

Program Complot
(Version 2021-1)

by

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(Present Contact Information)

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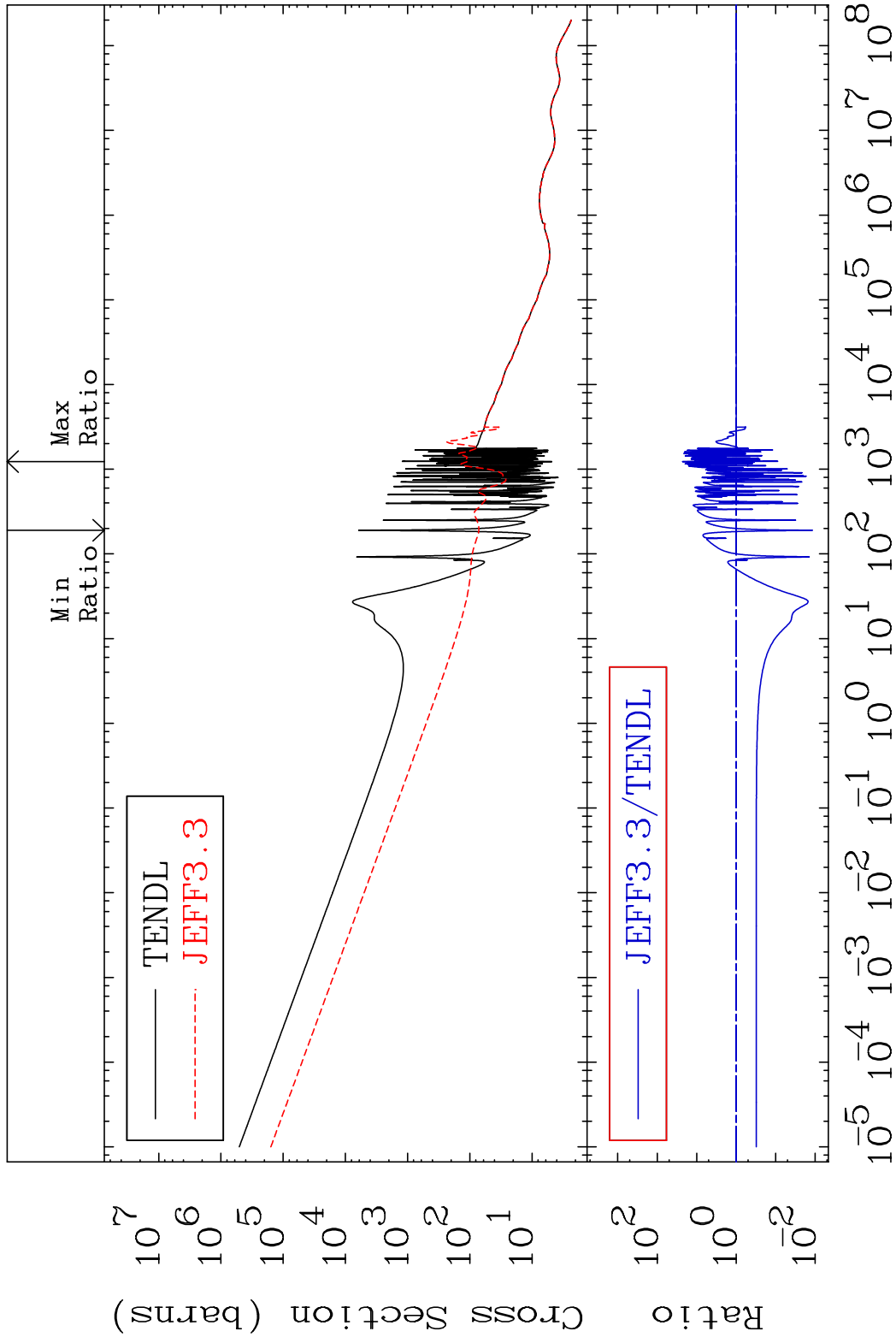
Press Mouse Button to Start

MAT 6413

Total

64-Gd-148

Cross Section -98.84 To 2207. %



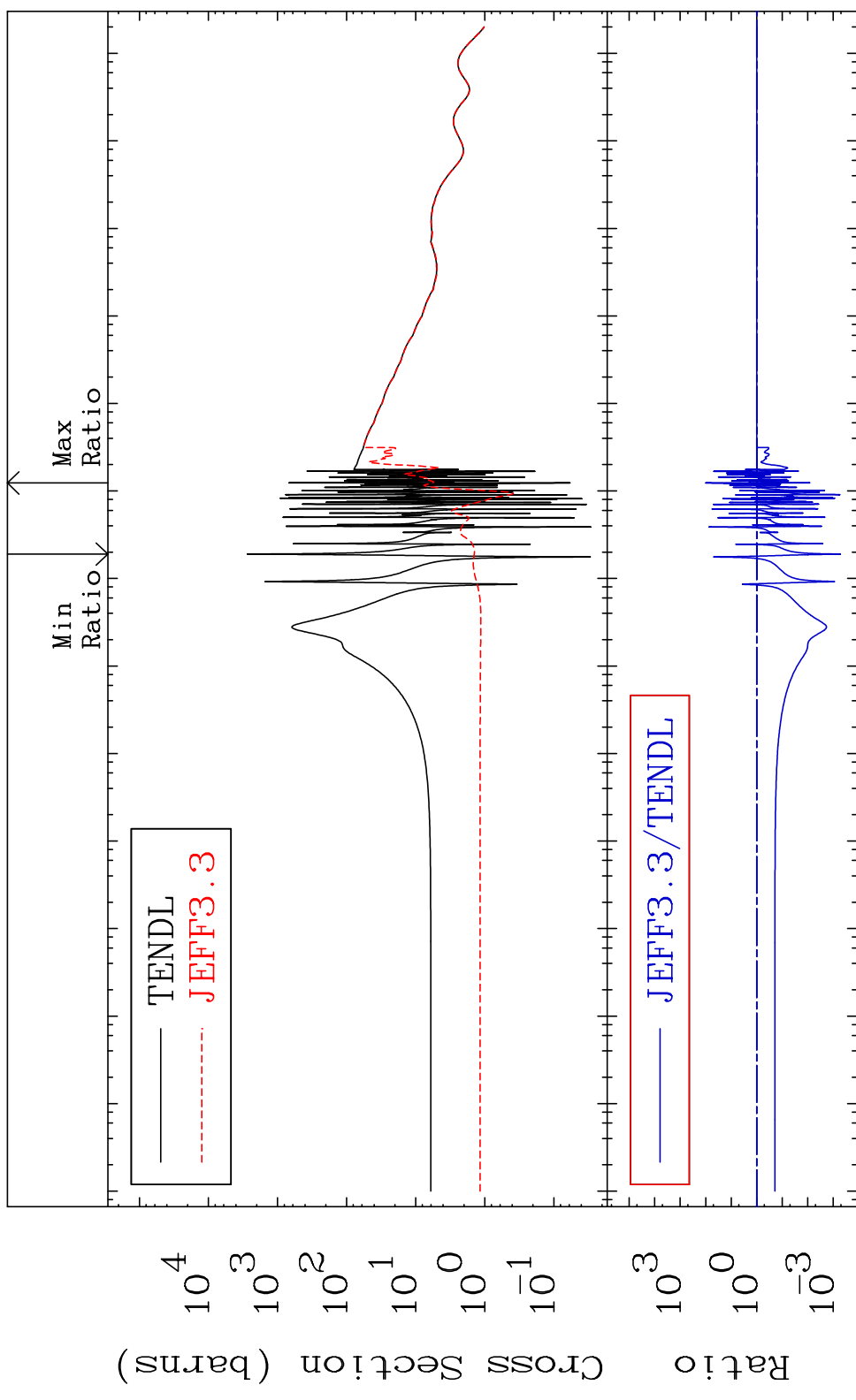
1

Incident Energy (eV)

64-Gd-148

MAT 6413

Elastic Cross Section 64-Gd-148
-99.95 To 9844. %

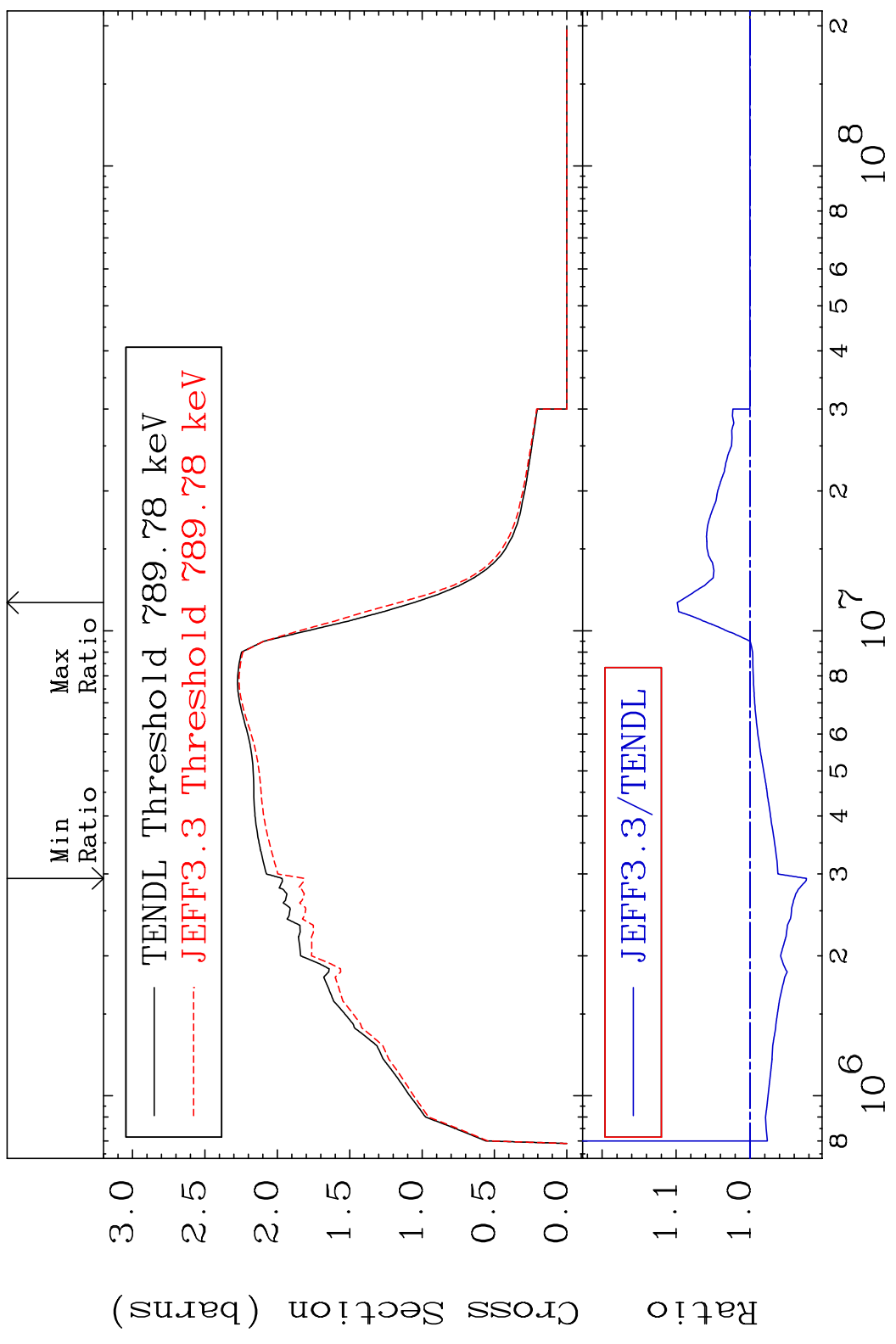


MAT 6413

Inelastic

64-Gd-148

Cross Section -7.642 To 9.846 %



3

Incident Energy (eV)

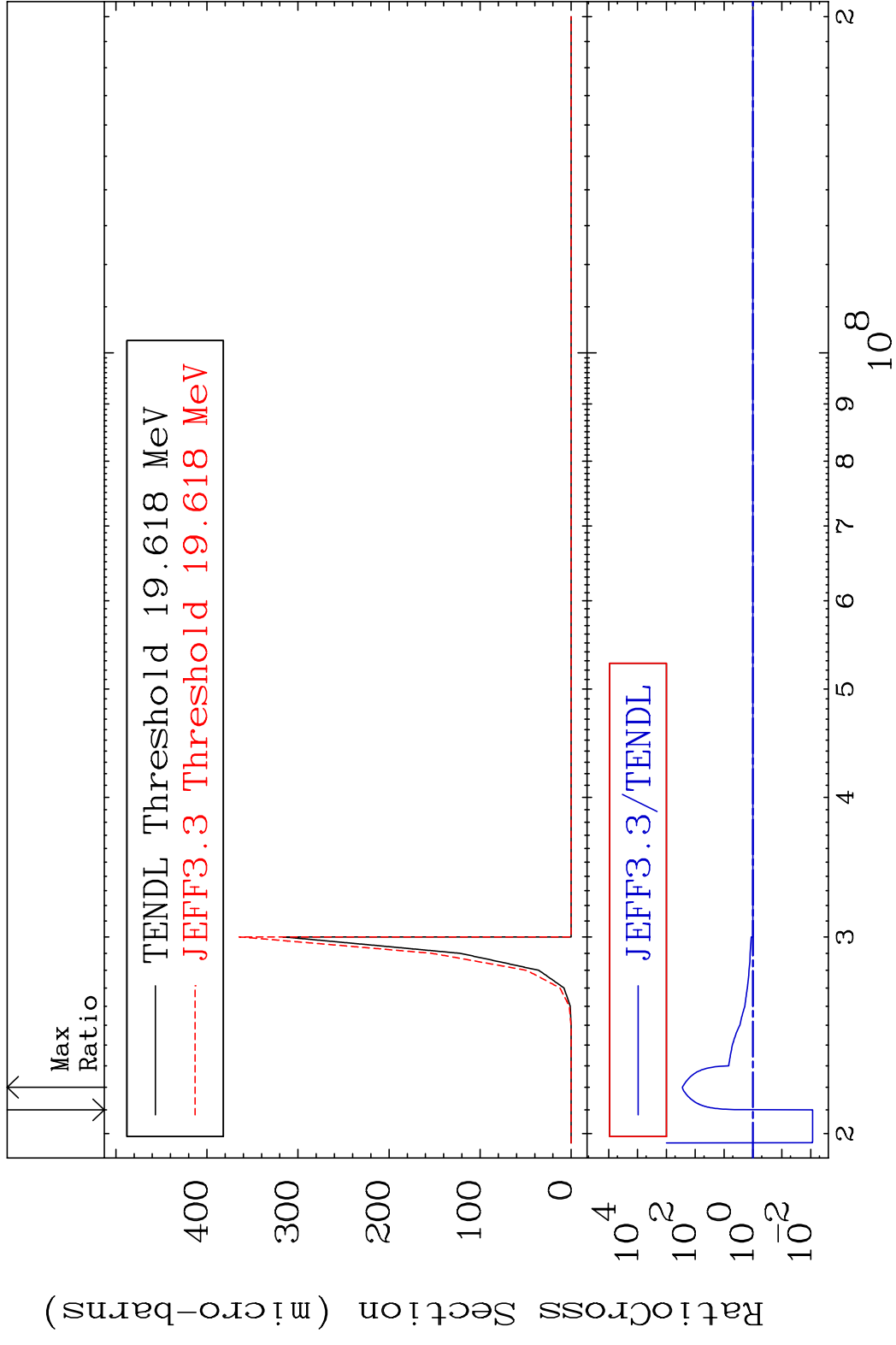
64-Gd-148

MAT 6413

(n,2n) d

64-Gd-148

Cross Section -99.14 To 9999. %

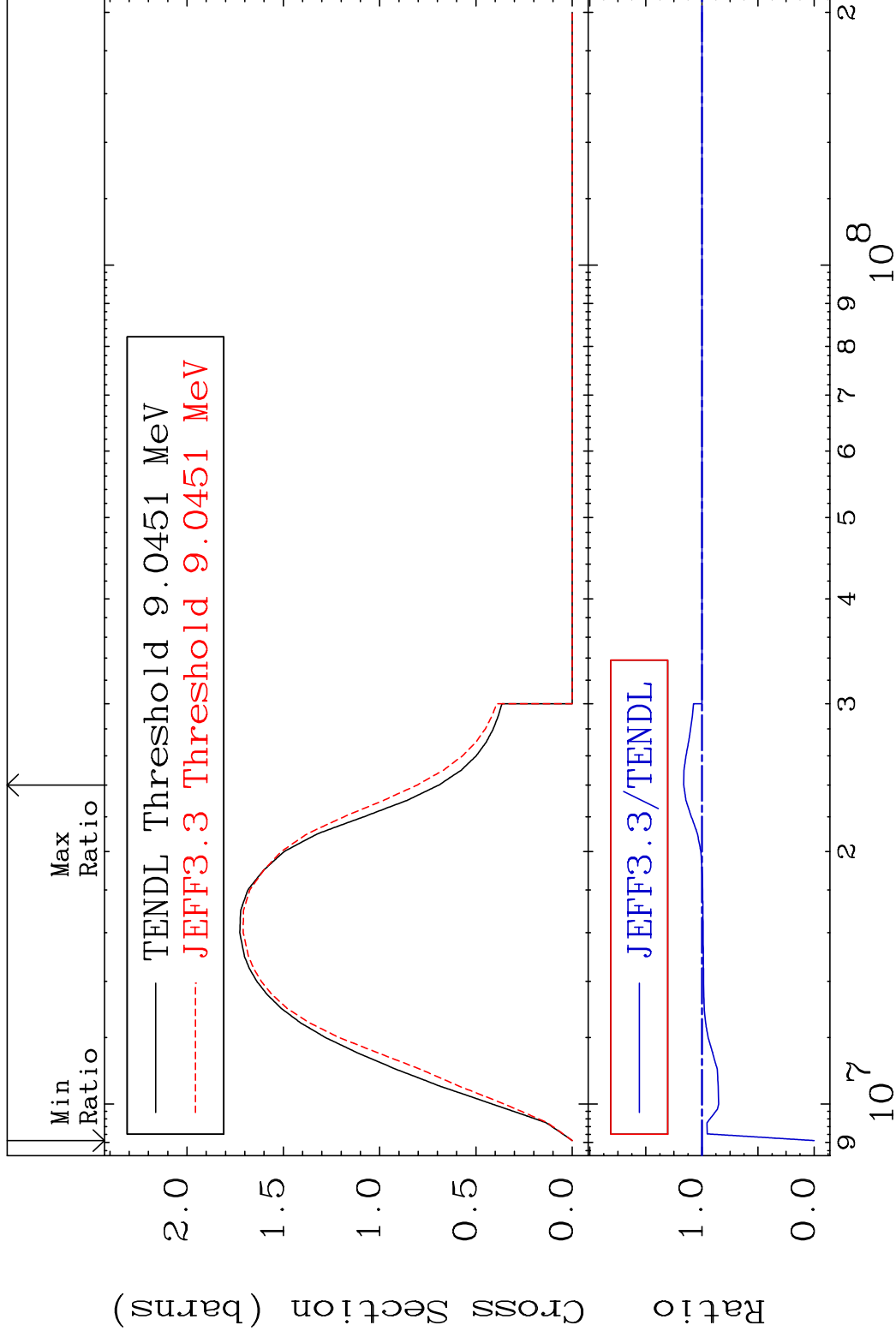


MAT 6413

(n,2n)

