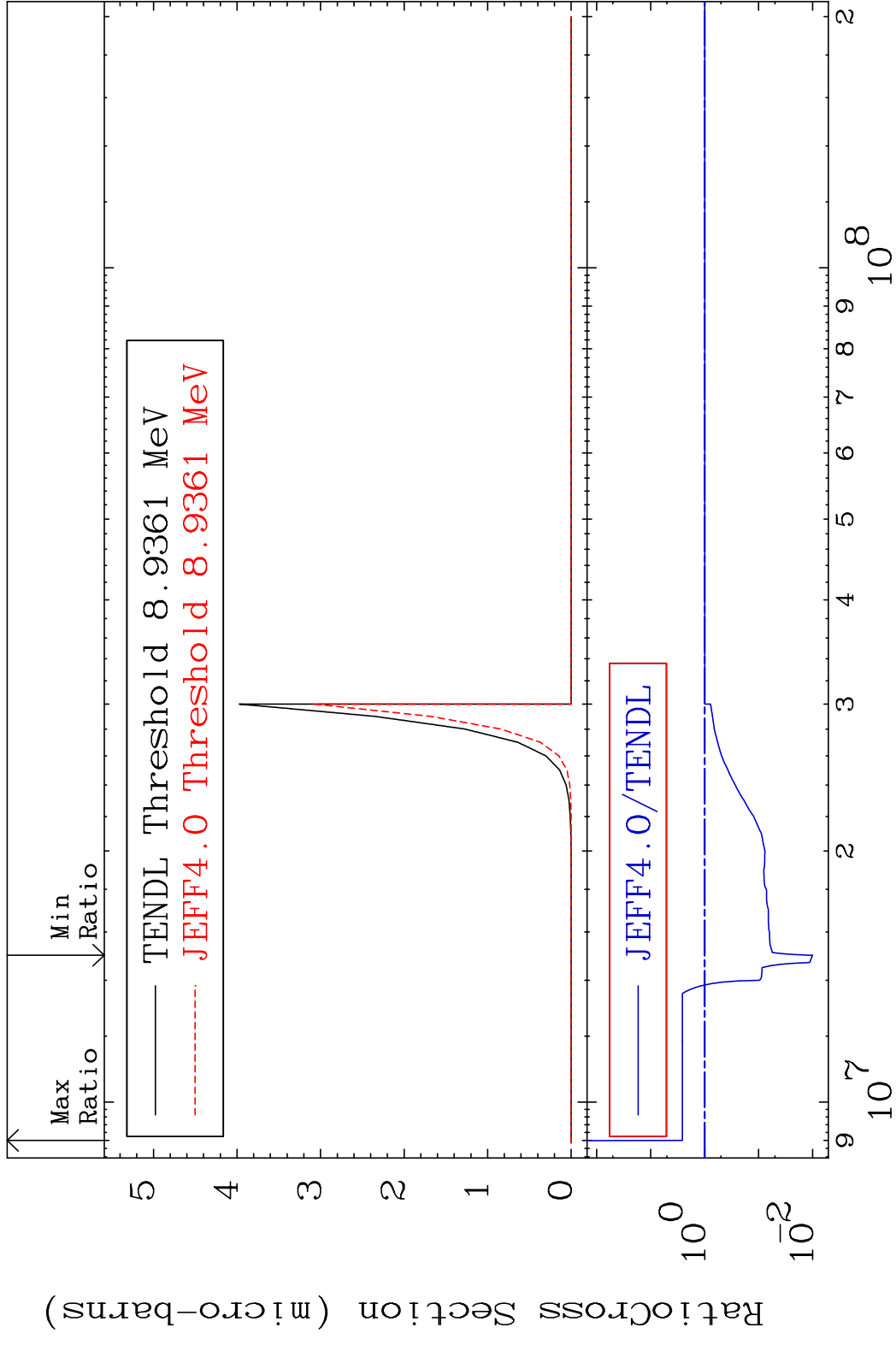


MAT 6149

(n,2p)

61-Pm-147

Cross Section -99.00 To 158.5 %

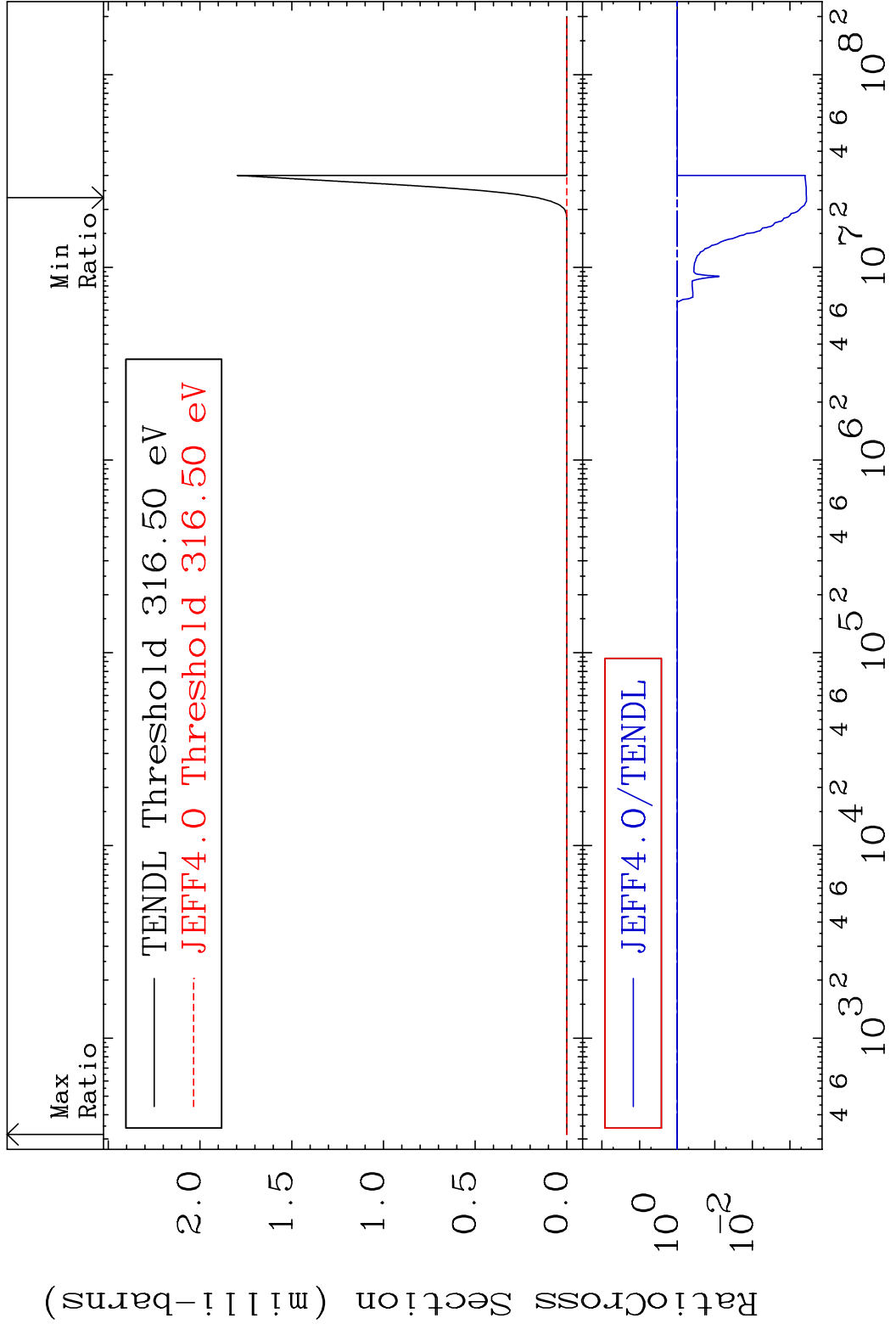


57

Incident Energy (eV)