64-Gd-148

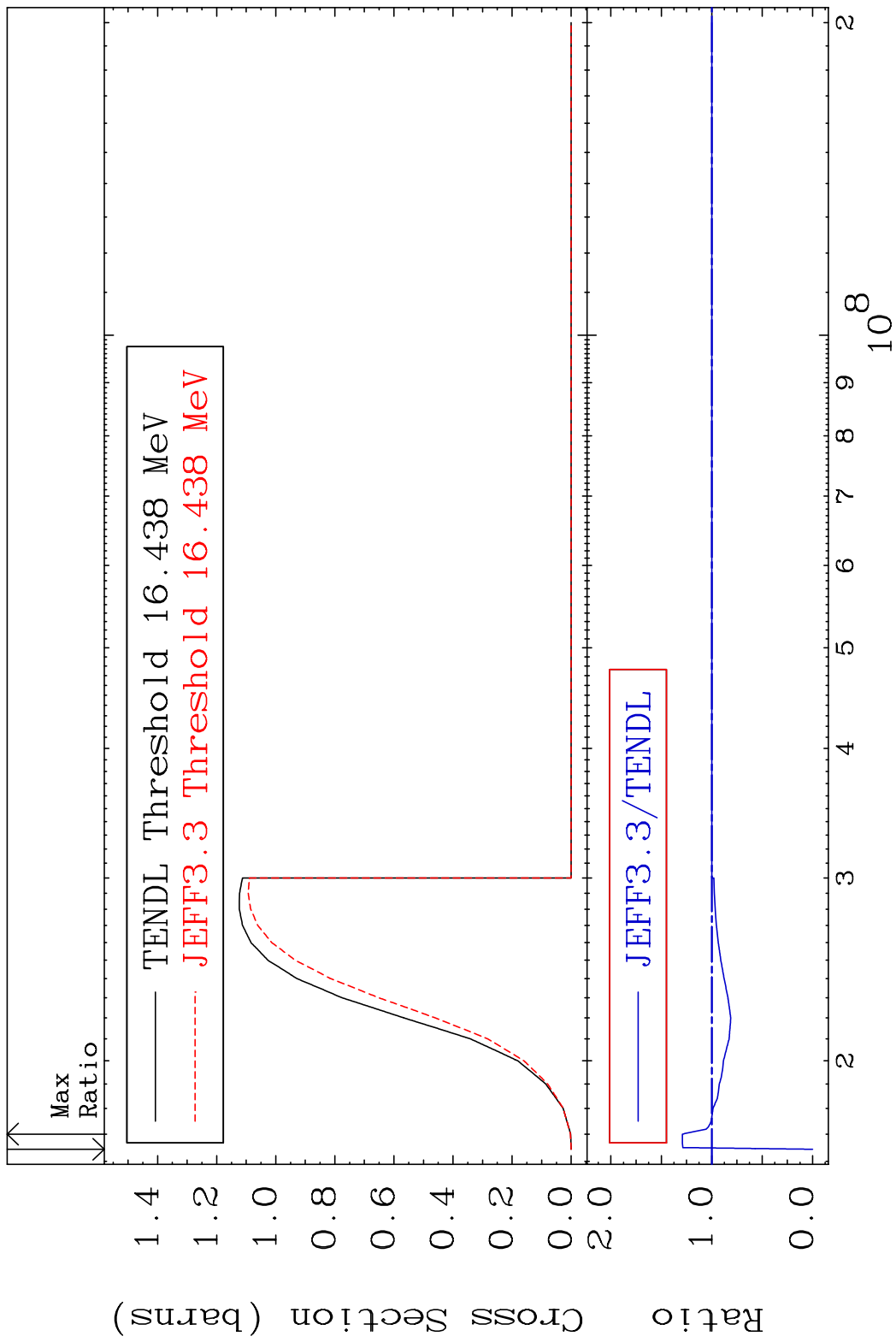
Cross Section -100.0 To 16.31 %



5

Incident Energy (eV)

64-Gd-148

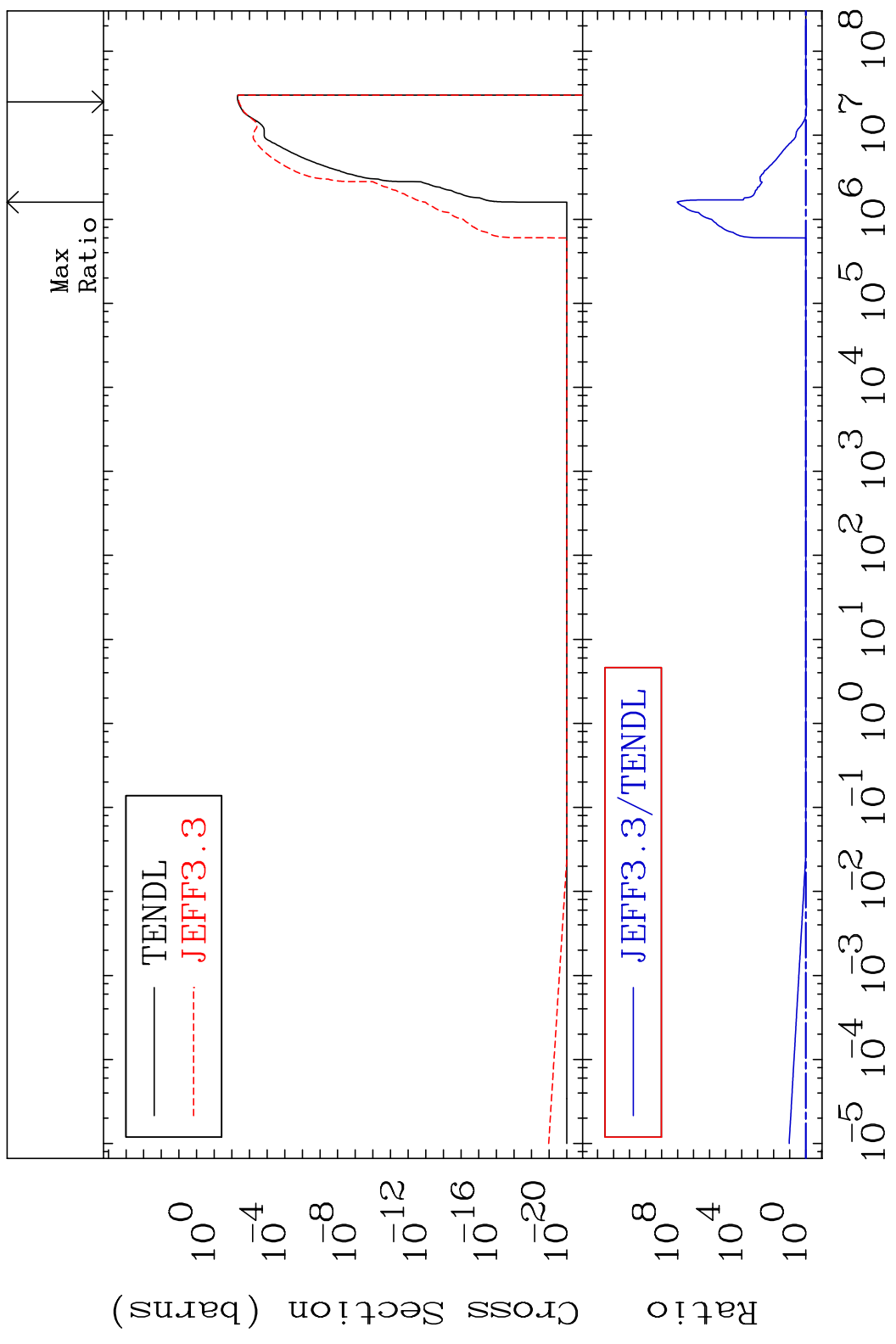


MAT 6413

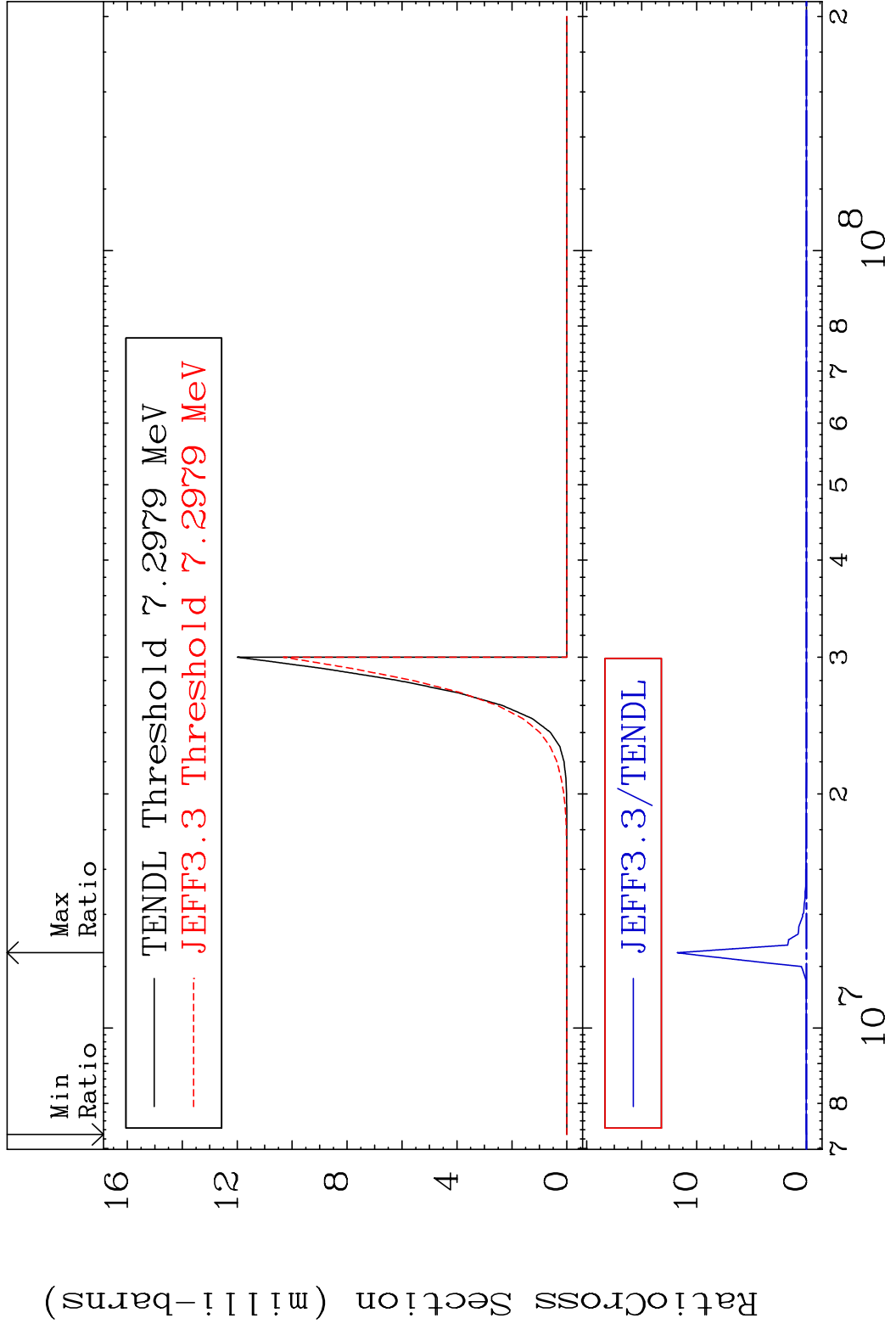
(n, n') α

64-Gd-148

Cross Section -9.908 To 9999. %

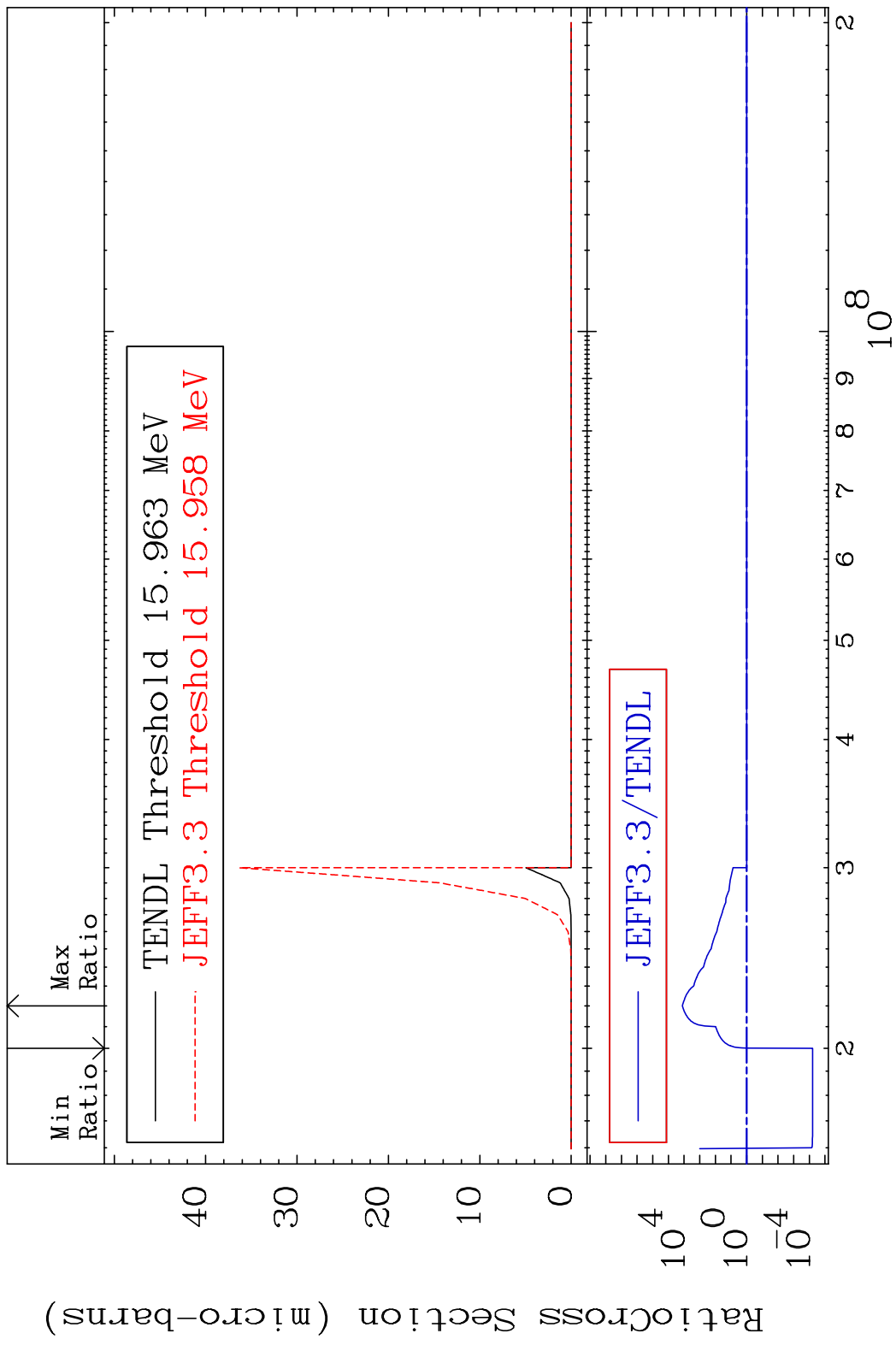


MAT 6413 (n,2n) α 64-Gd-148
 Cross Section -100.0 To 9999. %



8 10⁷ 10⁸ 2 64-Gd-148

MAT 6413 (n,3n) α 64-Gd-148
 Cross Section -99.99 To 9999. %

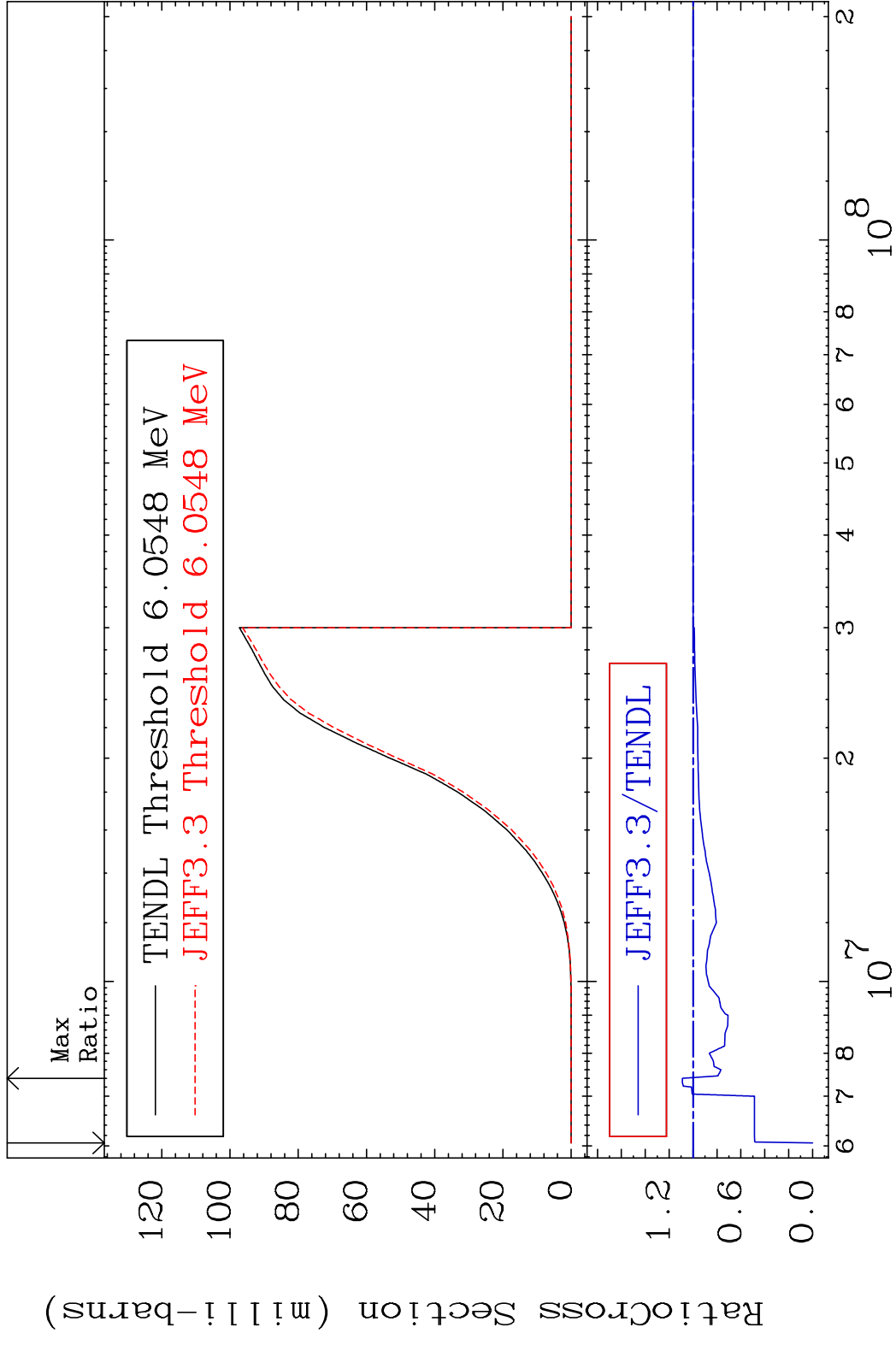


MAT 6413

(n, n') p

64-Gd-148

Cross Section -100.0 To 8.957 %



10

Incident Energy (eV)