61-Pm-147

MAT 6149 (n,p) α 61-Pm-147
 Cross Section -99.96 To 0.000 %

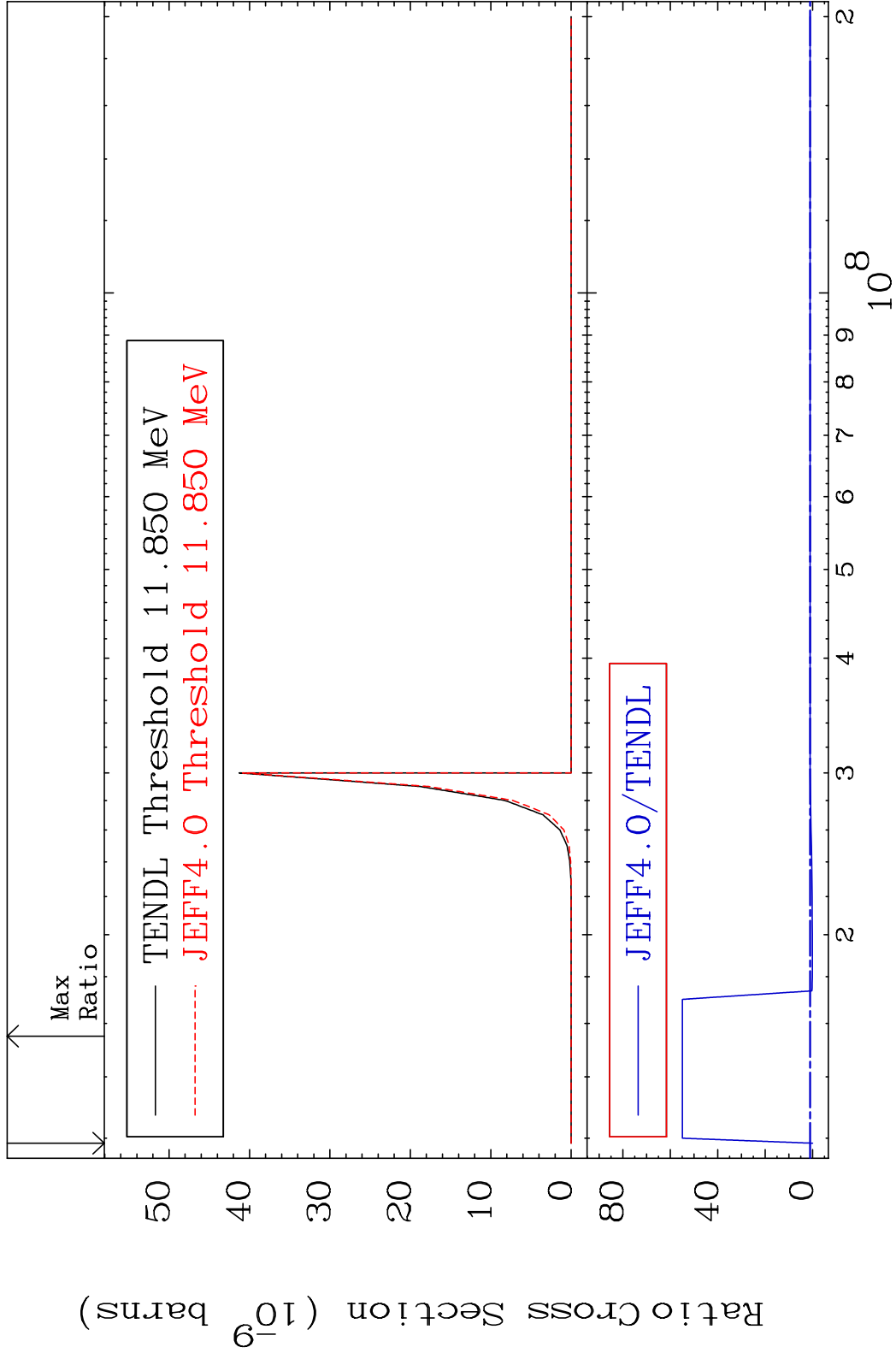


MAT 6149

(n,p) d

61-Pm-147

Cross Section -100.0 To 5391. %

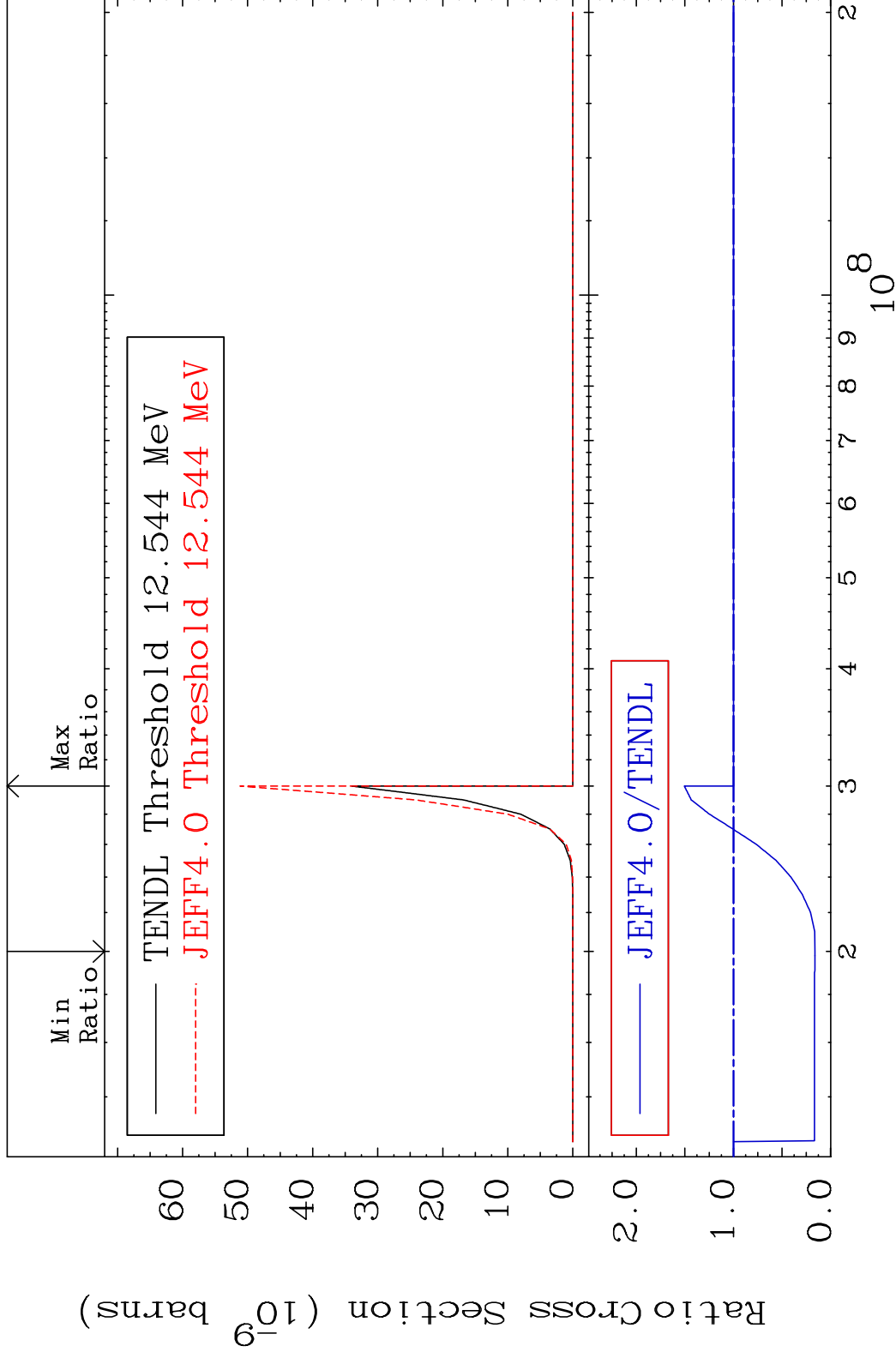


MAT 6149

(n,p) t

61-Pm-147

Cross Section -83.83 To 50.60 %

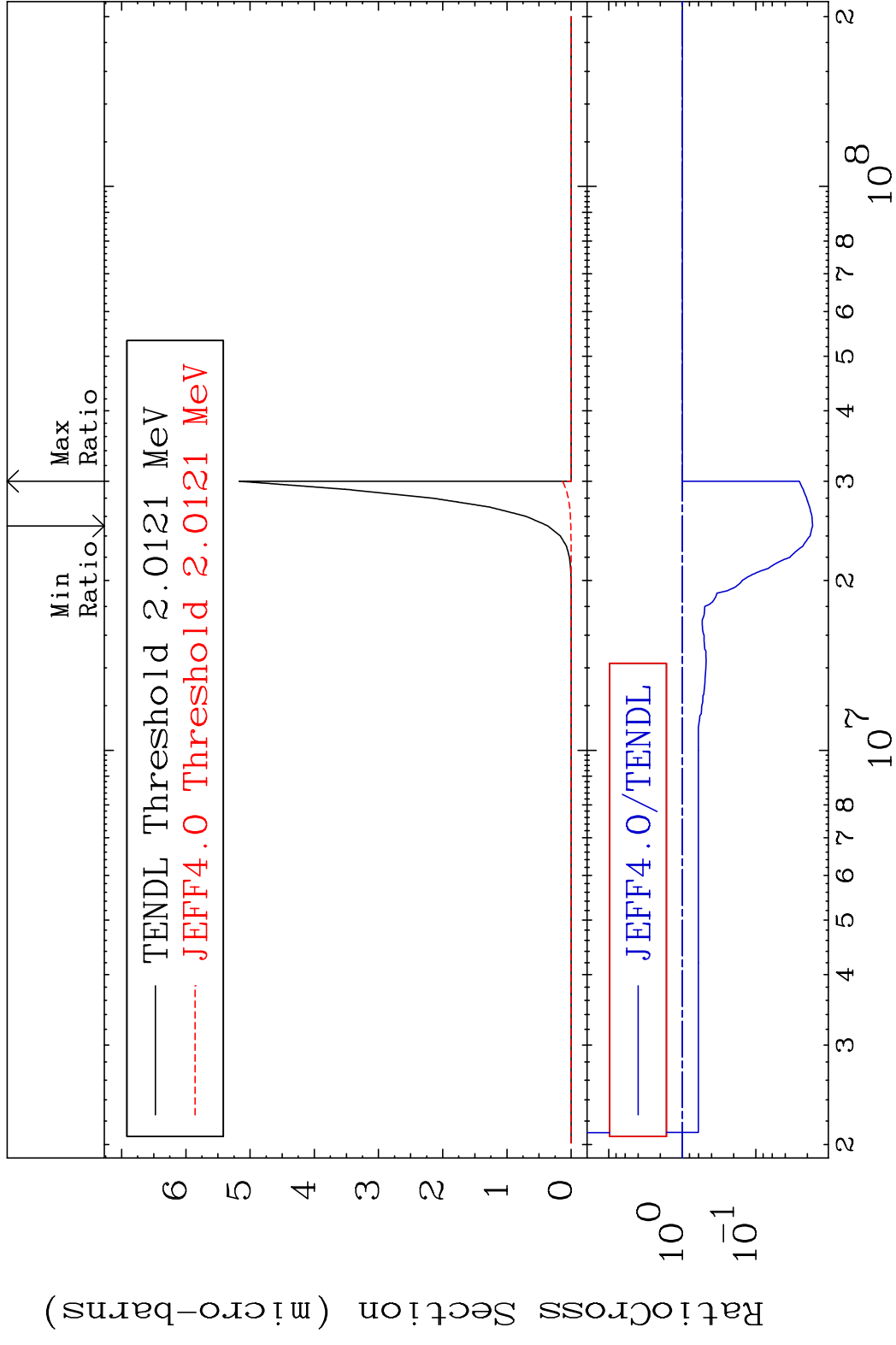


60

Incident Energy (eV)

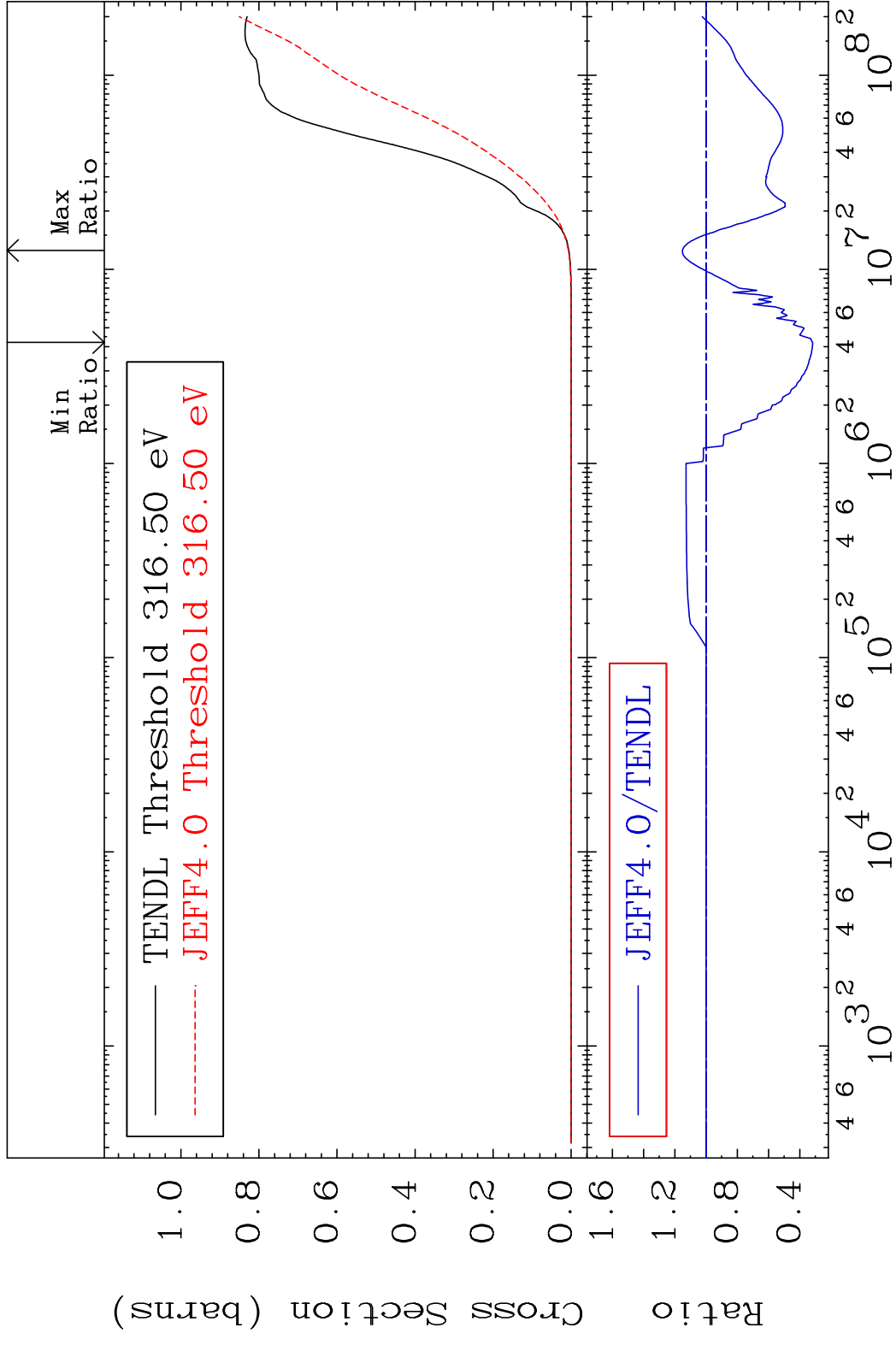
61-Pm-147

MAT 6149 (n,d) α 61-Pm-147
 Cross Section -98.30 To 0.000 %



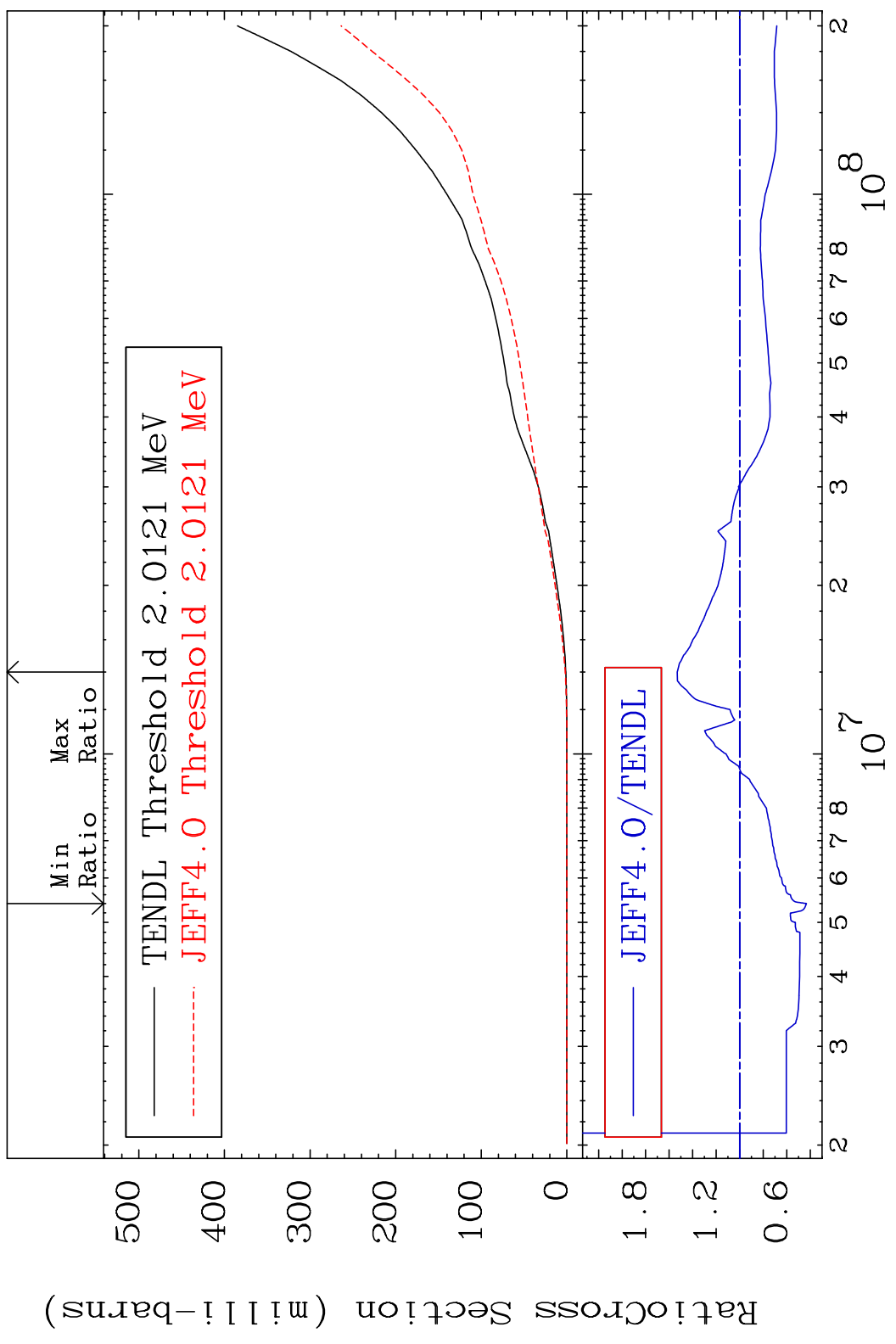
61 Incident Energy (eV) 61-Pm-147

MAT 6149 Hydrogen Production 61-Pm-147
 Cross Section -68.21 To 15.16 %



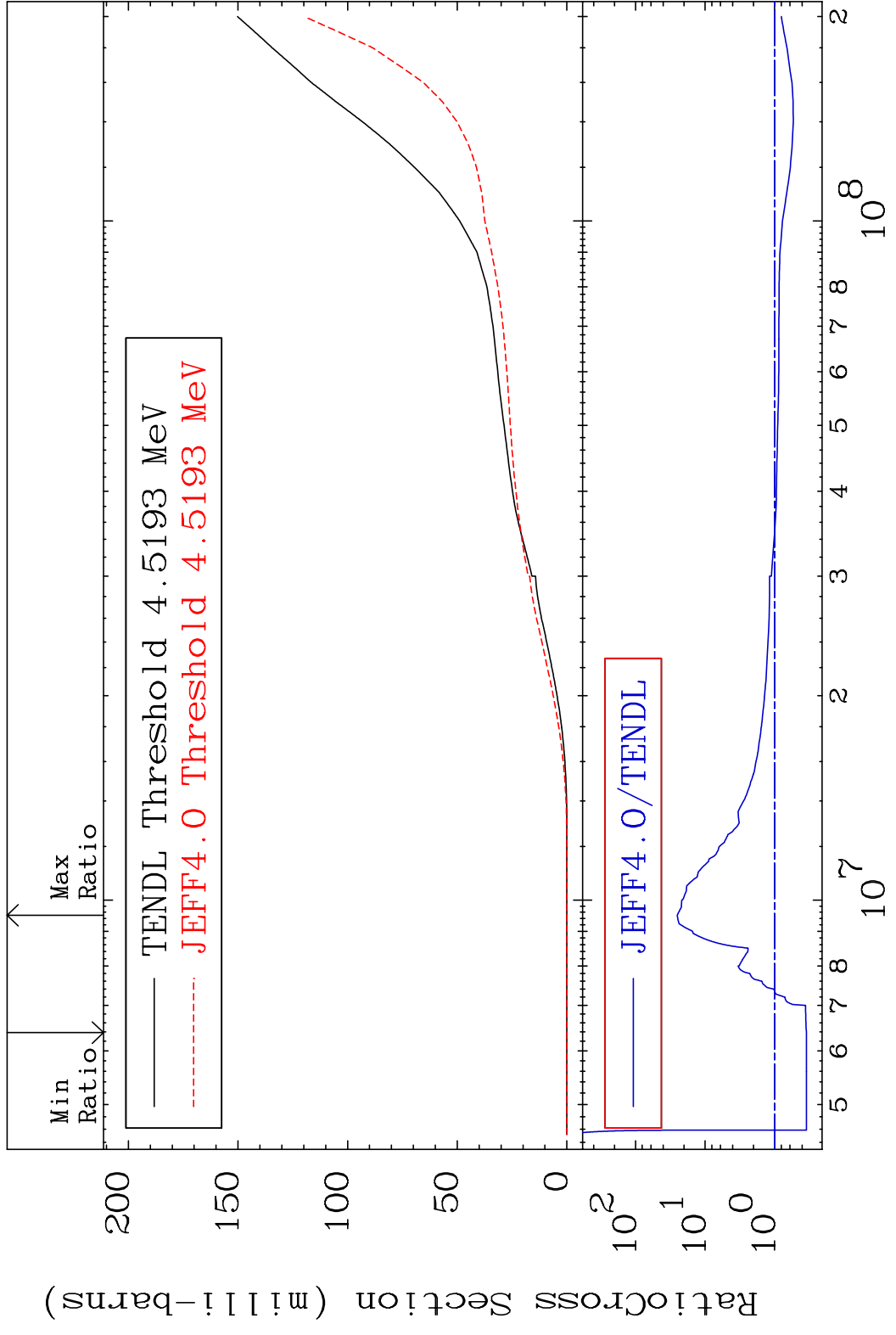
MAT 6149

Deuterium Production 61-Pm-147
Cross Section -56.67 To 53.18 %



63

61-Pm-147

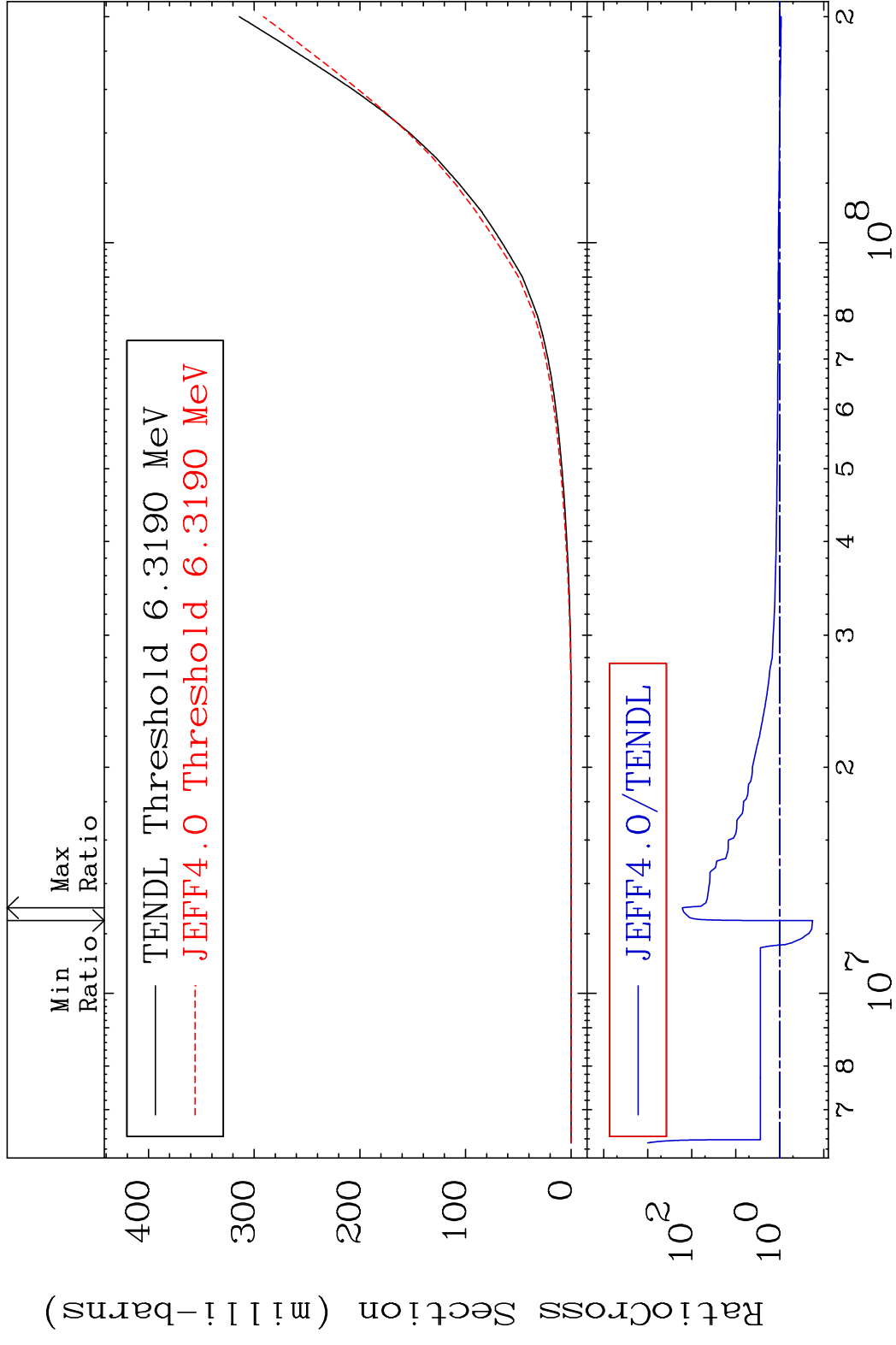


MAT 6149

He-3 Production