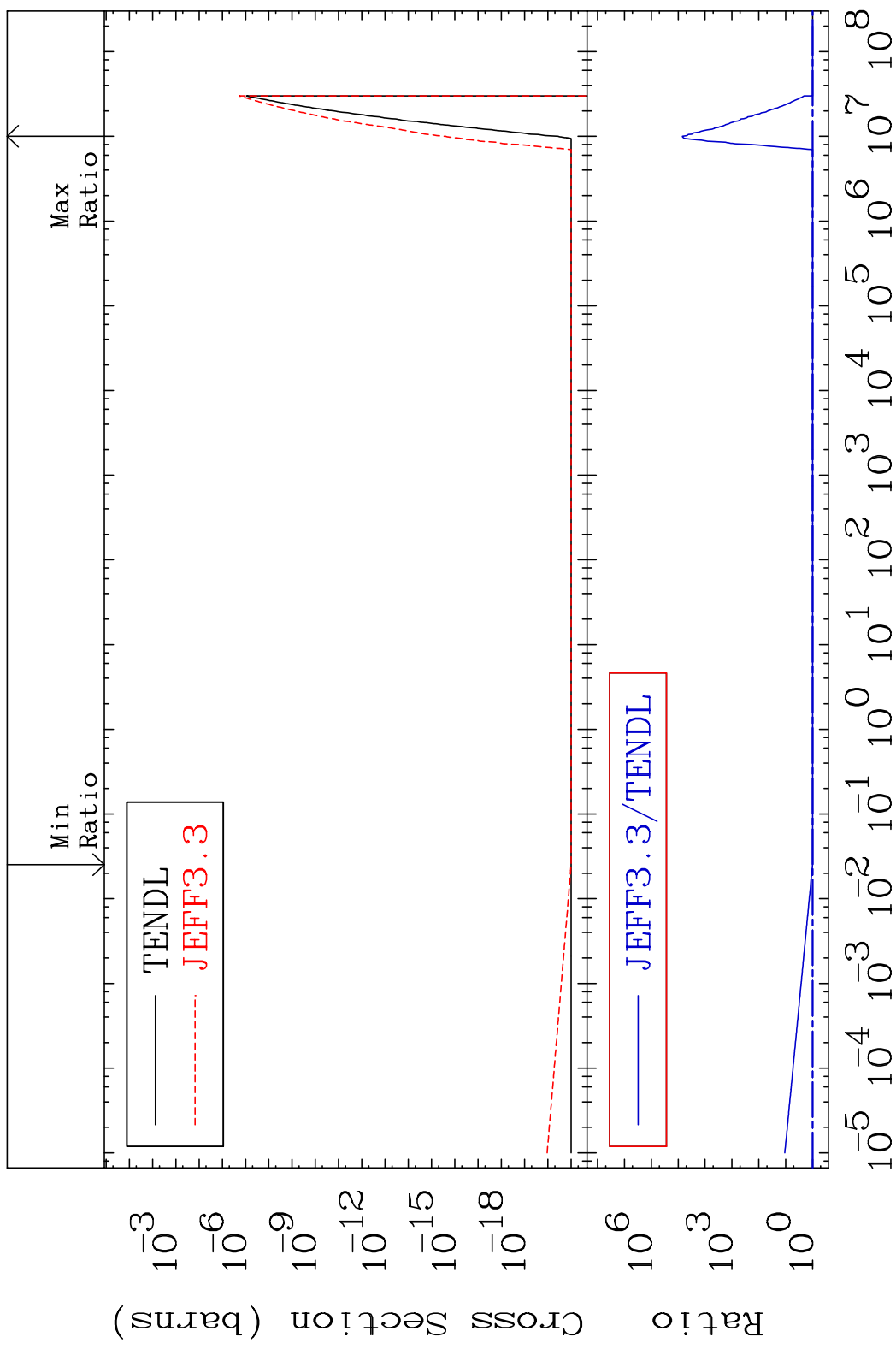
64-Gd-148

MAT 6413

(n, n') 2α

64-Gd-148

Cross Section 0.000 To 9999. %

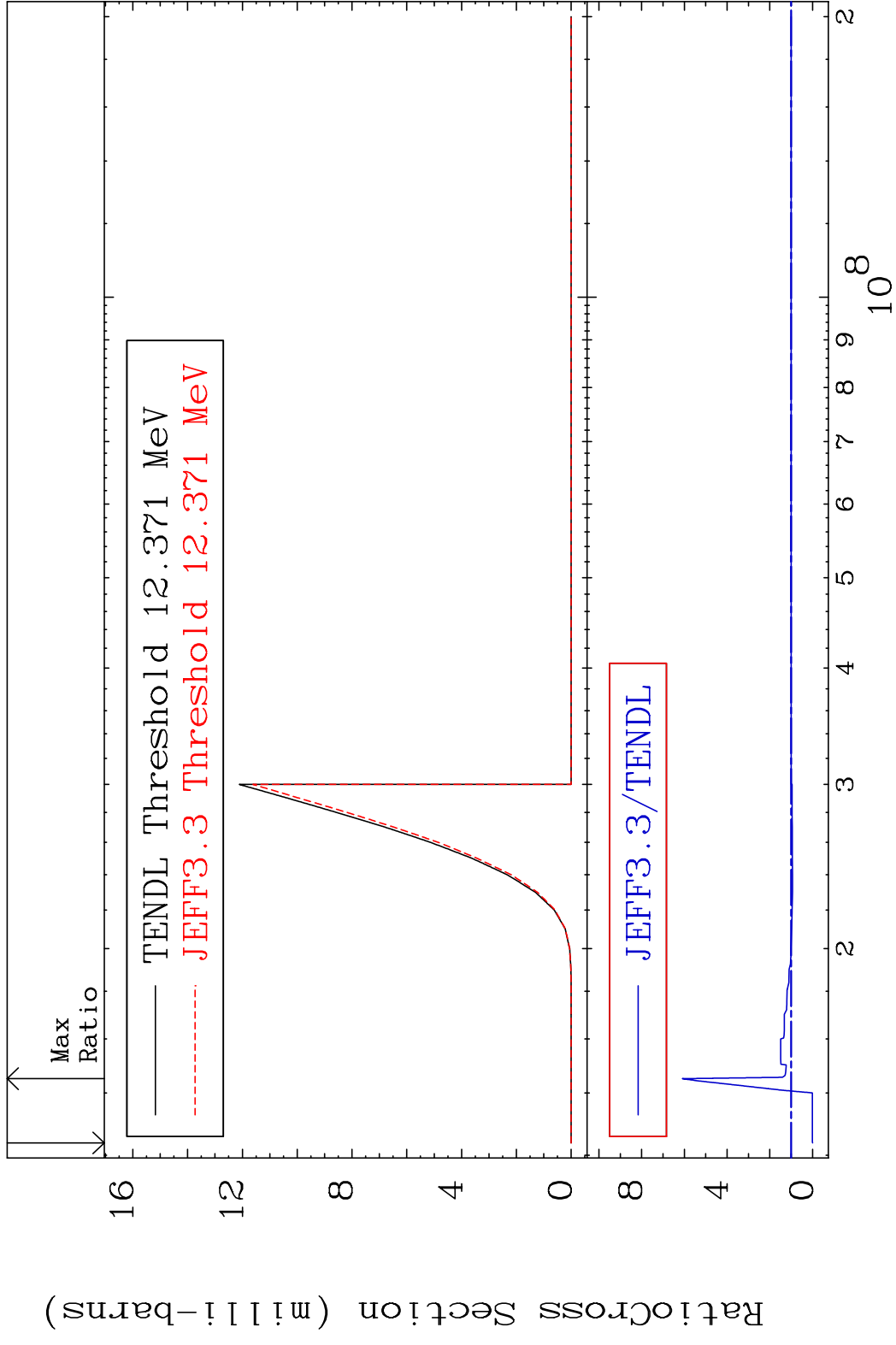


MAT 6413

(n, n') d

64-Gd-148

Cross Section -100.0 To 509.4 %

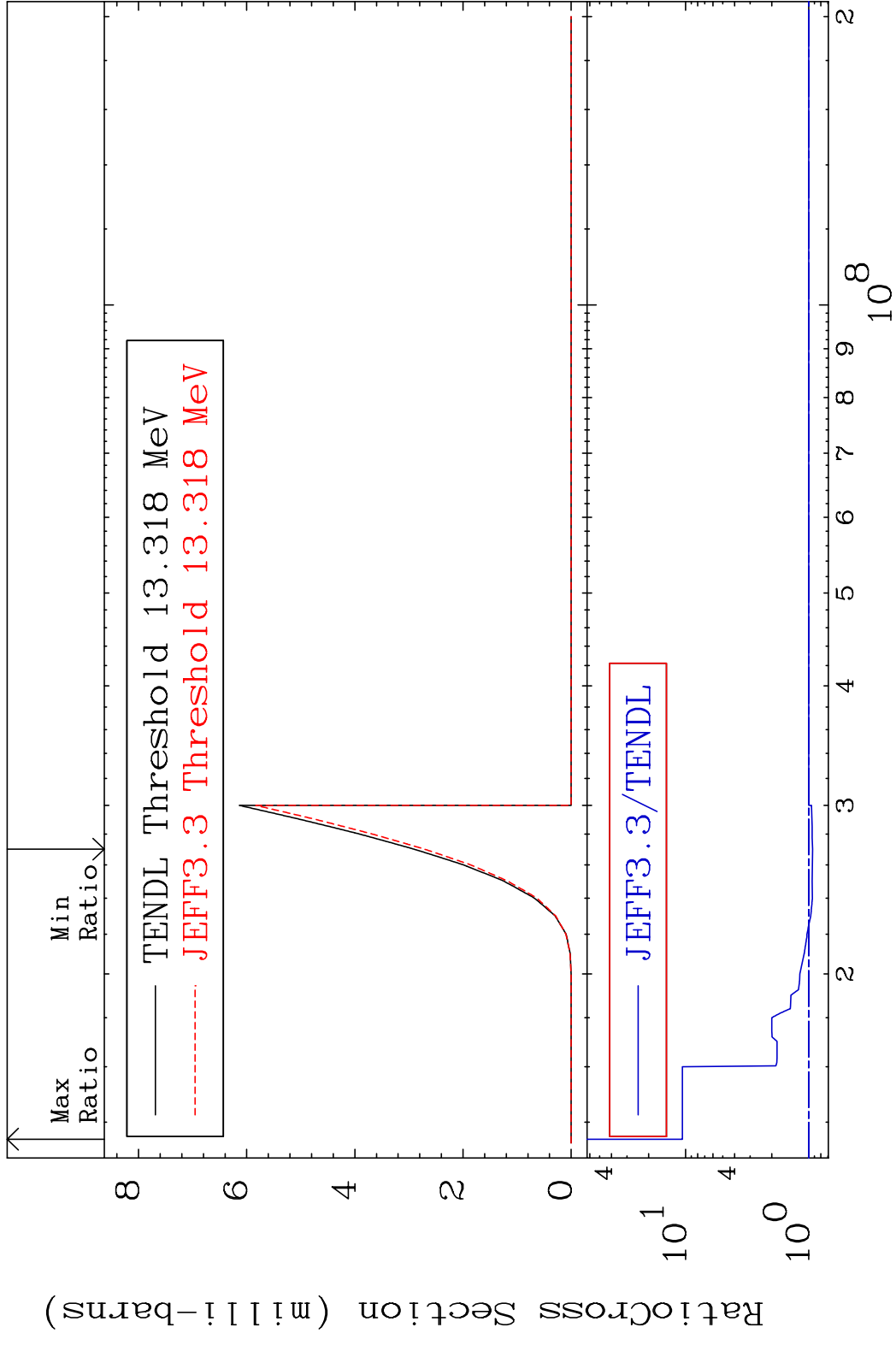


MAT 6413

(n, n') t

64-Gd-148

Cross Section -6.726 To 964.0 %

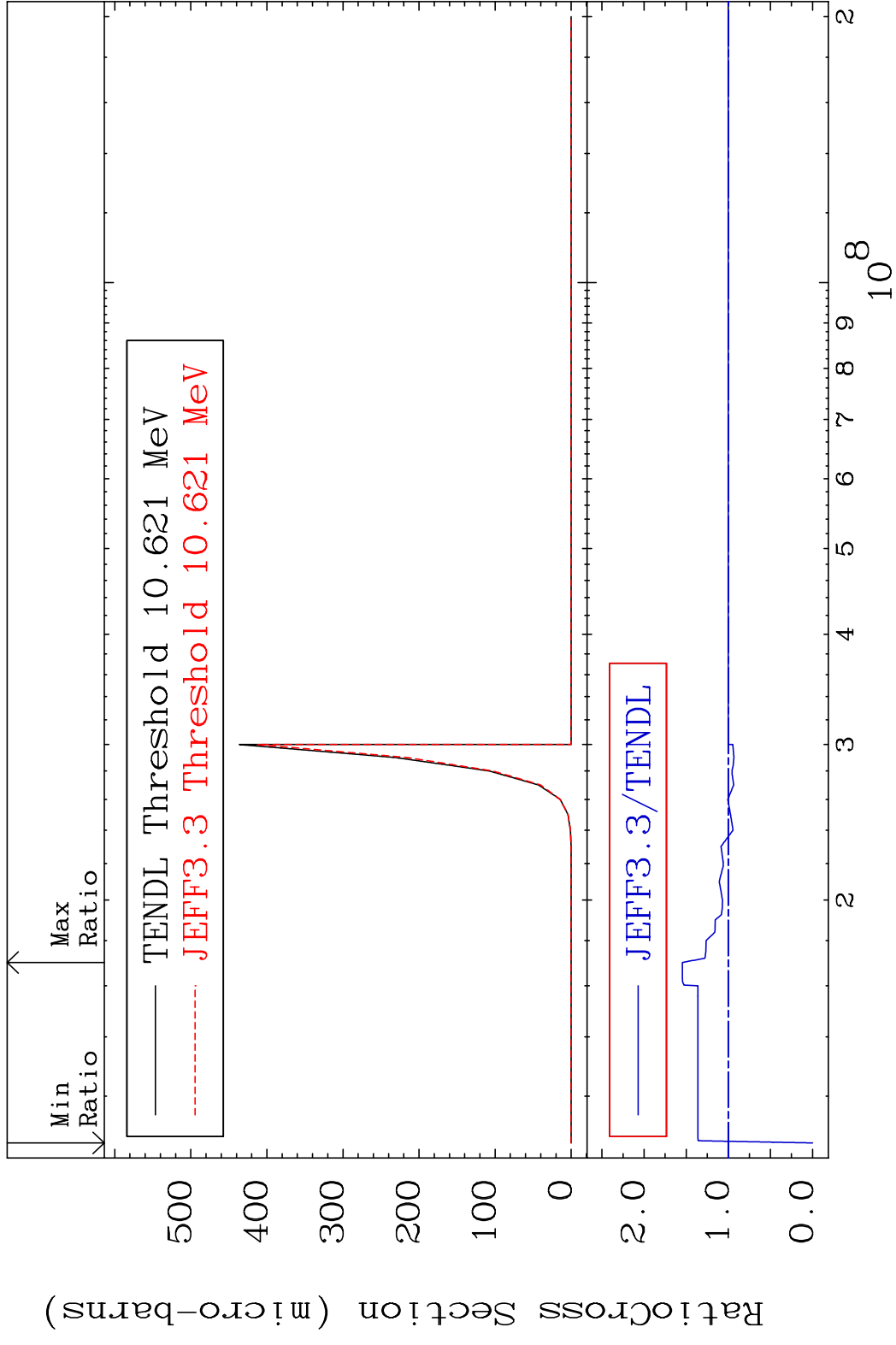


MAT 6413

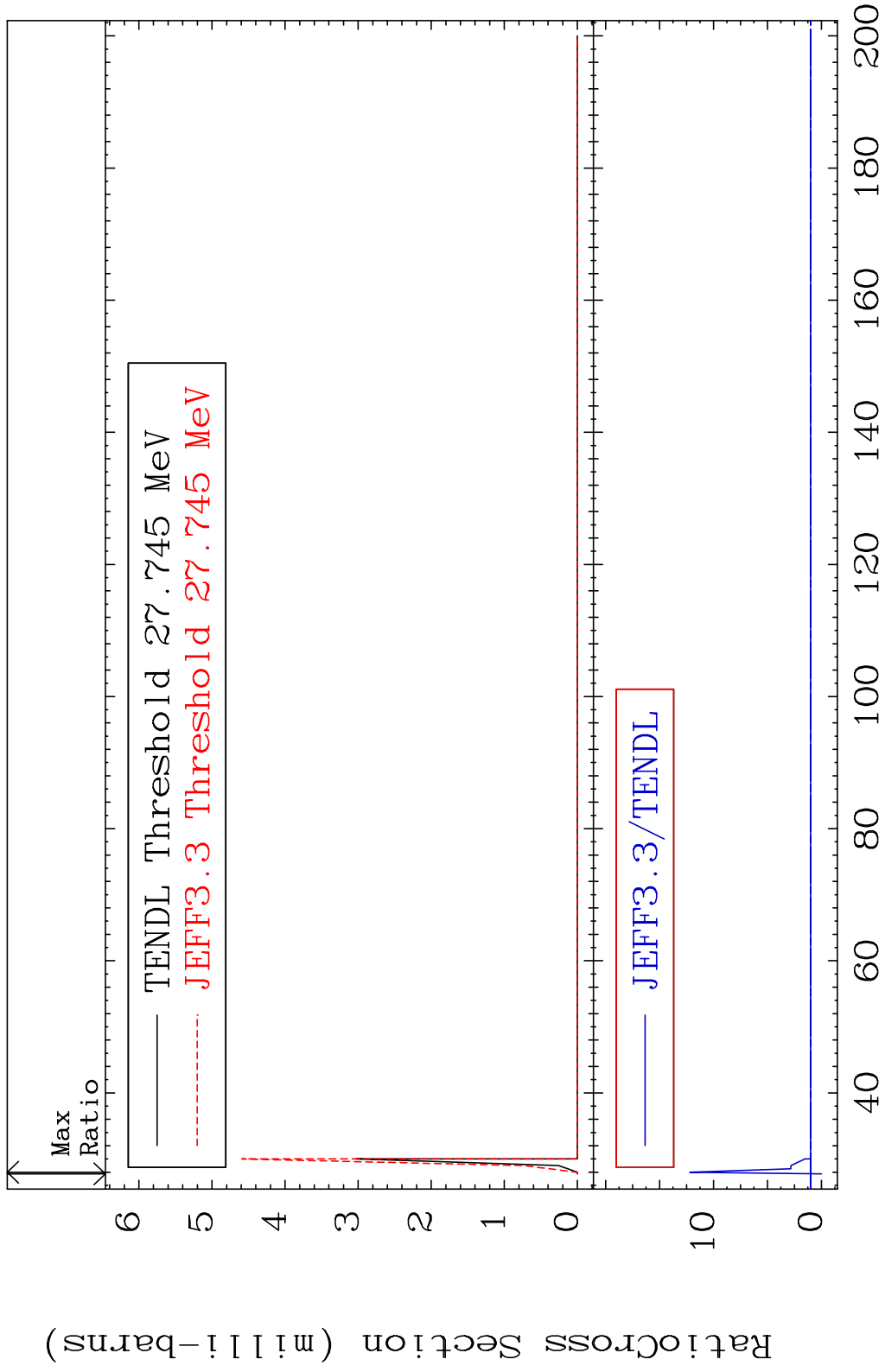
(n,n') He-3

64-Gd-148

Cross Section -100.0 To 54.53 %



MAT 6413 (n,4n) 64-Gd-148
Cross Section -100.0 To 1120. %

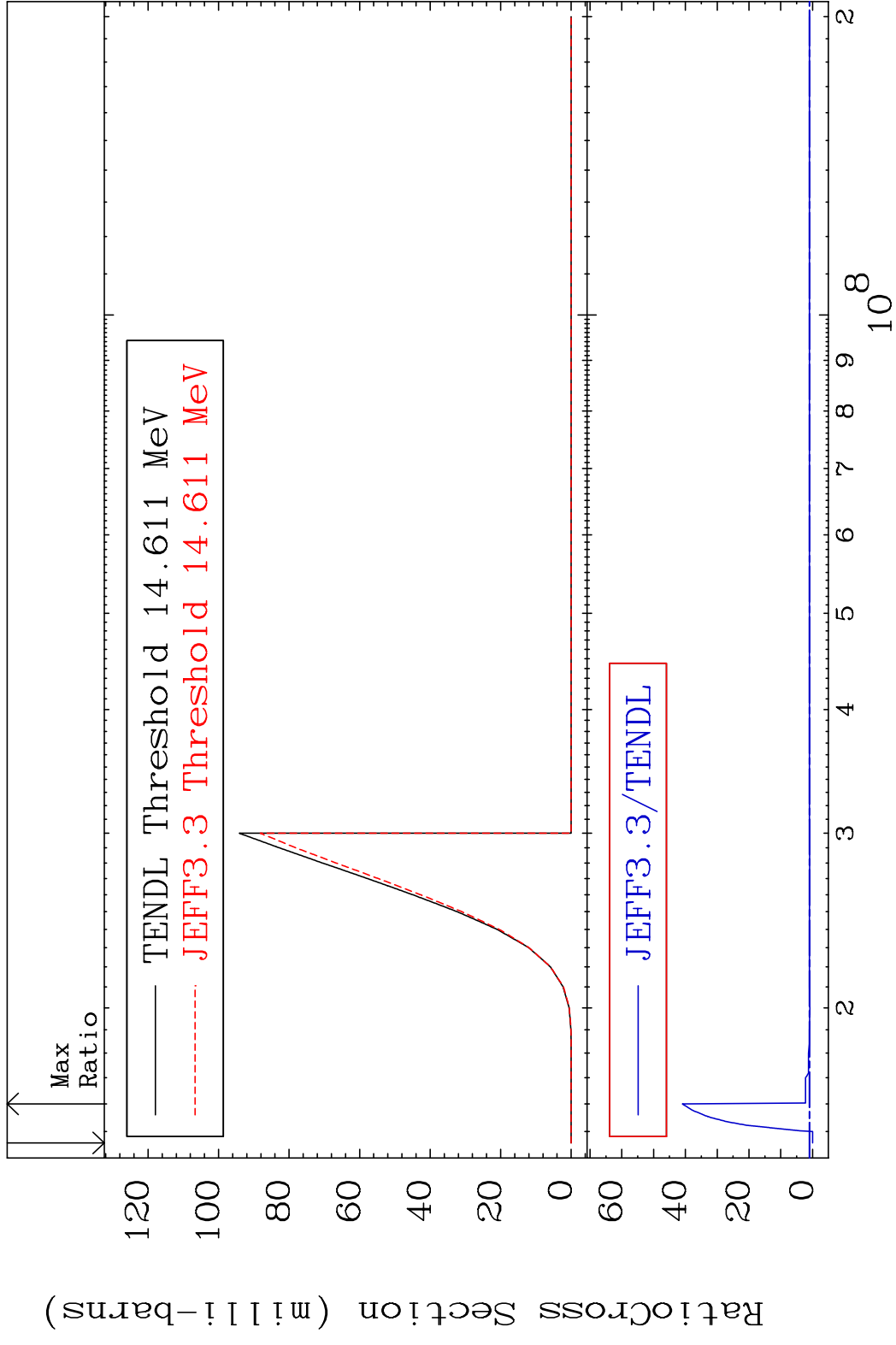


MAT 6413

(n,2n) p

64-Gd-148