61-Pm-147

Cross Section -82.06 To 9999. %



65

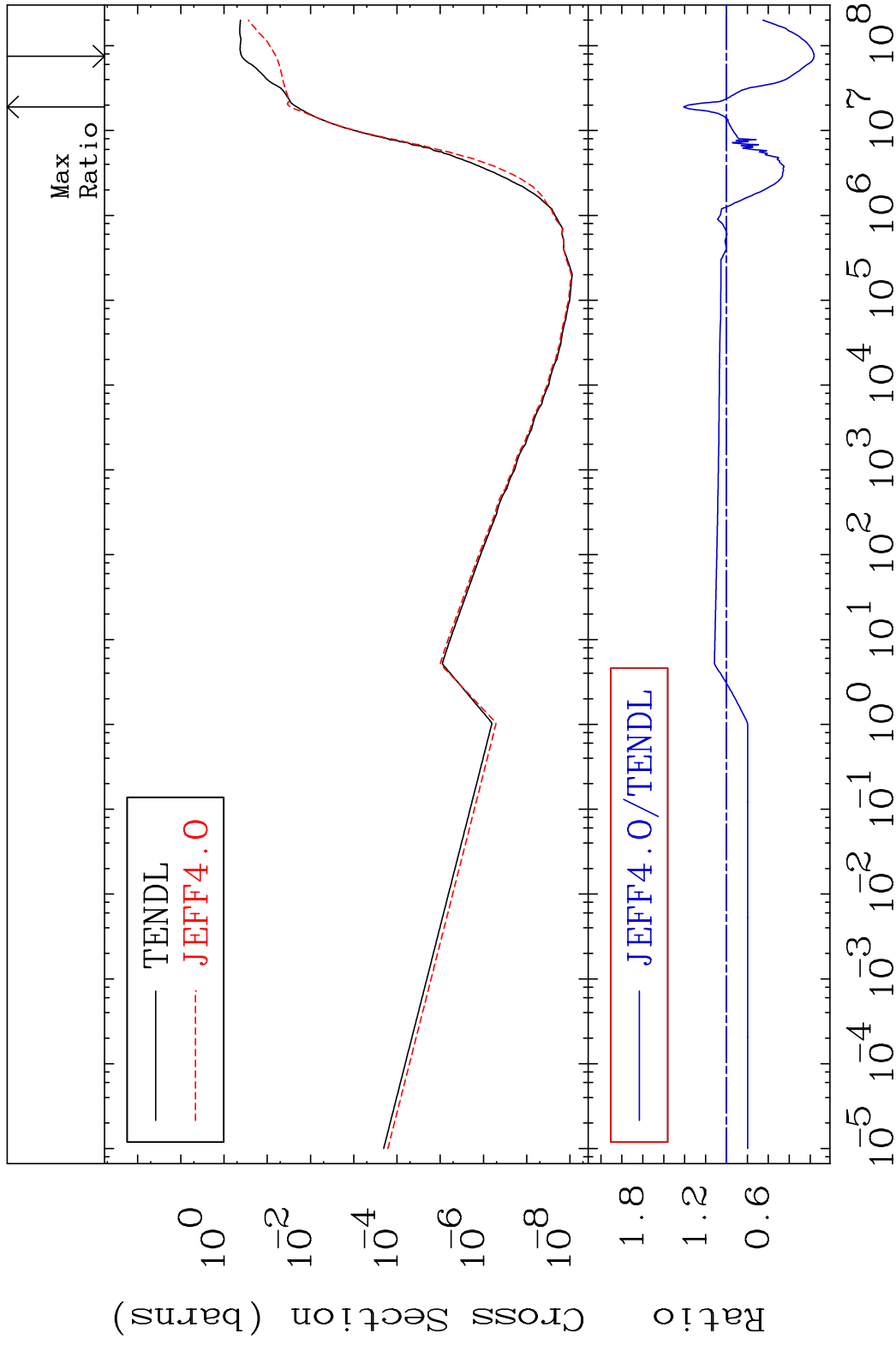
61-Pm-147

MAT 6149

He-4 Production

61-Pm-147

Cross Section -83.74 To 40.94 %

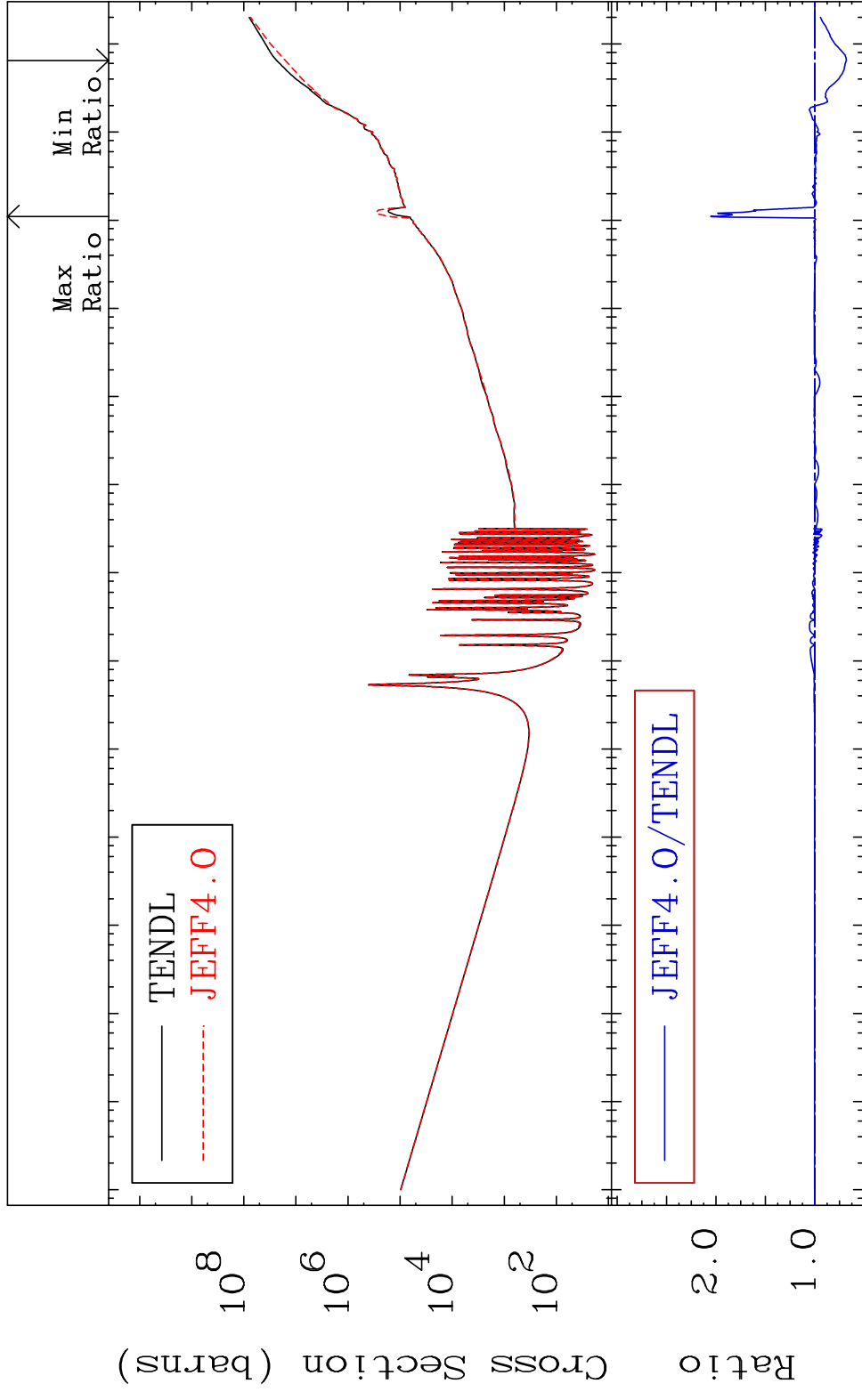


66

Incident Energy (eV)

61-Pm-147

MAT 6149 Kerma total (eV-barns) 61-Pm-147
 Cross Section -31.91 To 105.3 %



10⁸
 10⁶
 10⁴
 10²
 Cross Section (barns)

Ratio

2.0
 1.0

10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸
 Incident Energy (eV)

67 61-Pm-147

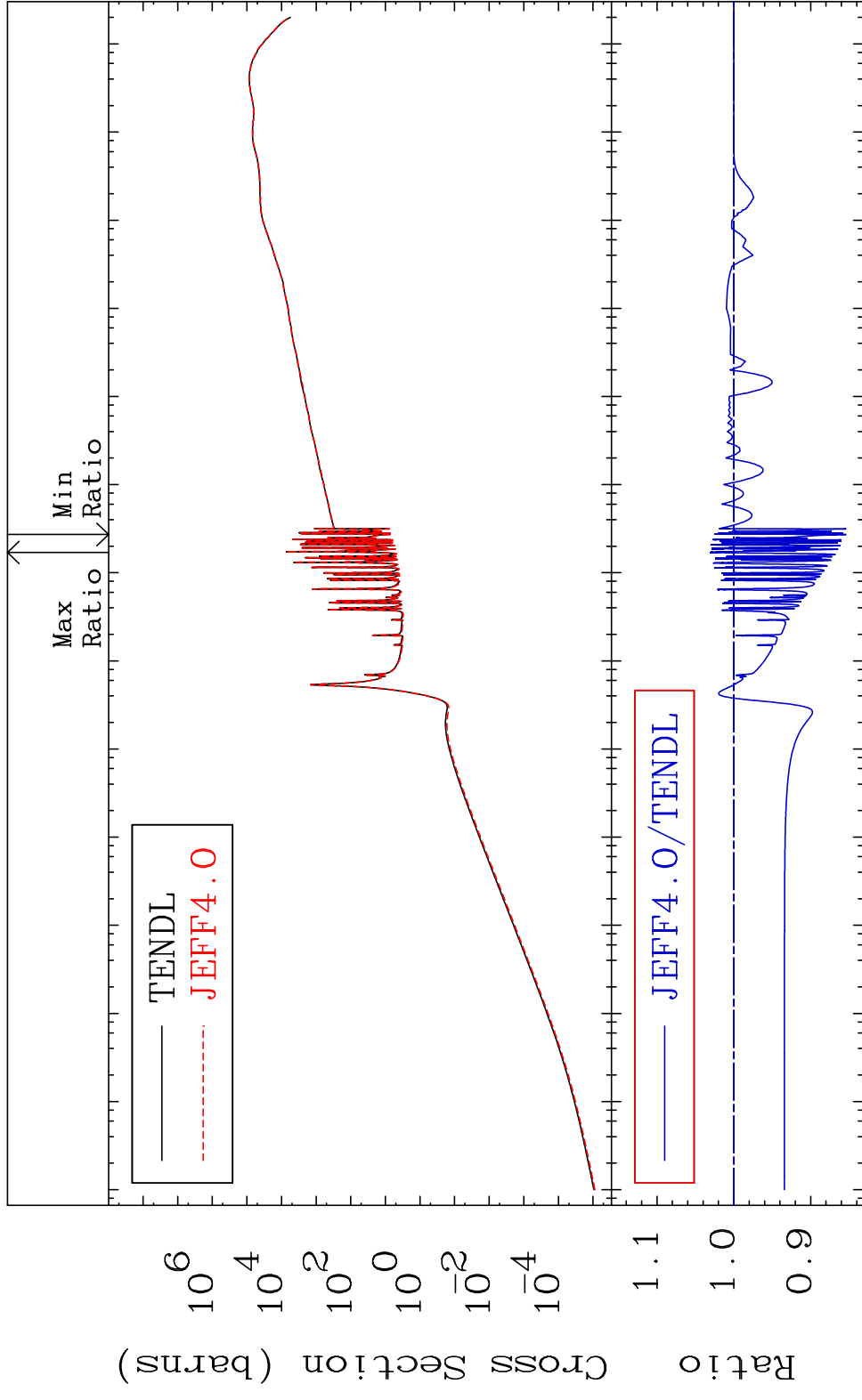
MAT 6149

Kerma elastic

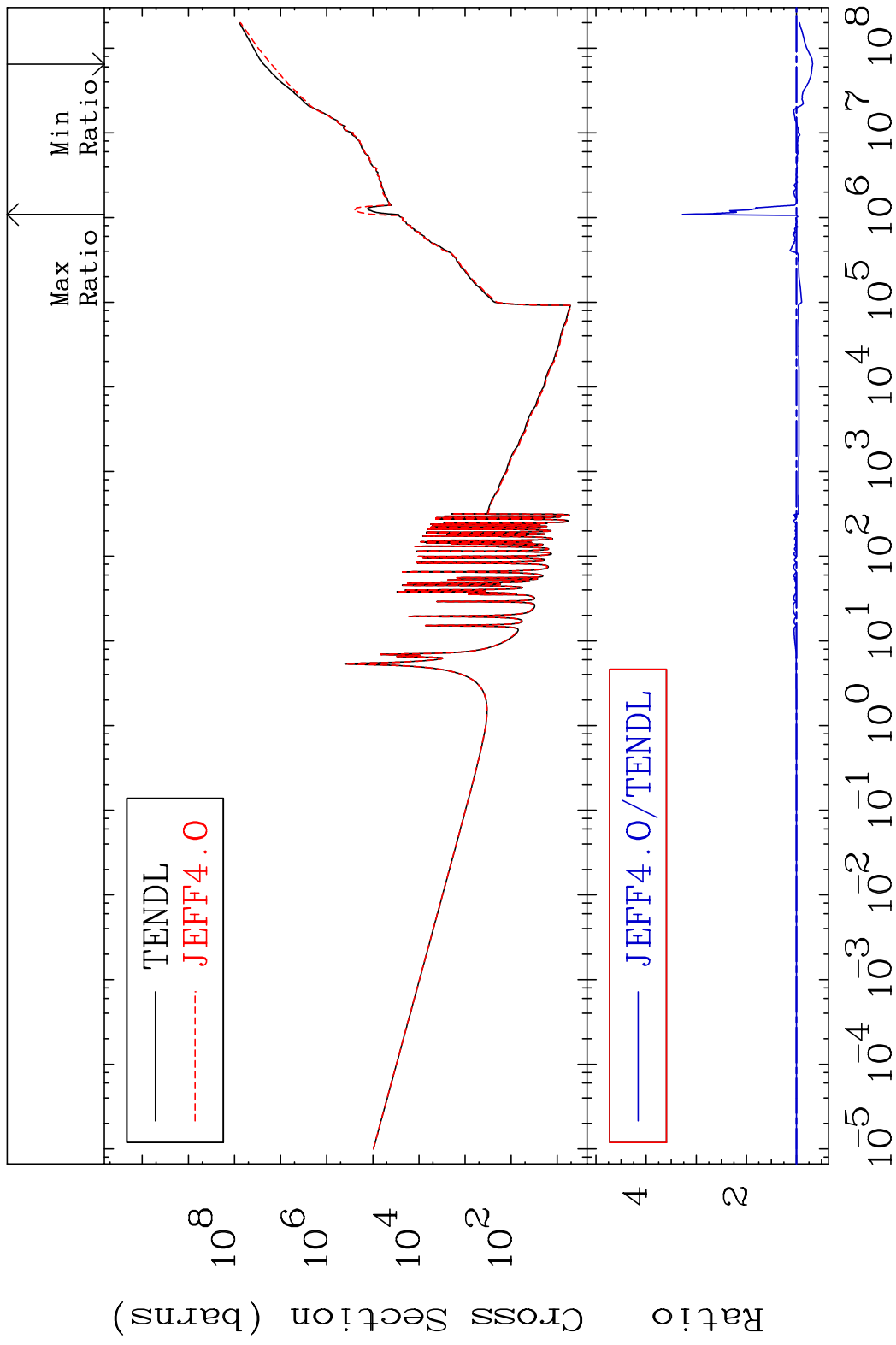
61-Pm-147

Cross Section

-14.64 To 3.007 %

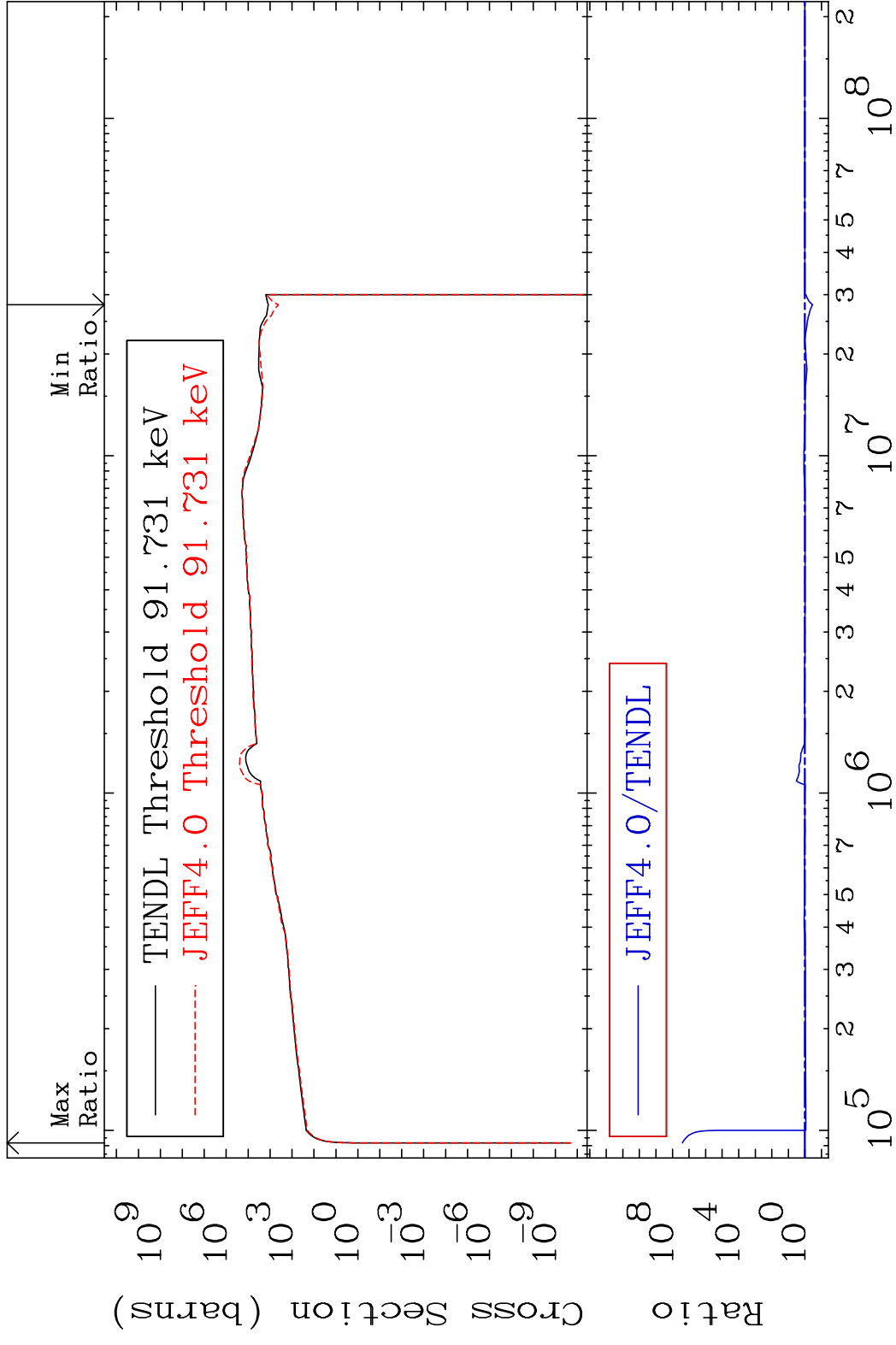


MAT 6149 Kerma non-elastic (all but mt2) 61-Pm-147
 Cross Section -32.01 To 227.6 %