Cross Section -100.0 To 3995. %

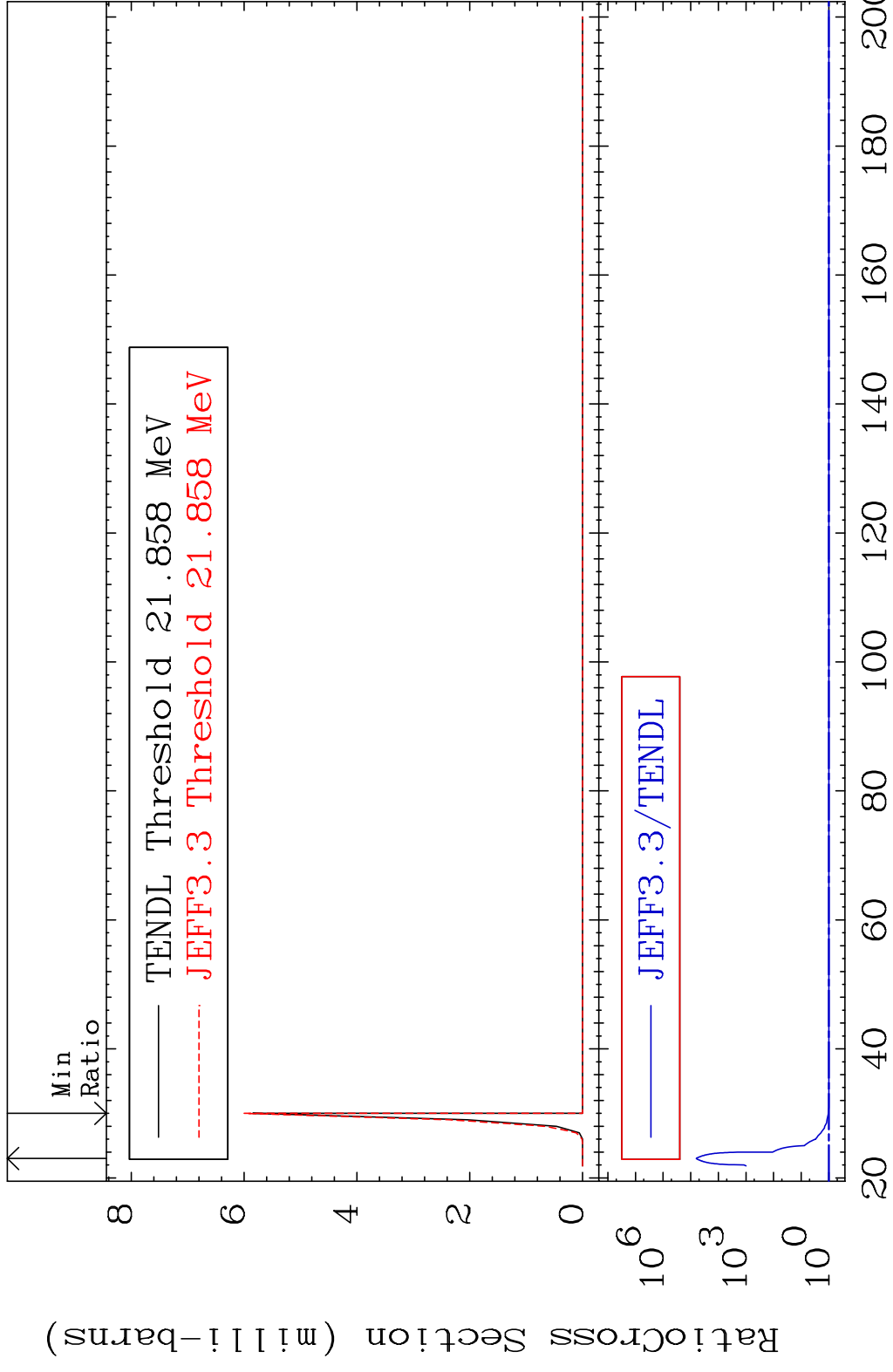


MAT 6413

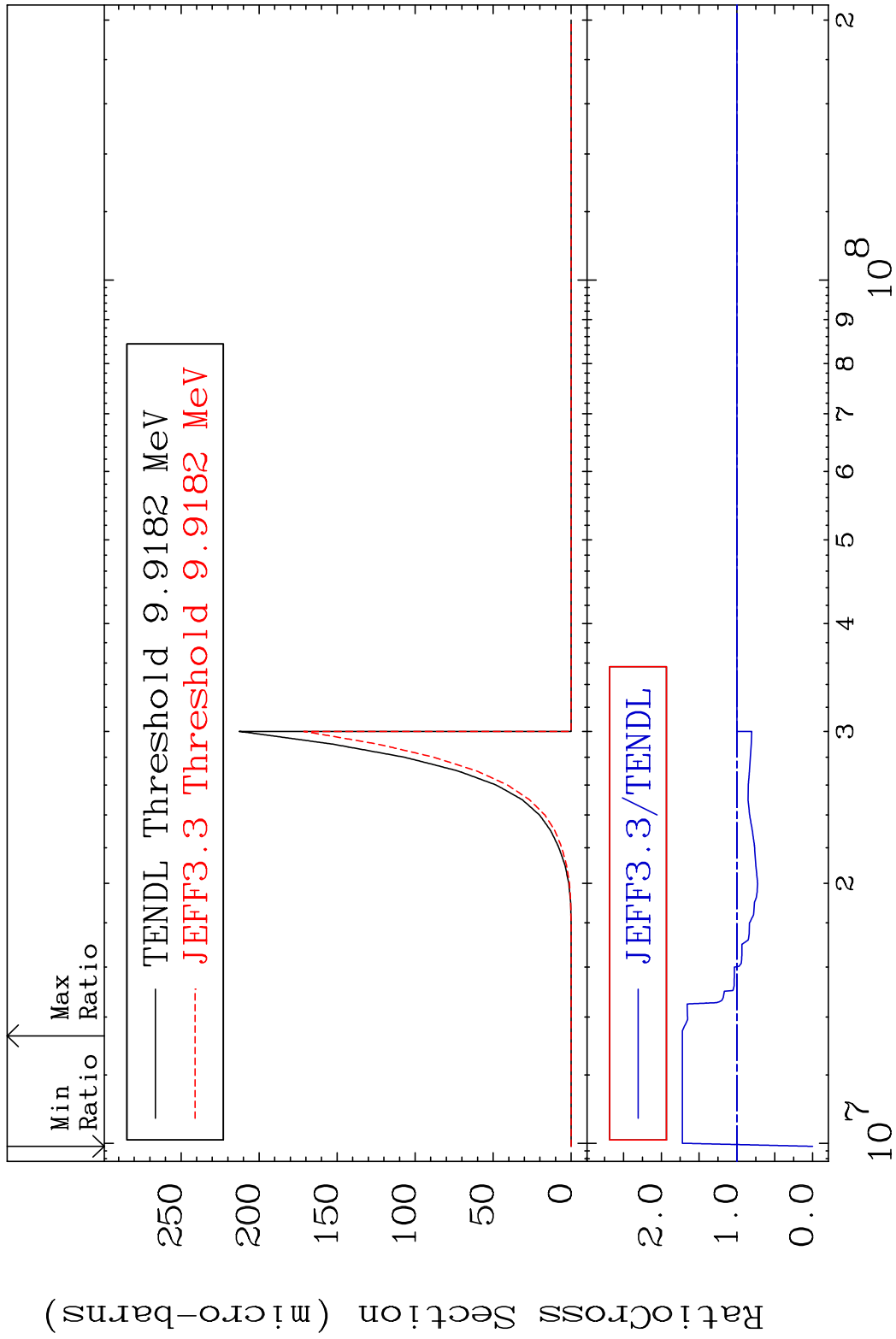
(n,3n) p

64-Gd-148

Cross Section 0.000 To 9999. %



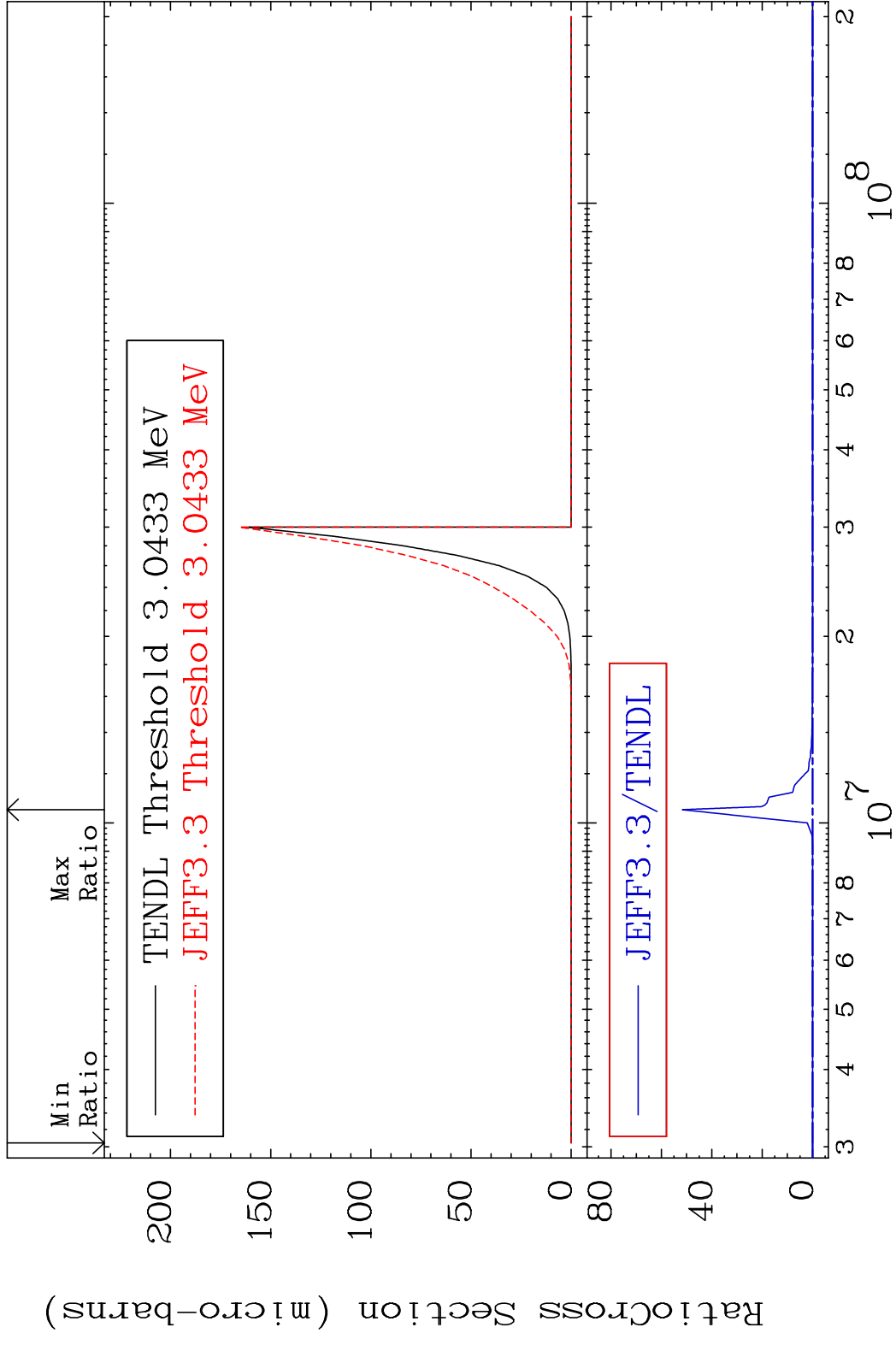
MAT 6413 (n,2n) p 64-Gd-148
 Cross Section -100.0 To 72.16 %



18 Incident Energy (eV) 64-Gd-148

MAT 6413

(n,n') p α 64-Gd-148
Cross Section -100.0 To 9999. %

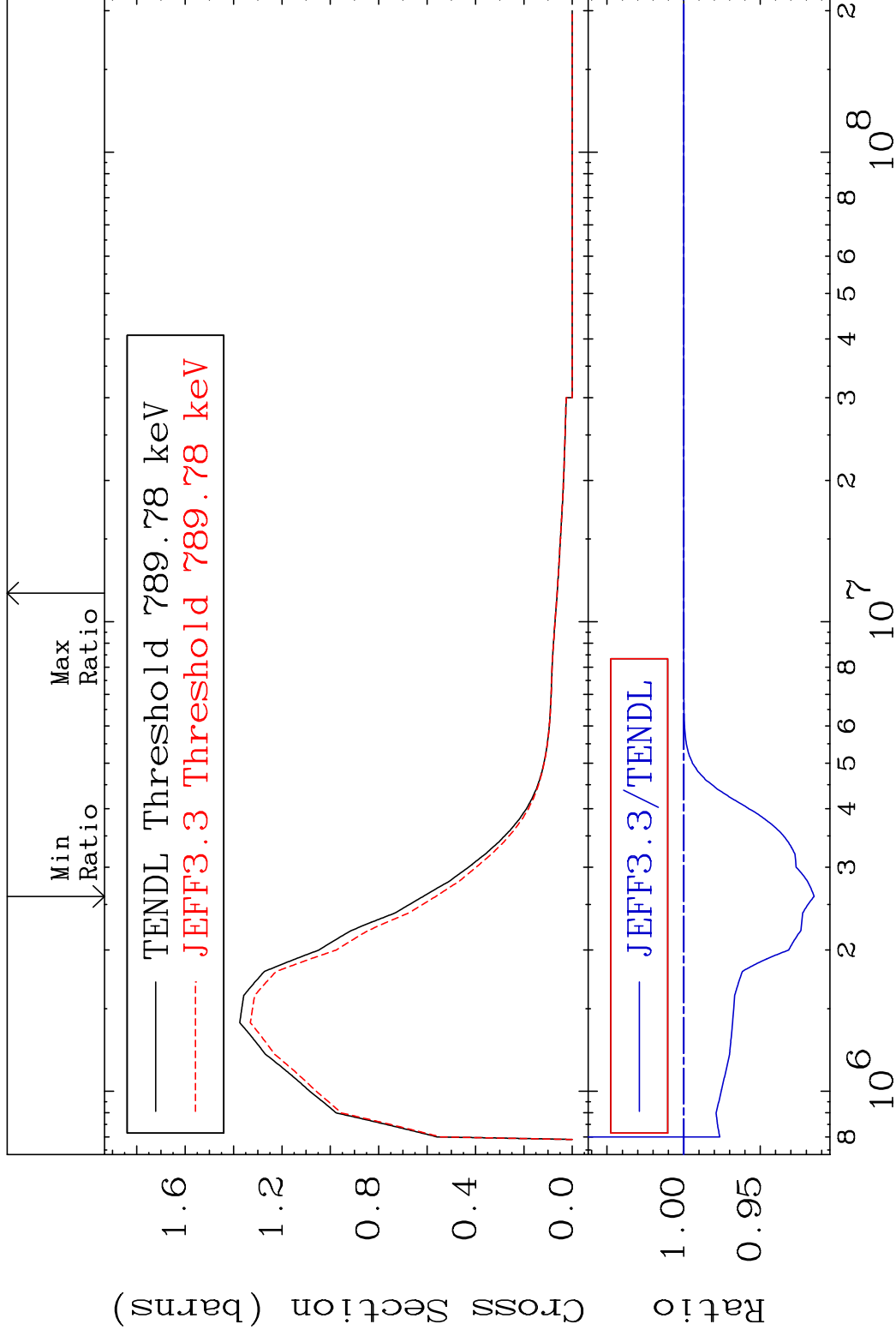


MAT 6413

MT= 51 (n, n') Level

64-Gd-148

Cross Section -8.511 To 0.000 %

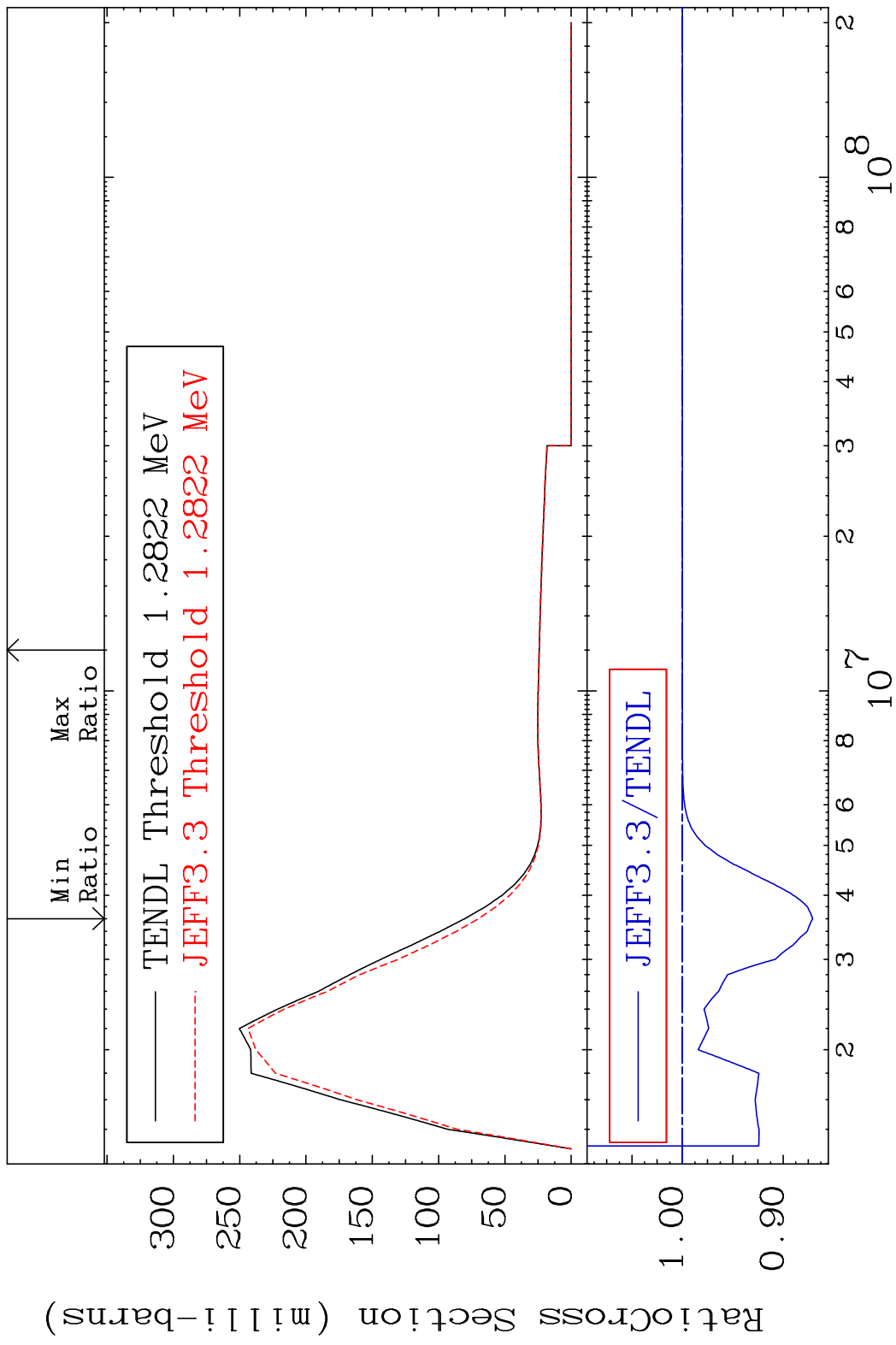


20

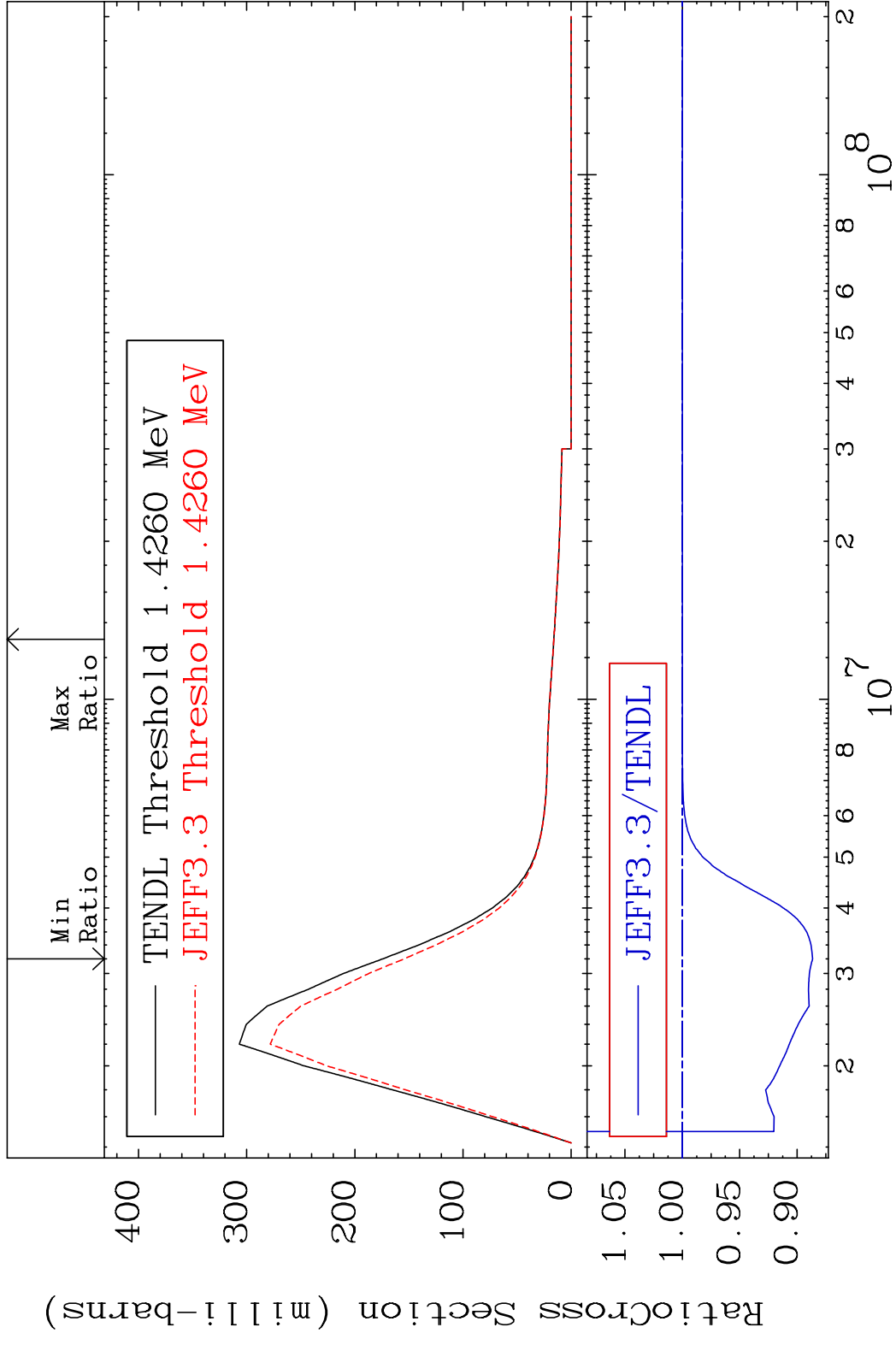
Incident Energy (eV)