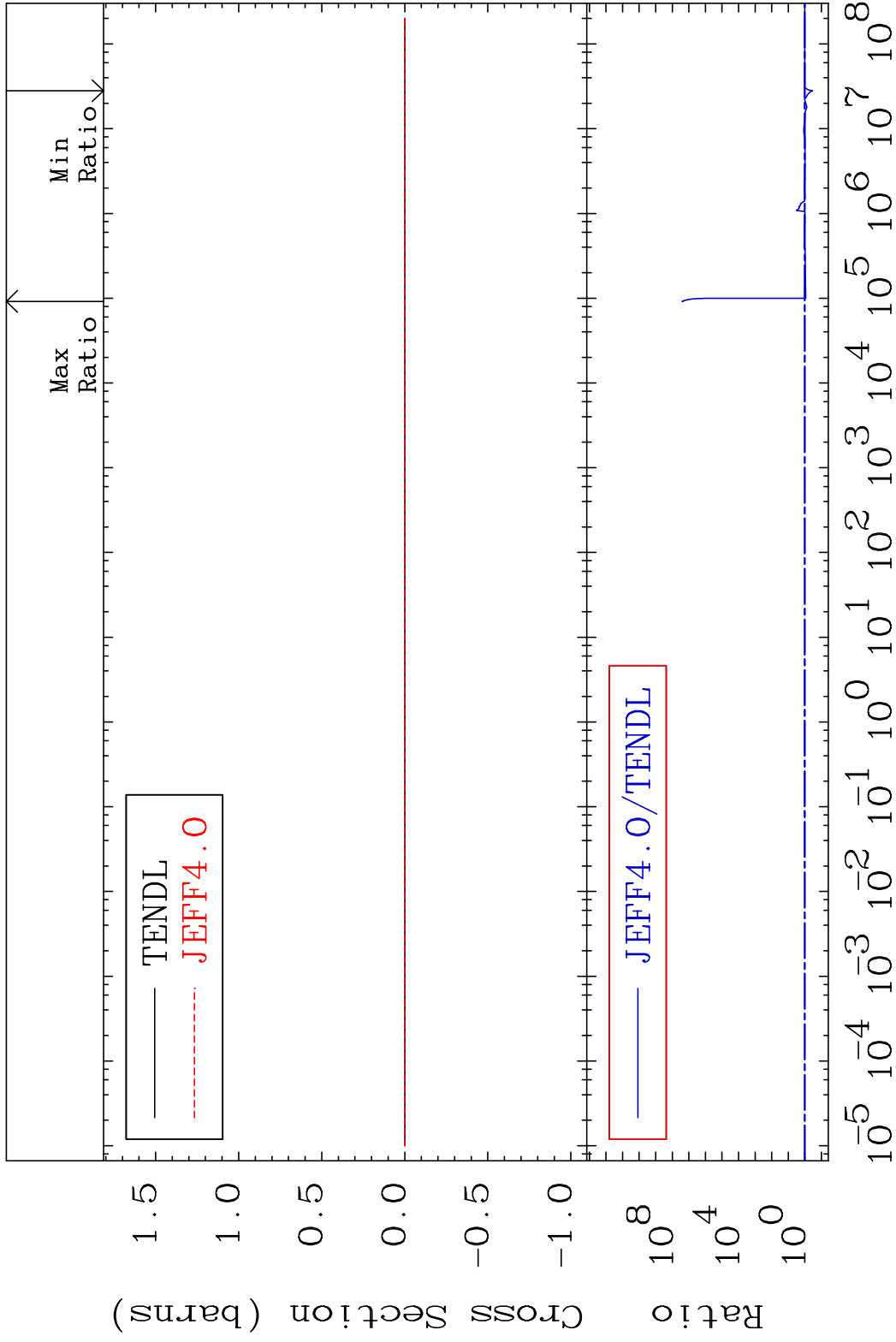


69 Incident Energy (eV) 61-Pm-147

MAT 6149 Kerma inelastic (mt51-91) 61-Pm-147
 Cross Section -65.32 To 9999. %

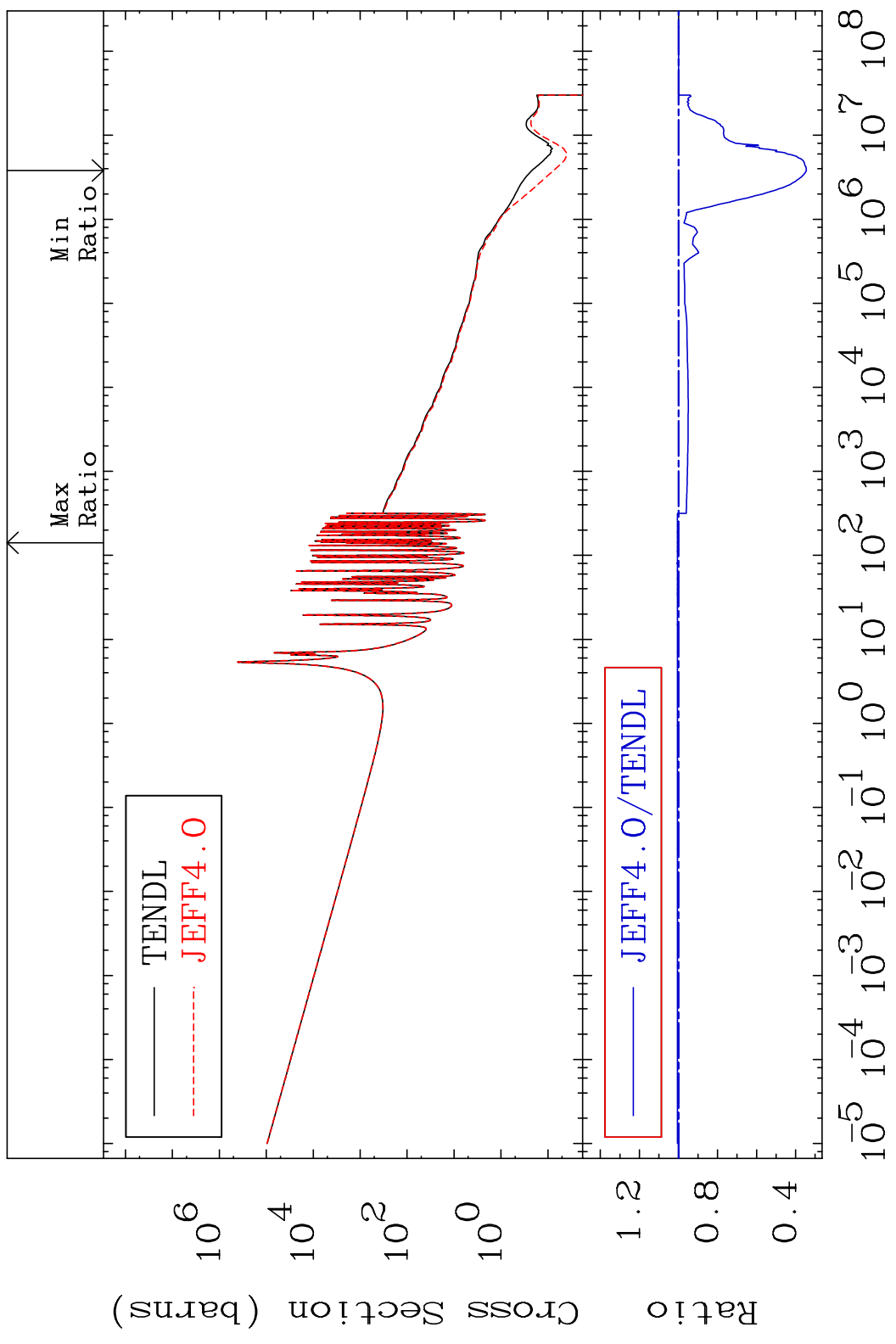


MAT 6149 Kerma fission (mt18 or mt19-20-21-38) 61-Pm-147
 Cross Section -65.32 To 9999. %



MAT 6149

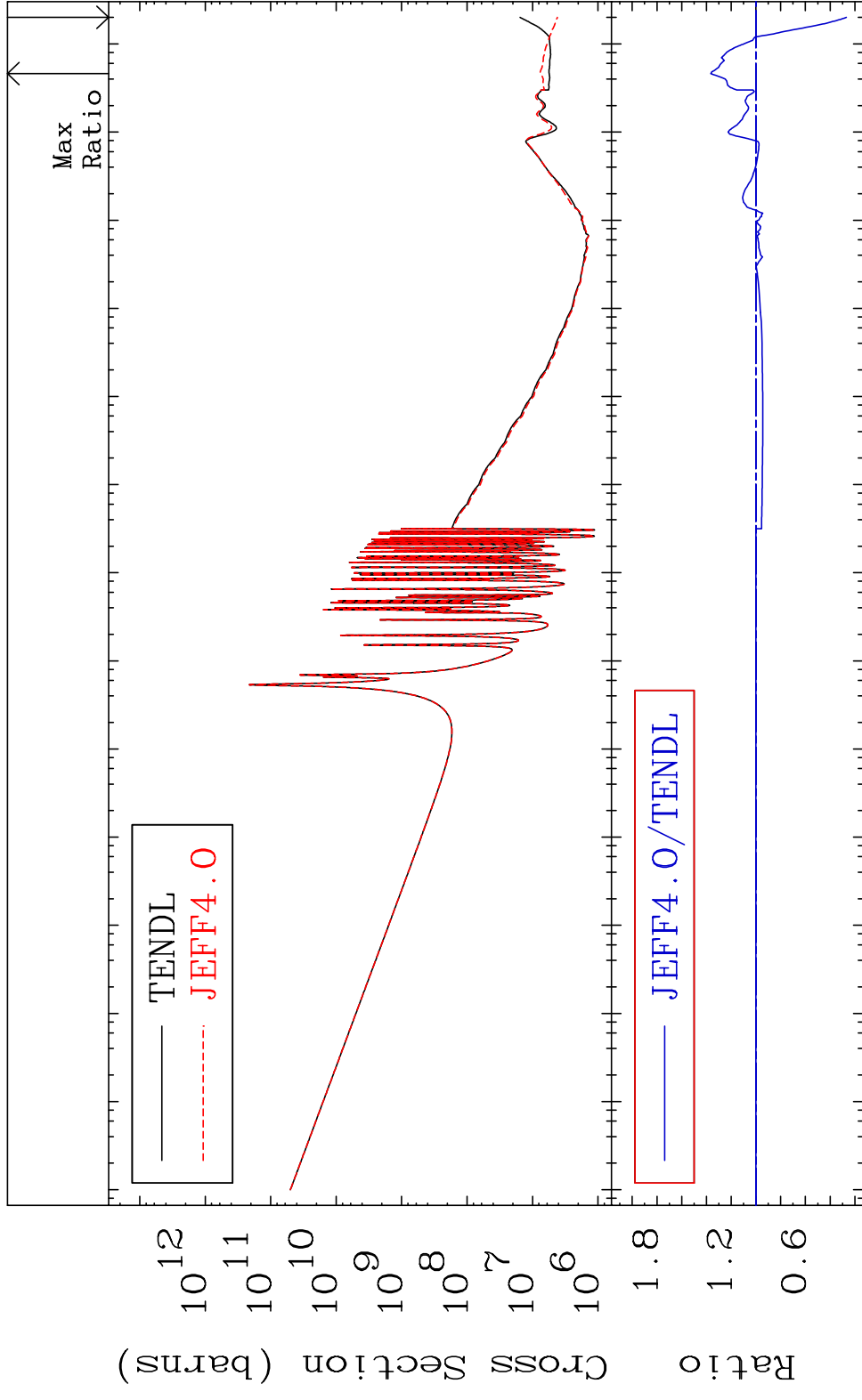
Kerma capture (mt102) 61-Pm-147
Cross Section -65.52 To 0.661 %