64-Gd-148

MAT 6413 MT= 52 (n,n') Level 64-Gd-148
 Cross Section -12.92 To 0.000 %



MAT 6413 MT= 53 (n,n') Level 64-Gd-148
 Cross Section -11.35 To 0.000 %

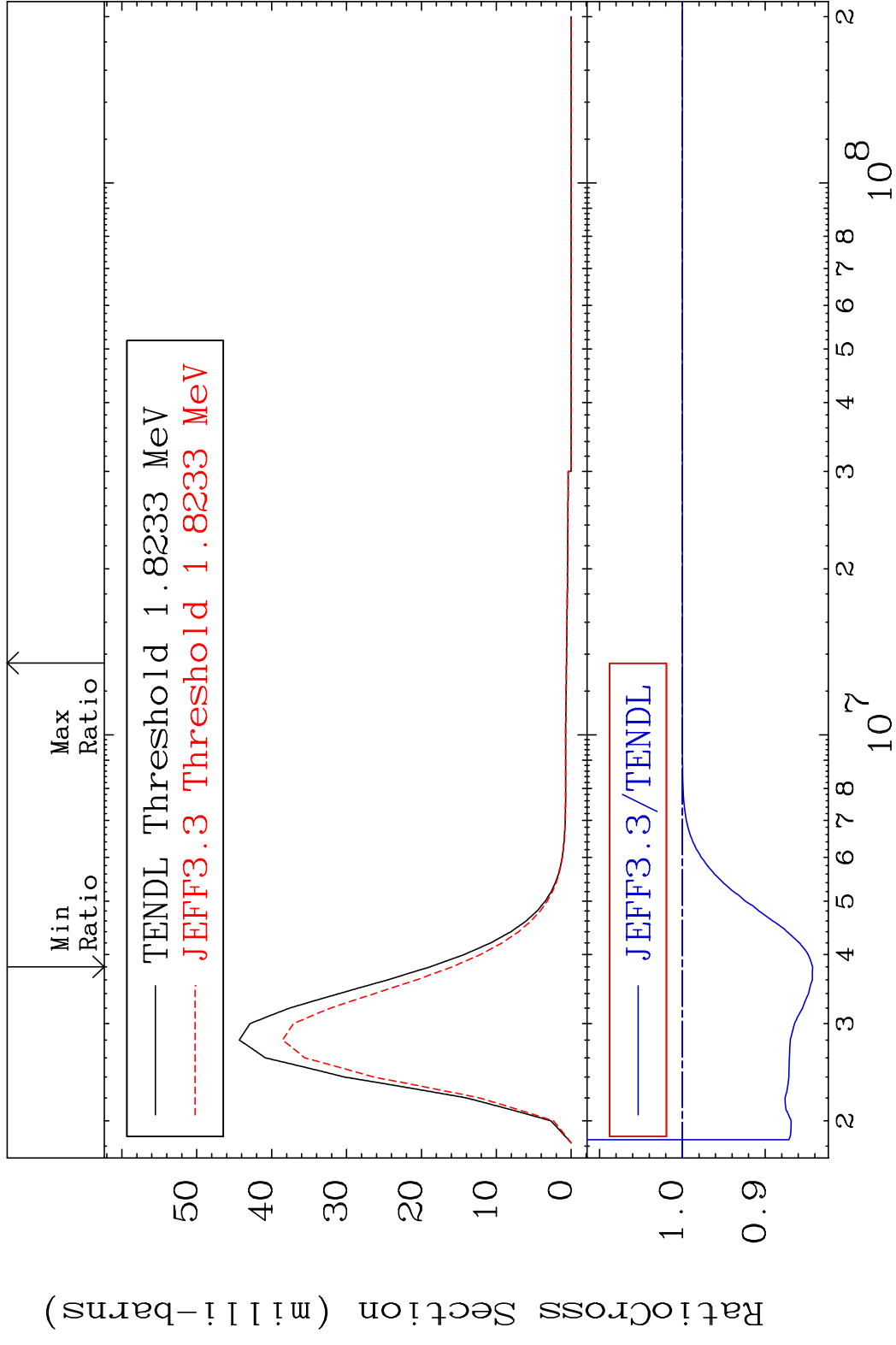


MAT 6413

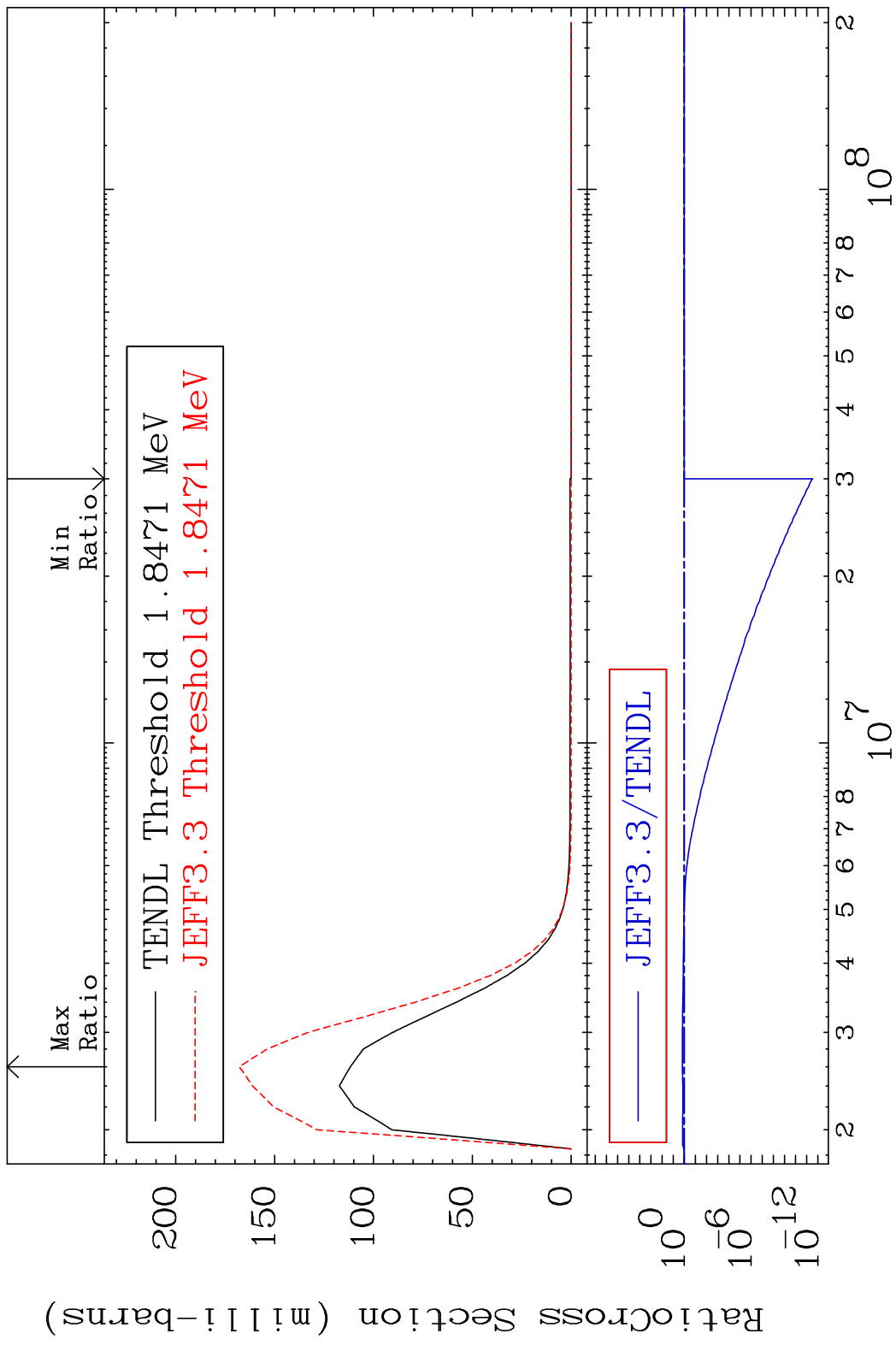
MT= 54 (n, n') Level

64-Gd-148

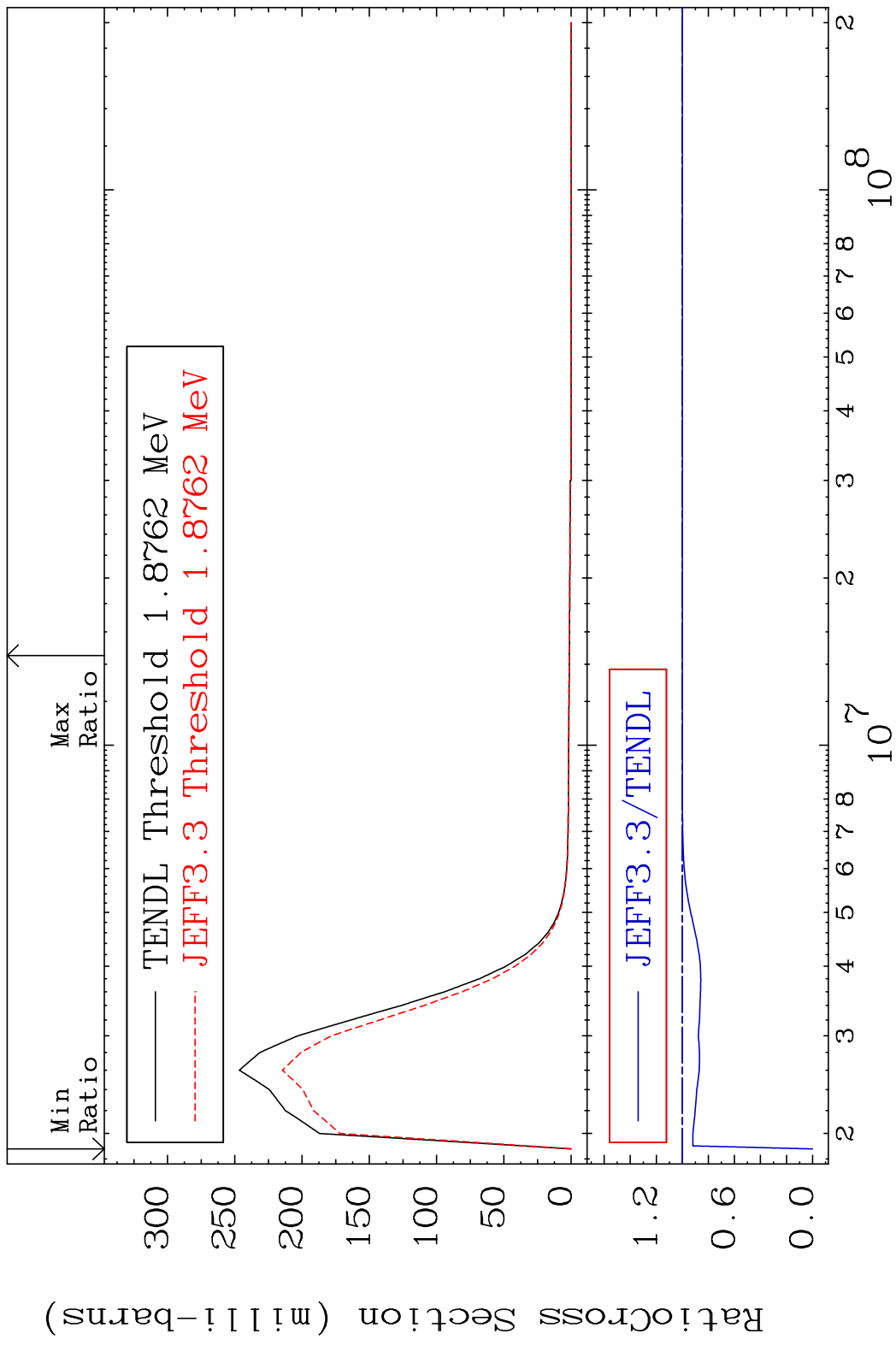
Cross Section -15.72 To 0.000 %



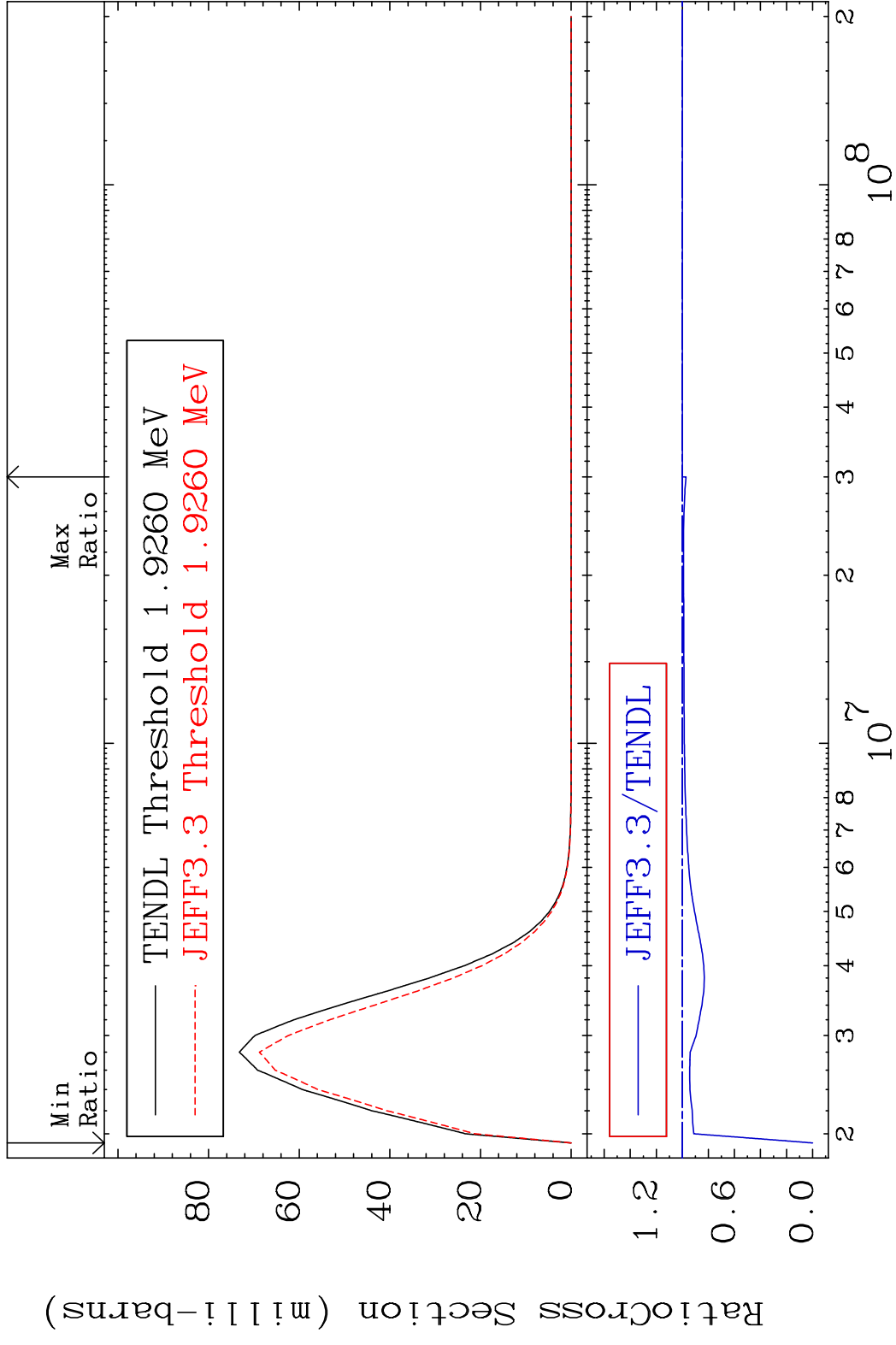
MAT 6413 MT= 55 (n, n') Level 64-Gd-148
 Cross Section -100.0 To 50.32 %



MAT 6413 MT= 56 (n,n') Level 64-Gd-148
 Cross Section -100.0 To 0.000 %



MAT 6413 MT= 57 (n, n') Level 64-Gd-148
 Cross Section -100.0 To 0.000 %

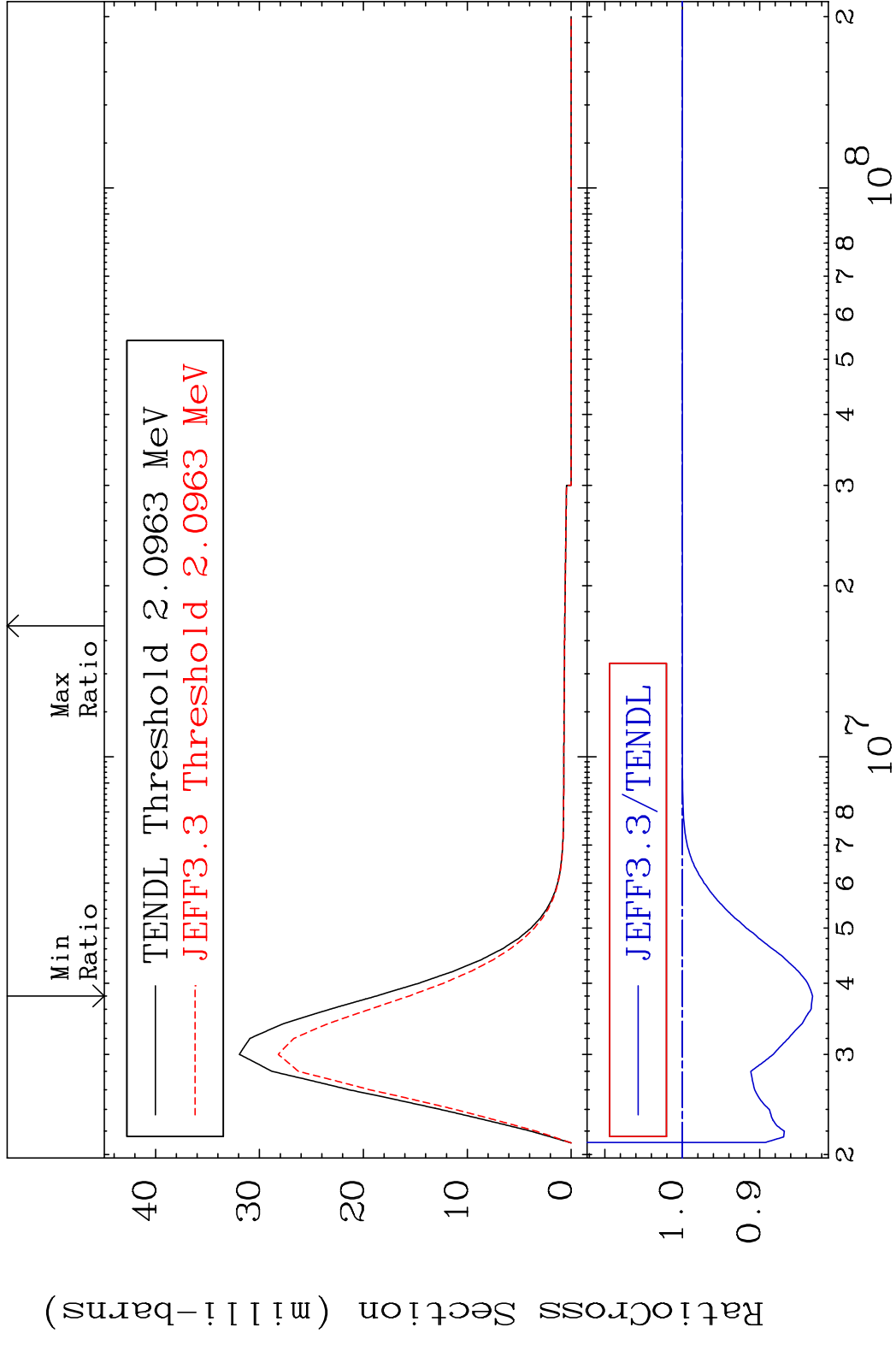


MAT 6413

MT= 58 (n, n') Level

64-Gd-148

Cross Section -16.82 To 0.000 %

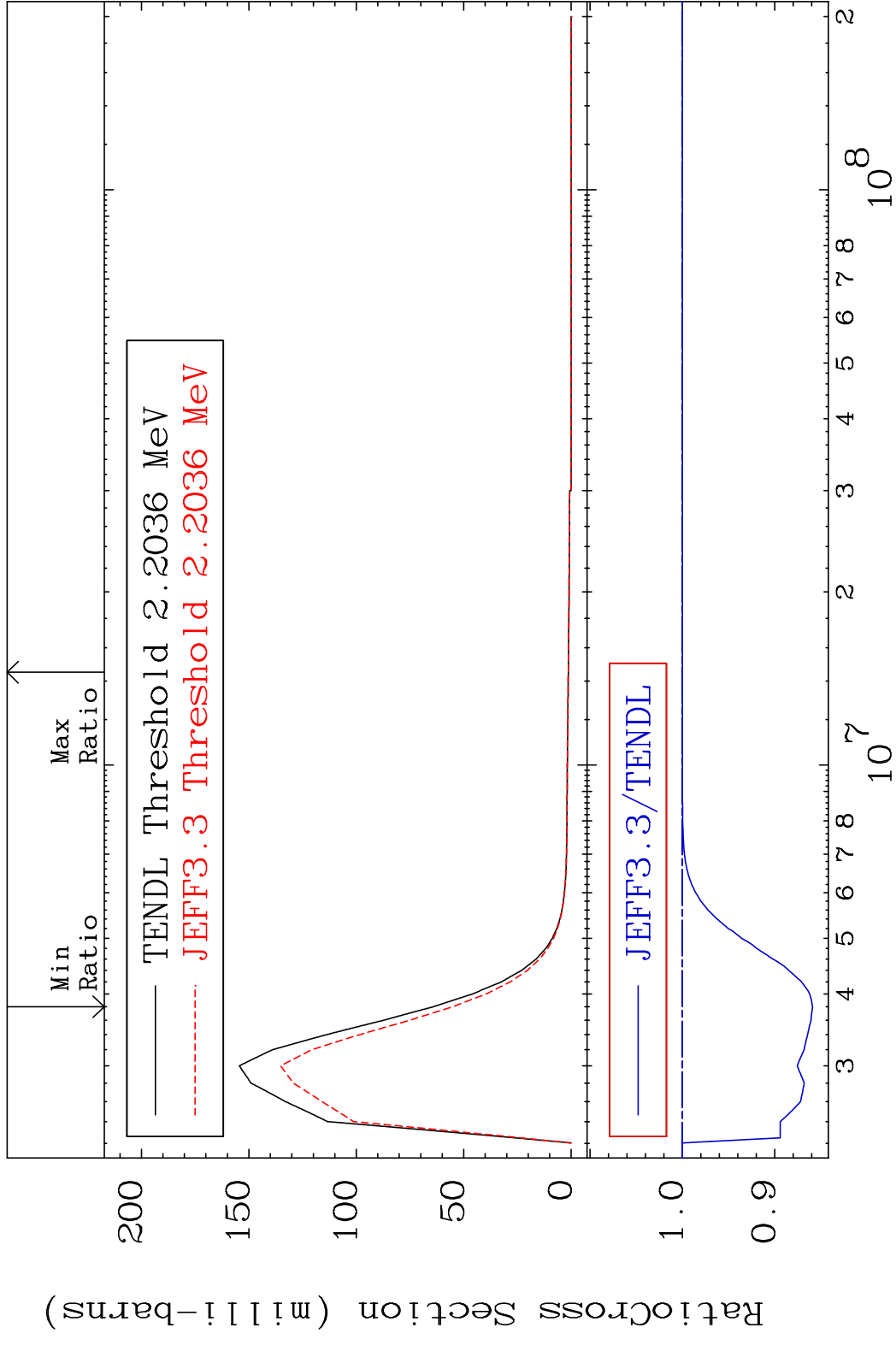


MAT 6413

MT= 59 (n,n') Level

64-Gd-148

Cross Section -14.10 To 0.000 %

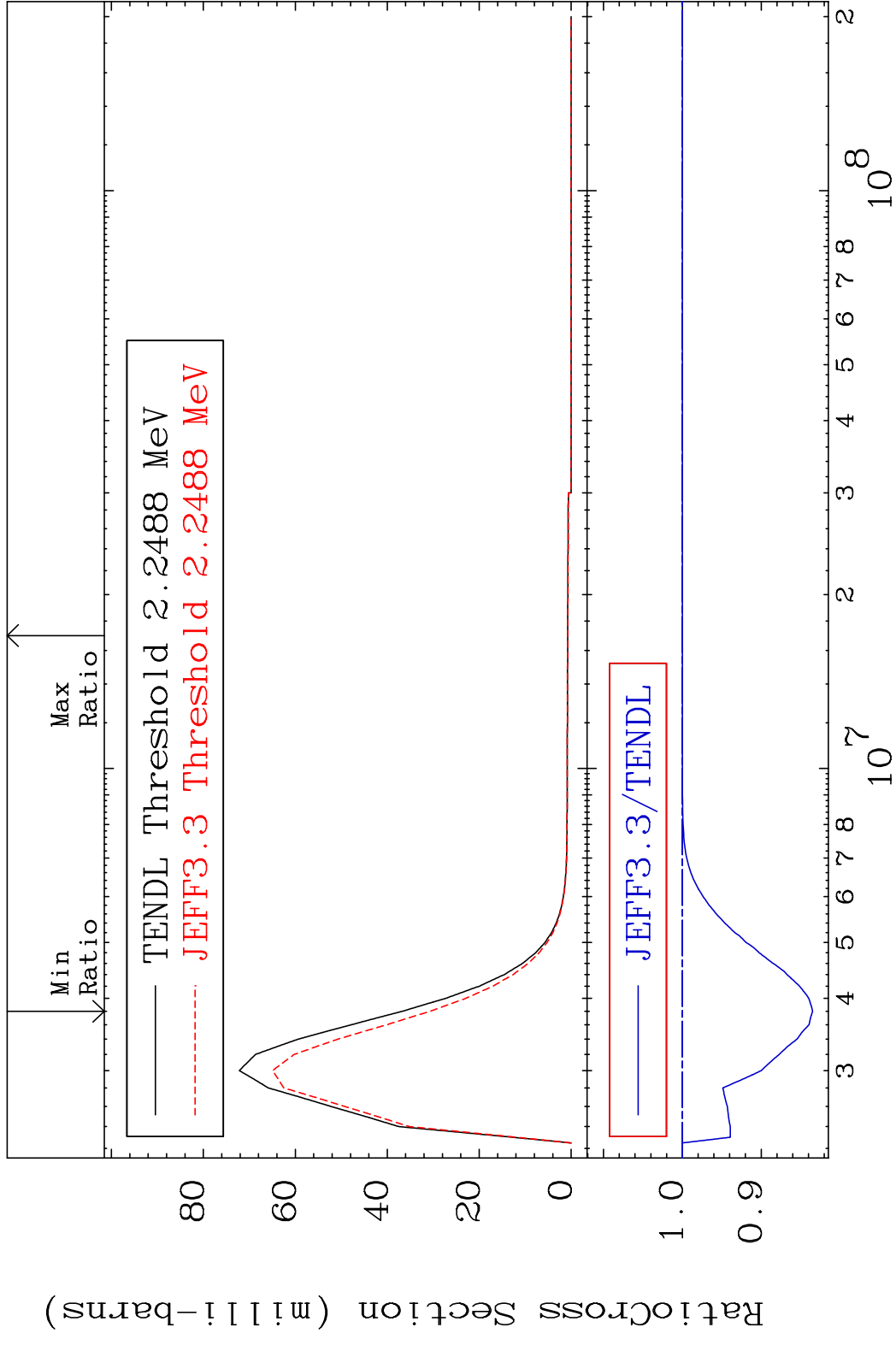


MAT 6413

MT= 60 (n, n') Level

64-Gd-148

Cross Section -16.52 To 0.000 %

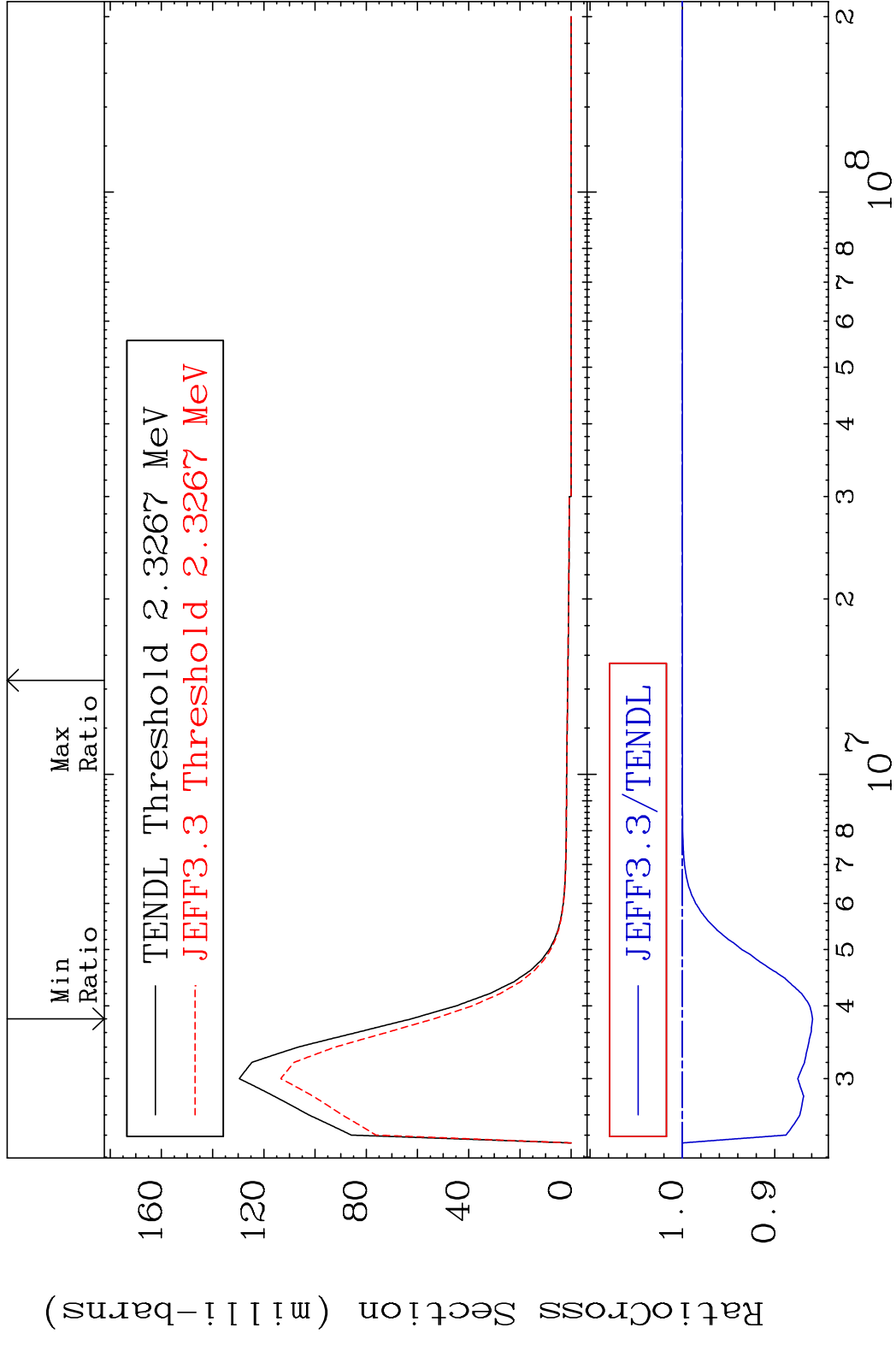


MAT 6413

MT= 61 (n, n') Level

64-Gd-148

Cross Section -14.10 To 0.000 %

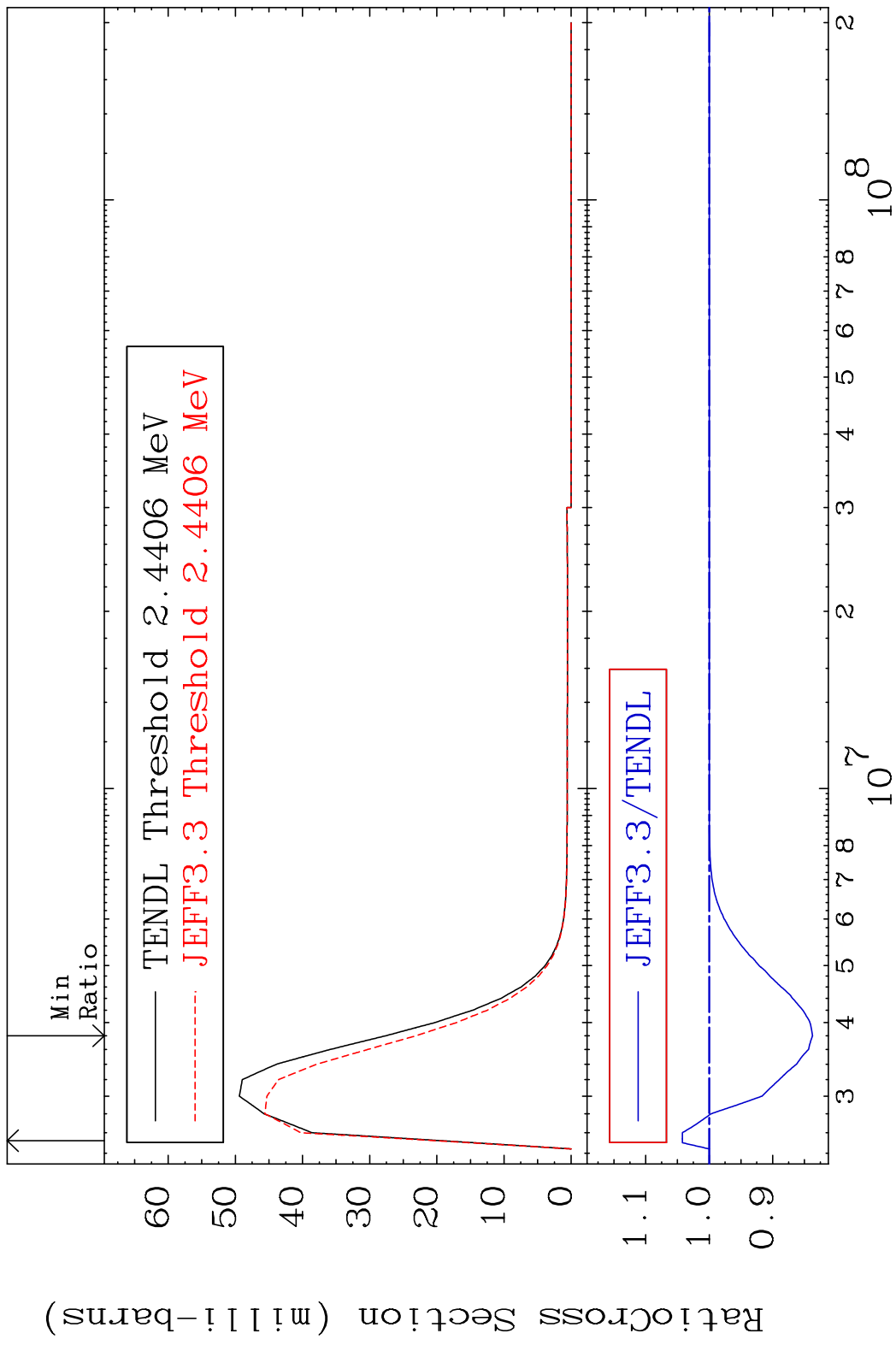


30

Incident Energy (eV)