72

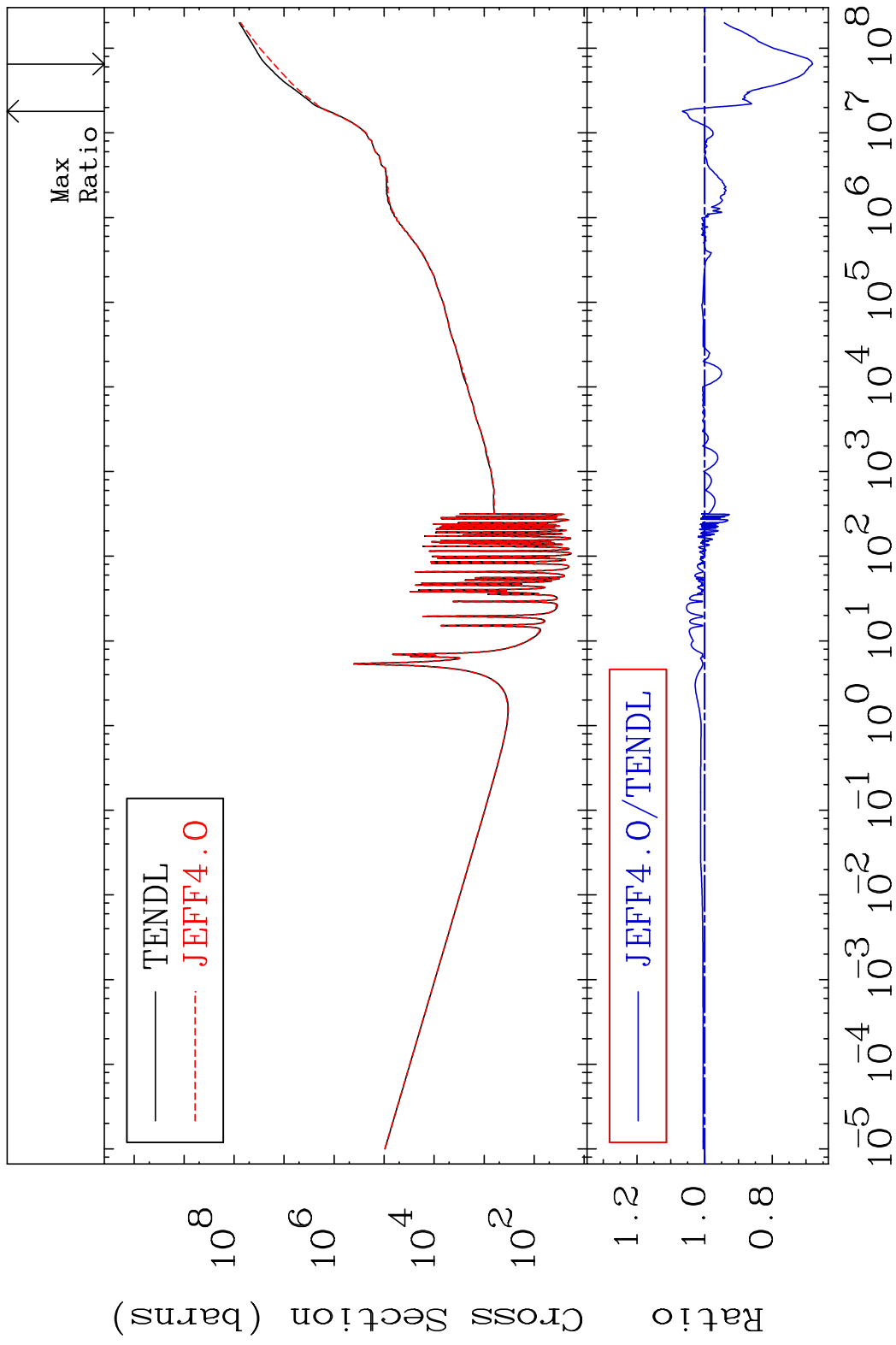
Incident Energy (eV) 61-Pm-147

MAT 6149 Total photon (eV-barns) 61-Pm-147
 Cross Section -73.09 To 36.54 %

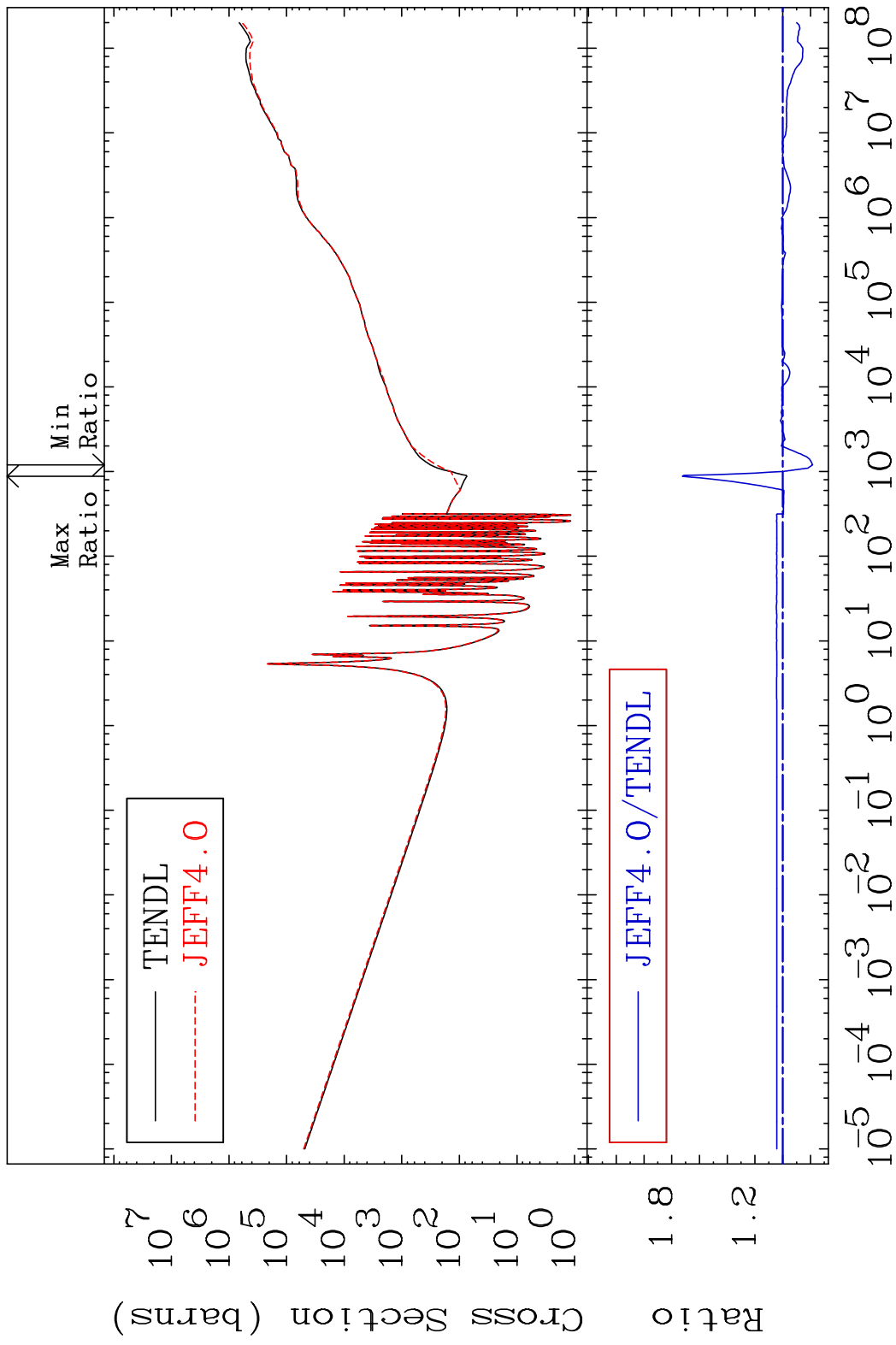


73 Incident Energy (eV) 61-Pm-147

MAT 6149 Total kinematic kerma (high limit) 61-Pm-147
 Cross Section -31.91 To 6.594 %



MAT 6149 Dpa total (eV-barns) 61-Pm-147
Cross Section -21.51 To 72.33 %



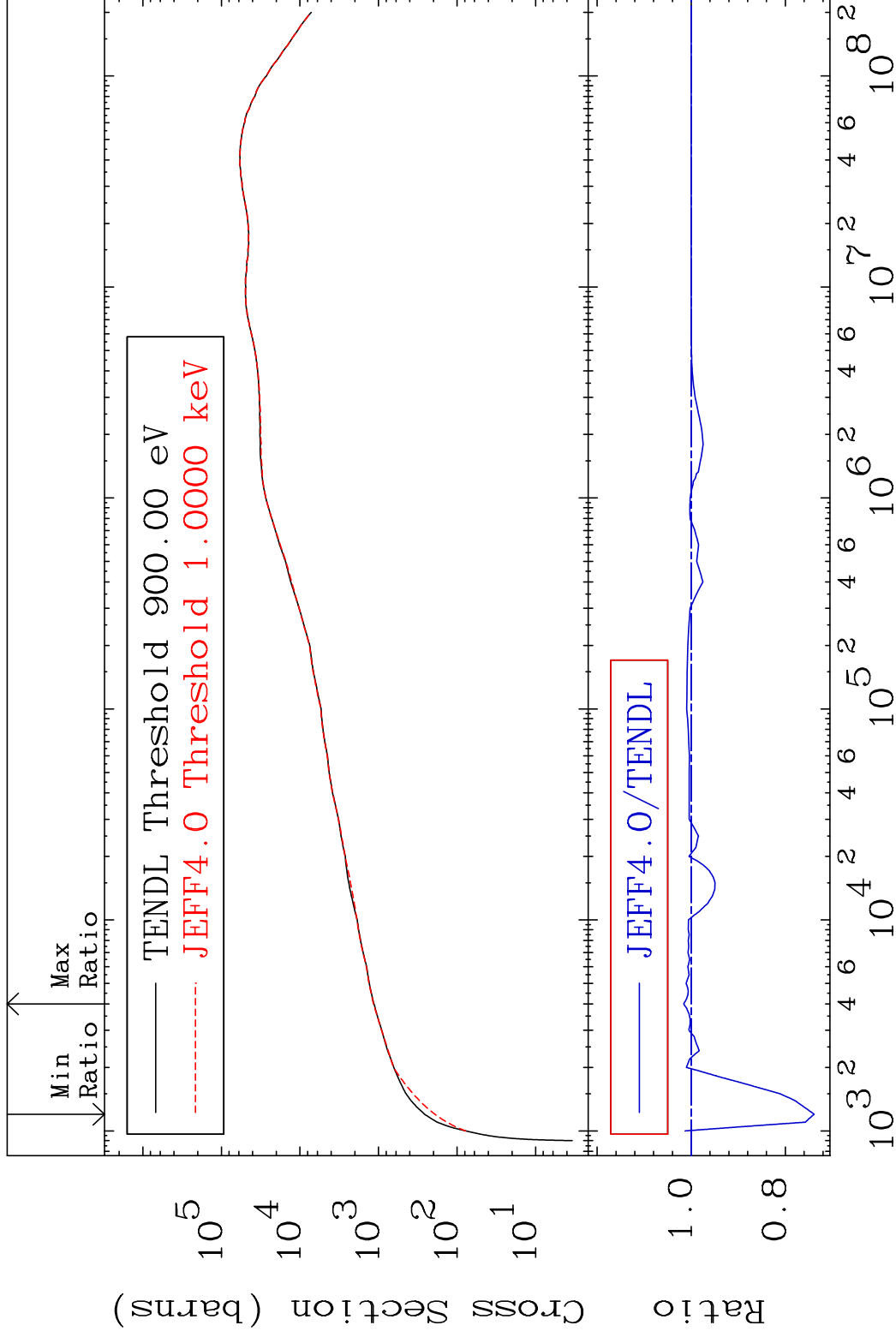
75 Incident Energy (eV) 61-Pm-147

MAT 6149

Dpa elastic (mt2)

61-Pm-147

Cross Section -26.12 To 1.612 %

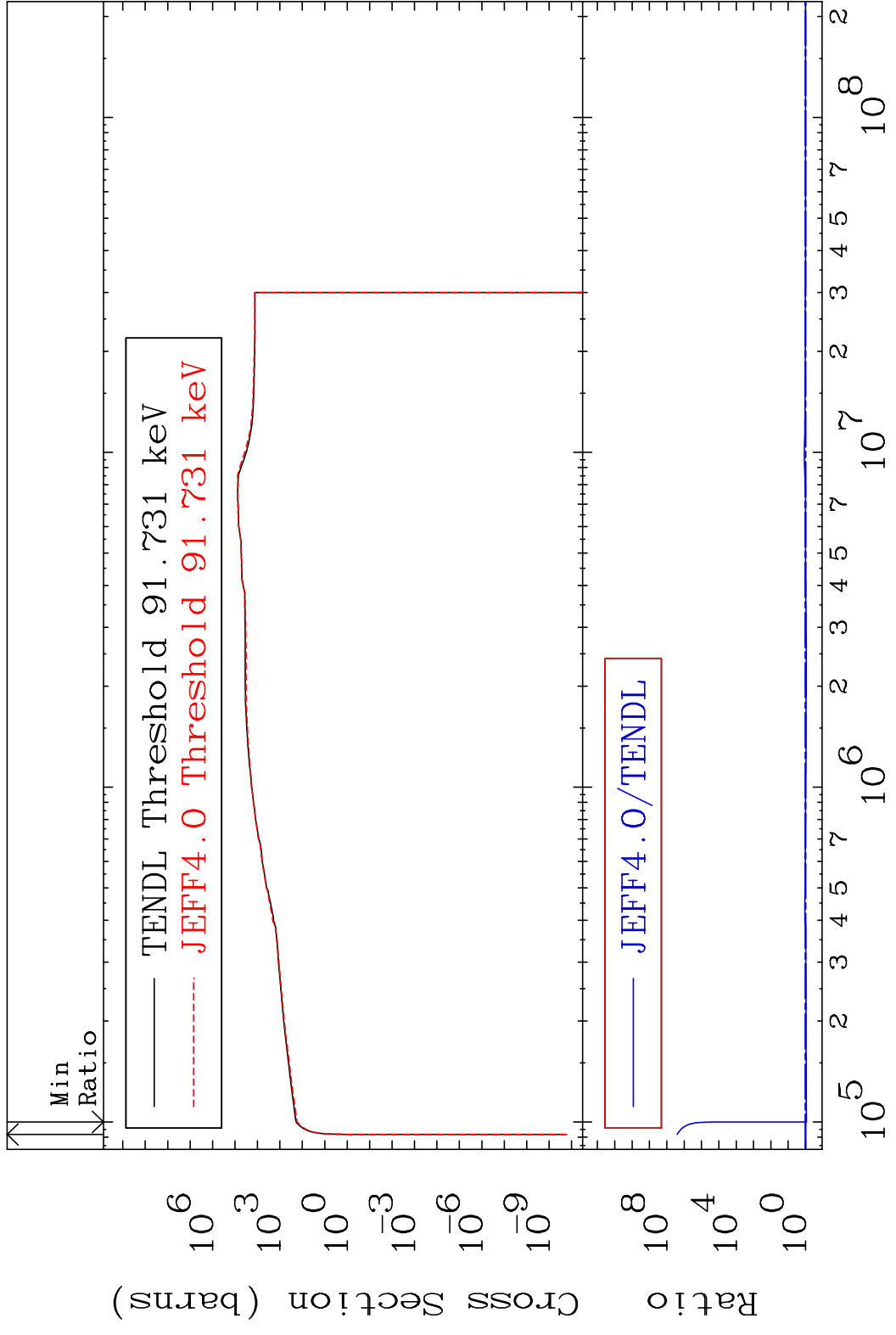


76

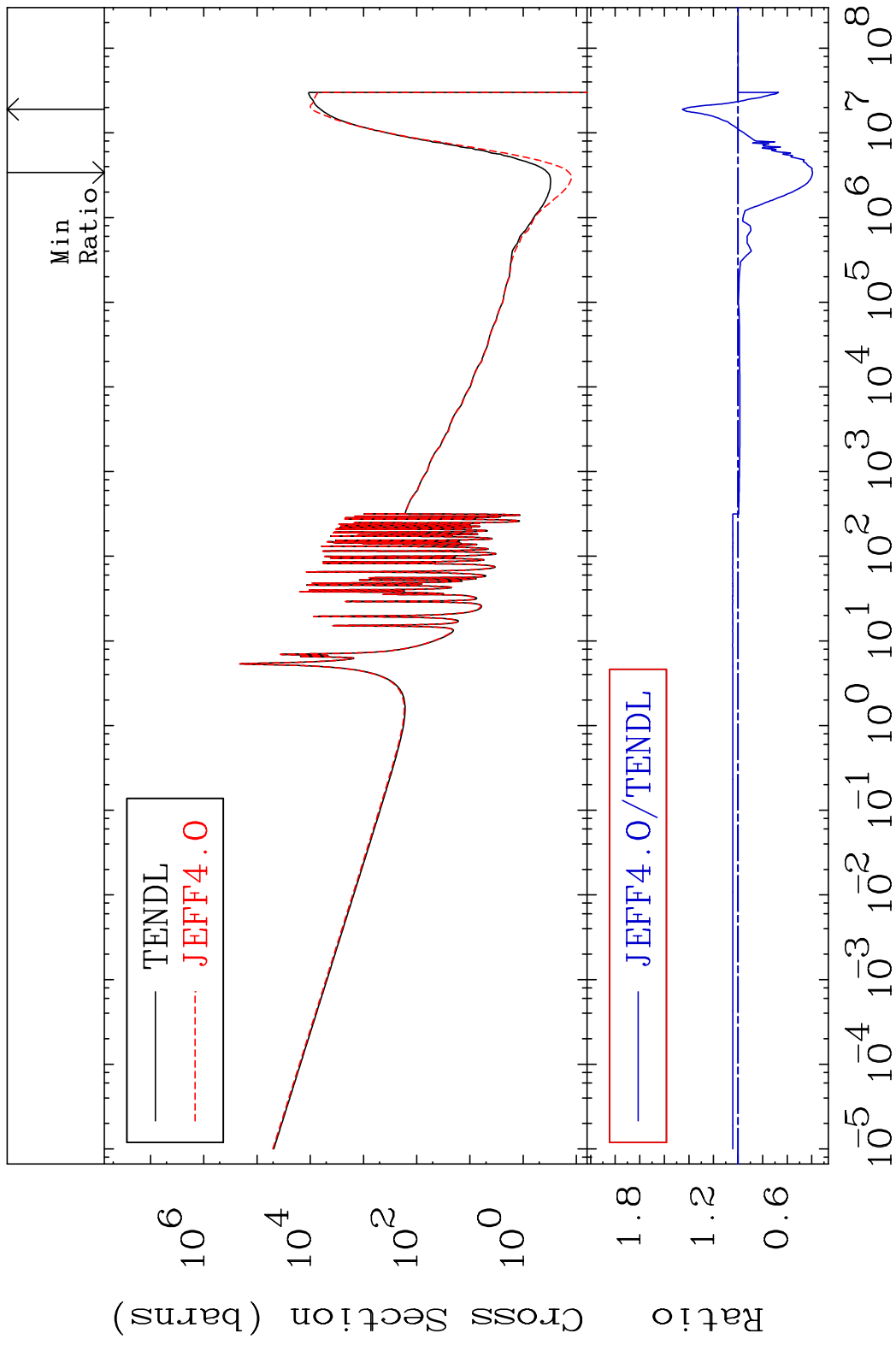
Incident Energy (eV)

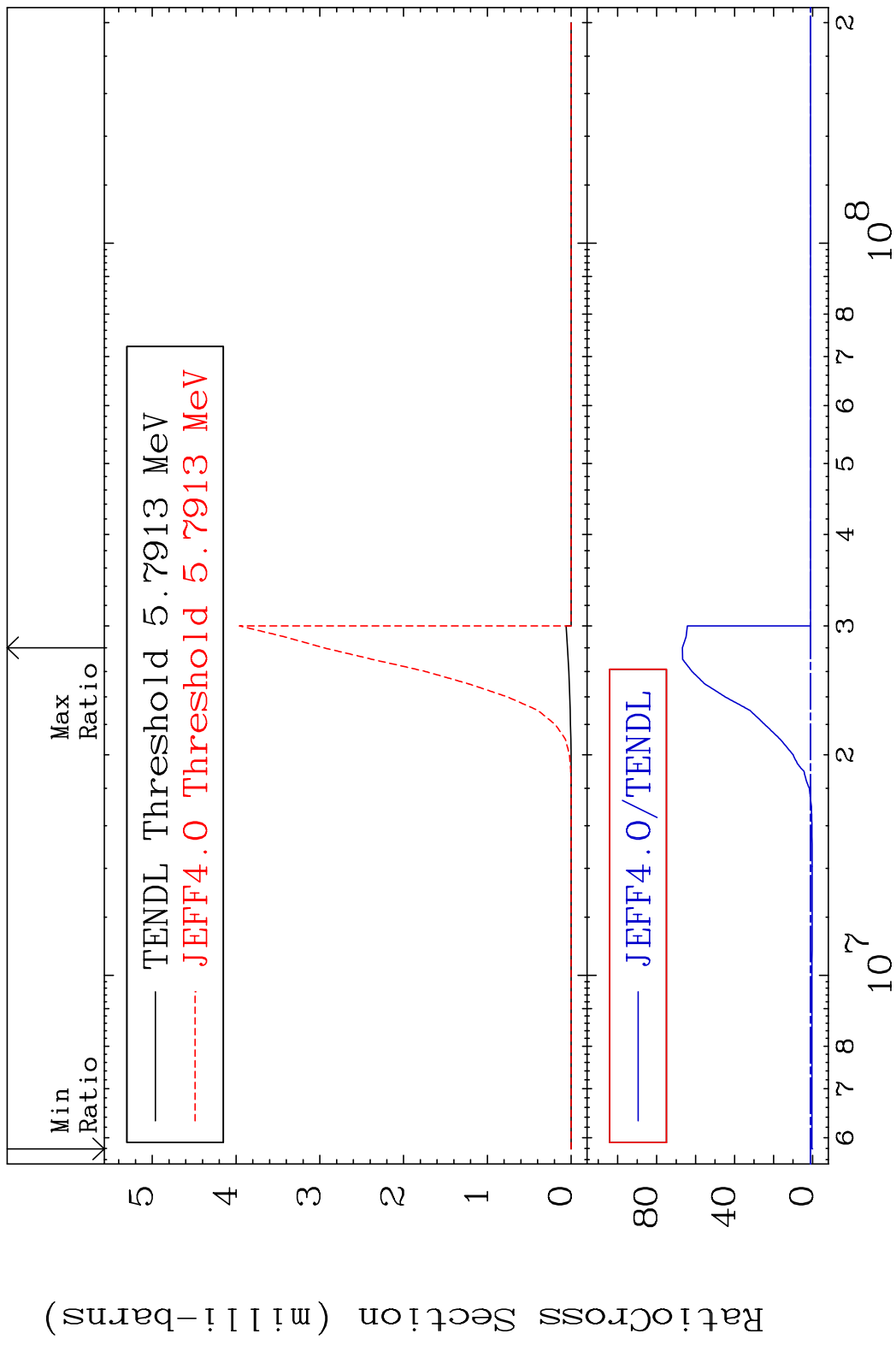
61-Pm-147

MAT 6149 Dpa inelastic (mt51-91) 61-Pm-147
 Cross Section -10.55 To 9999. %

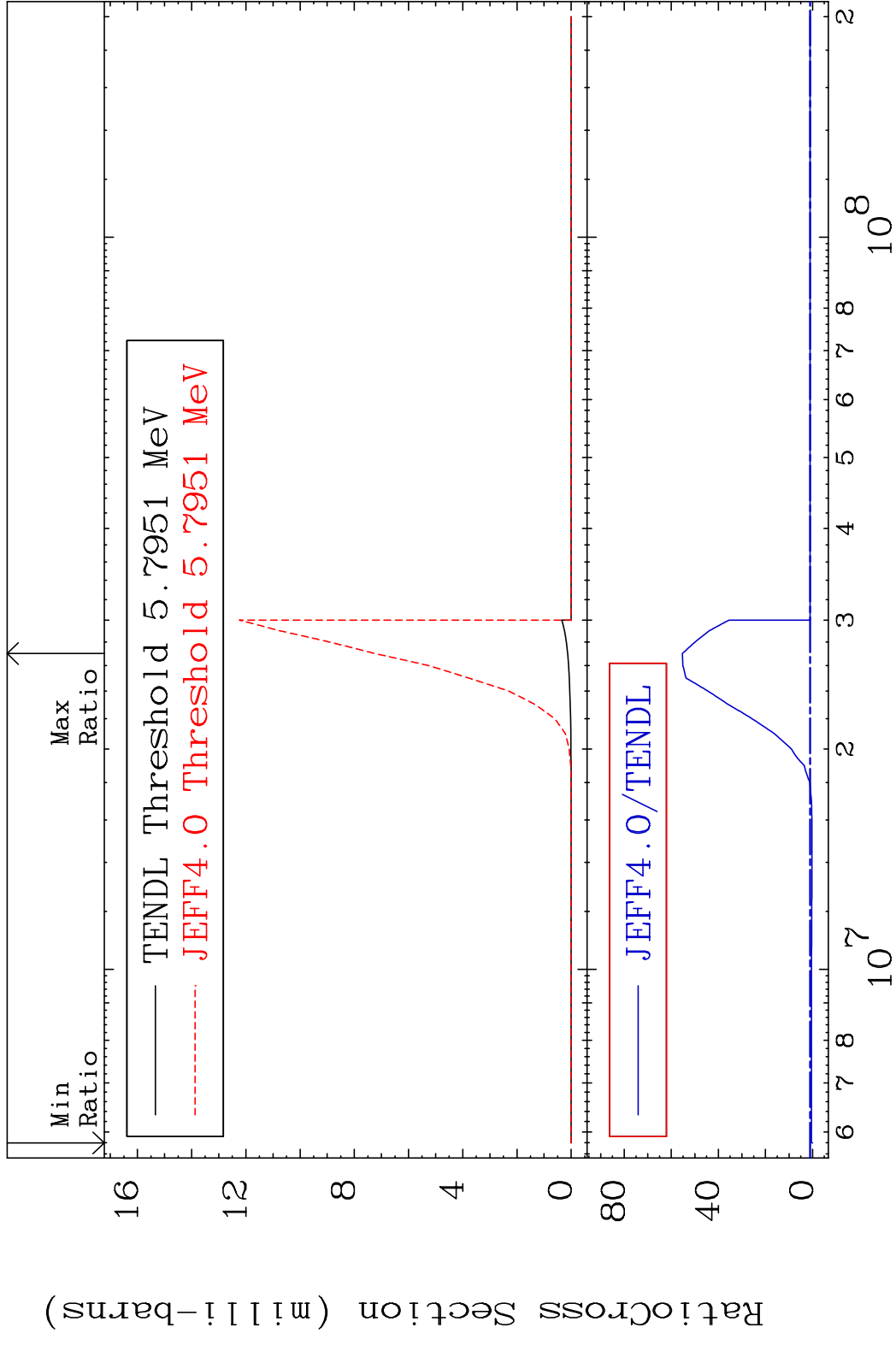


MAT 6149 Dpa disappearance (mt102 -120) 61-Pm-147
 Cross Section -60.62 To 45.35 %





MAT 6149 (n,2n) α :59-Pr-142m1 61-Pm-147
 Radionuclide Production Cross Section 1800 d to 5430. %



80 Incident Energy (eV) 61-Pm-147