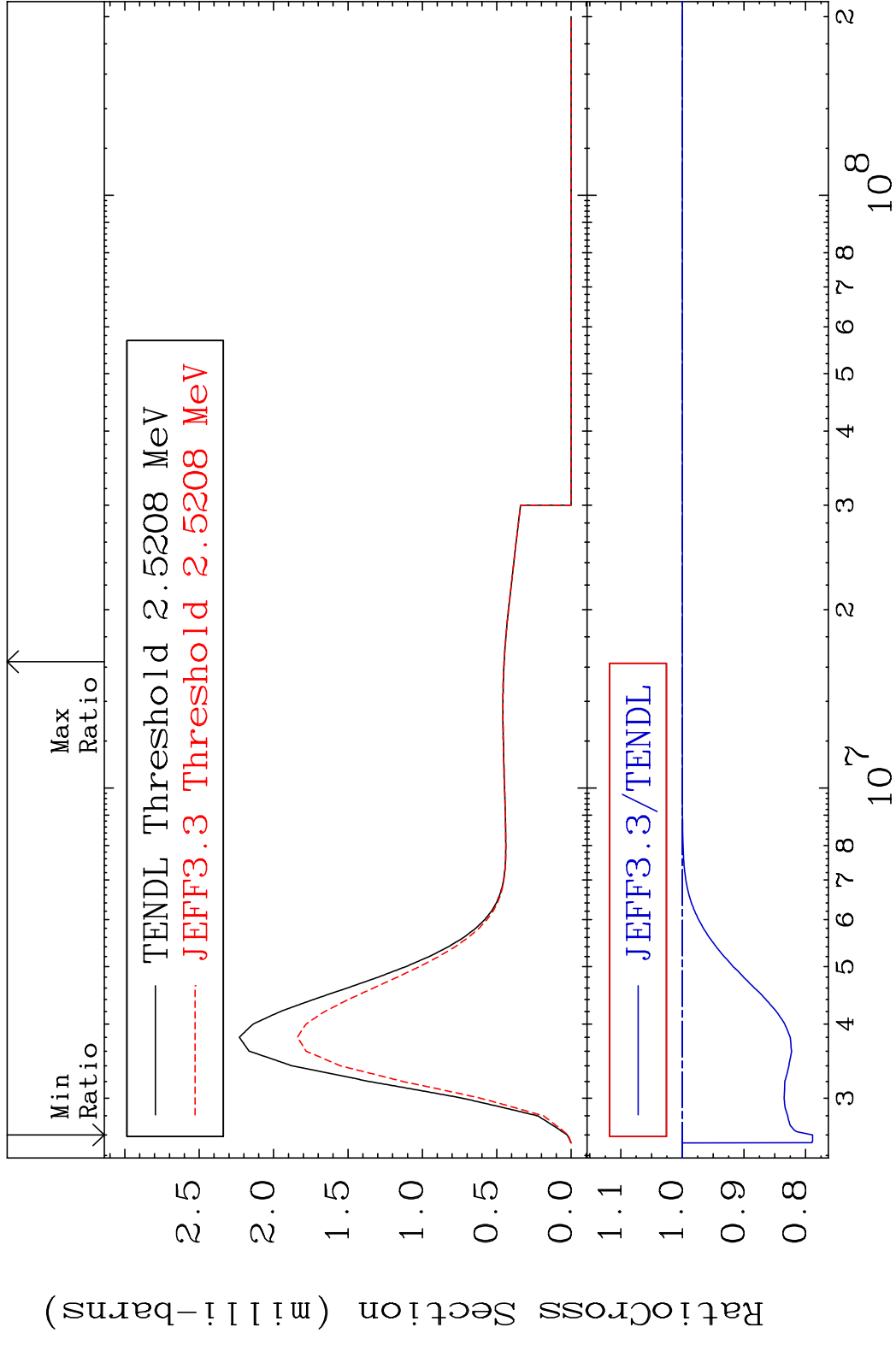
64-Gd-148

MAT 6413 MT= 62 (n, n') Level 64-Gd-148
 Cross Section -16.28 To 4.229 %

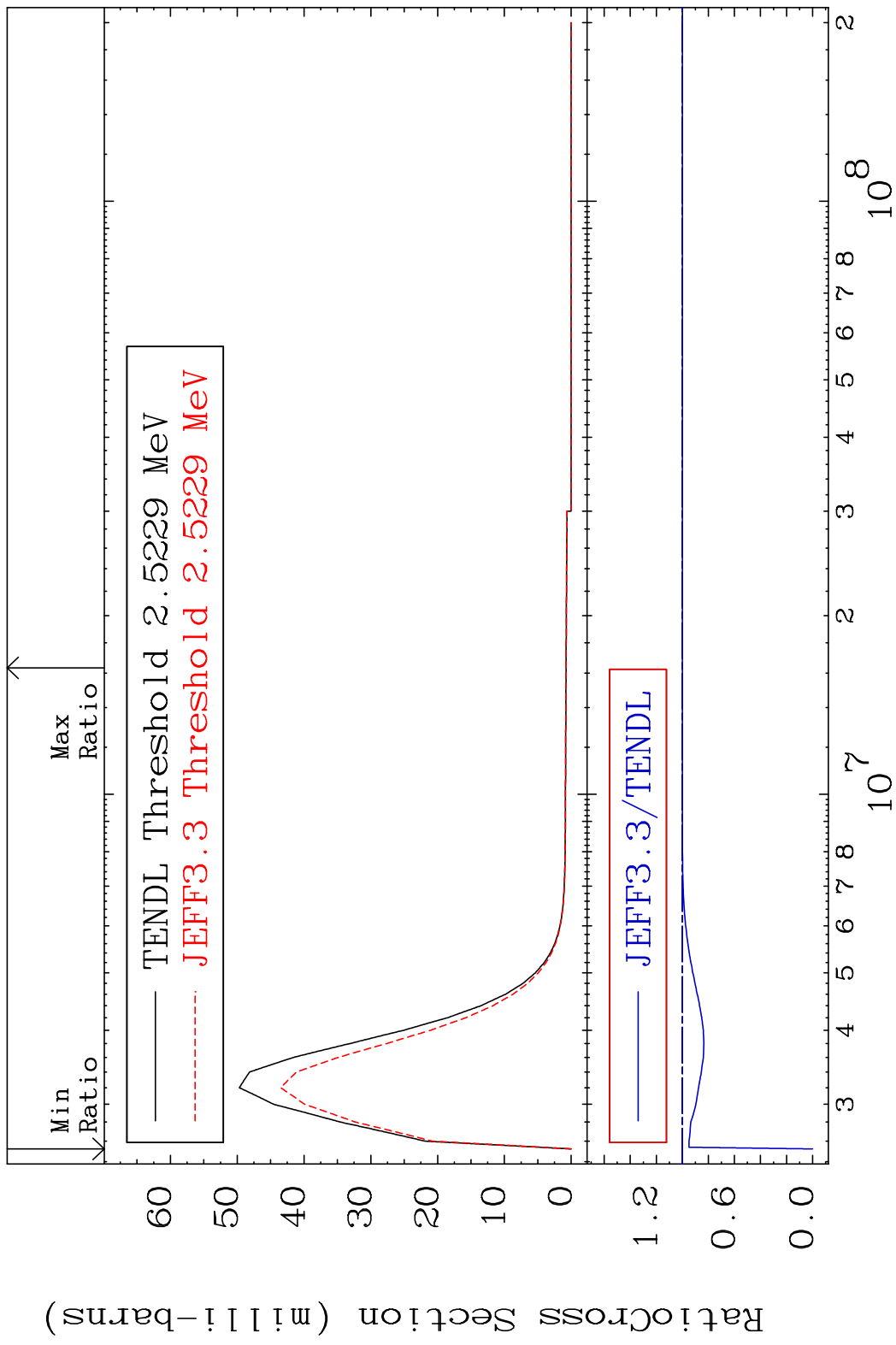


31 Incident Energy (eV) 64-Gd-148

MAT 6413 MT= 63 (n, n') Level 64-Gd-148
 Cross Section -21.12 To 0.000 %



MAT 6413 MT= 64 (n, n') Level 64-Gd-148
 Cross Section -100.0 To 0.000 %

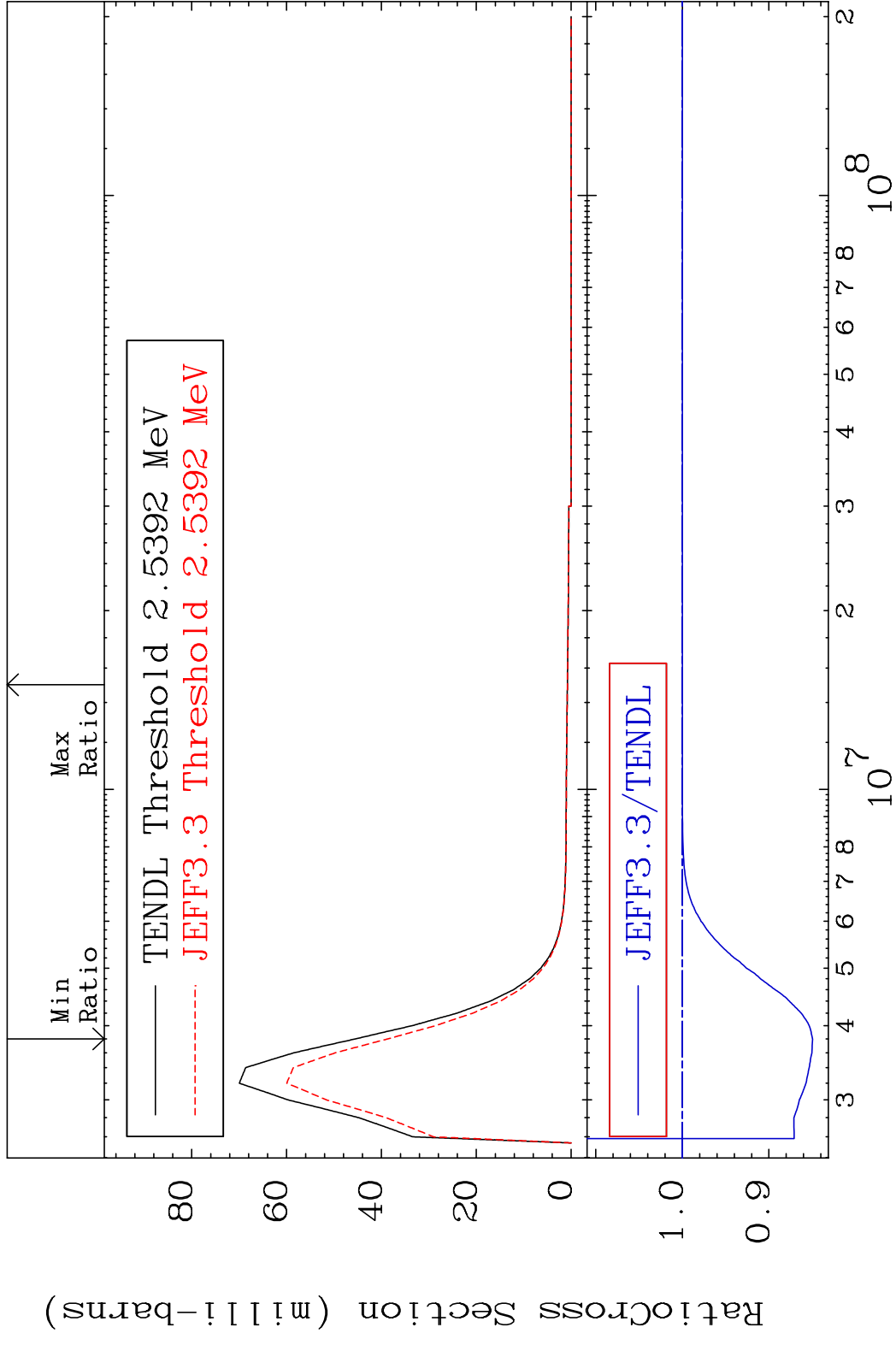


MAT 6413

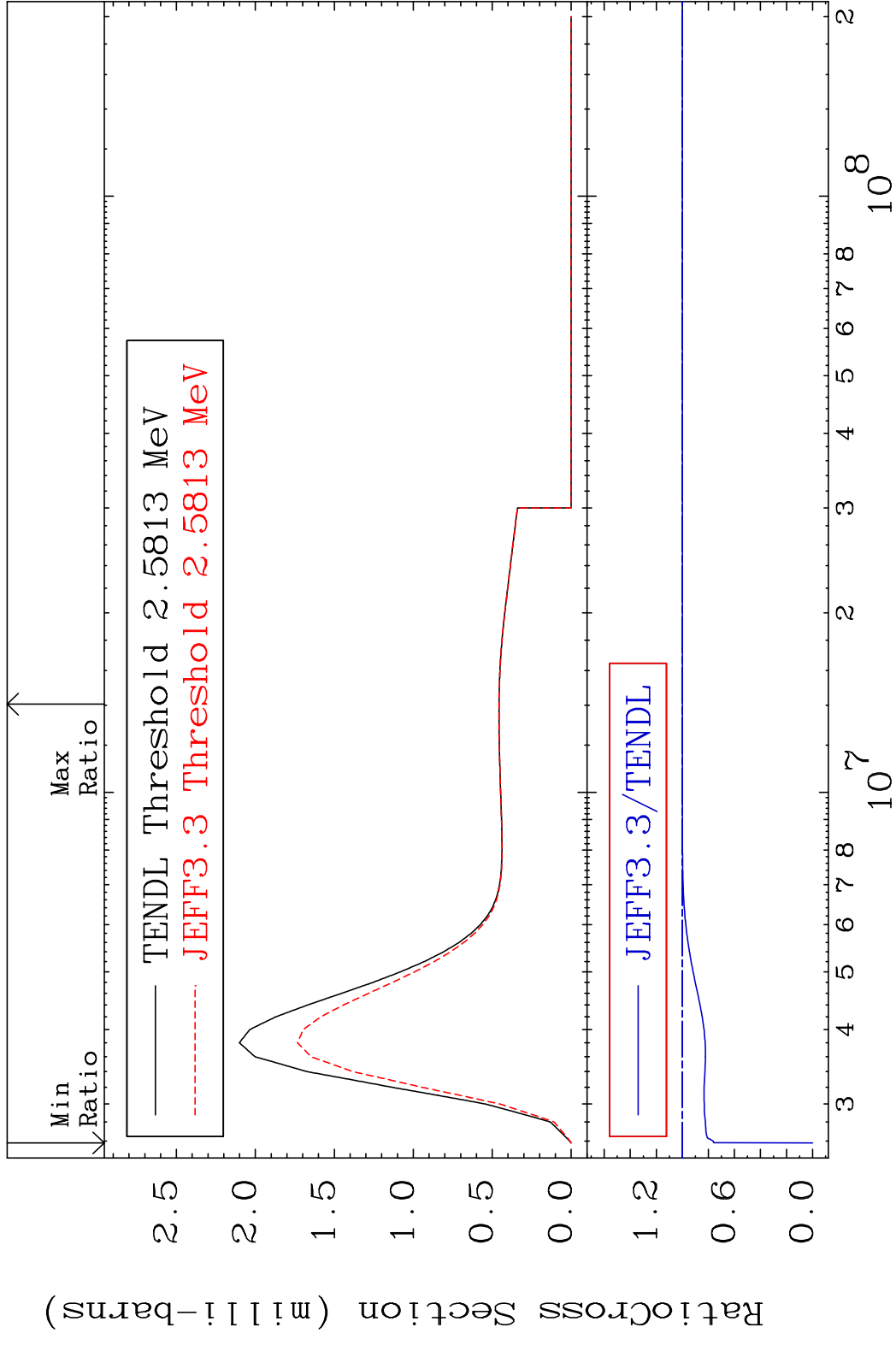
MT= 65 (n, n') Level

64-Gd-148

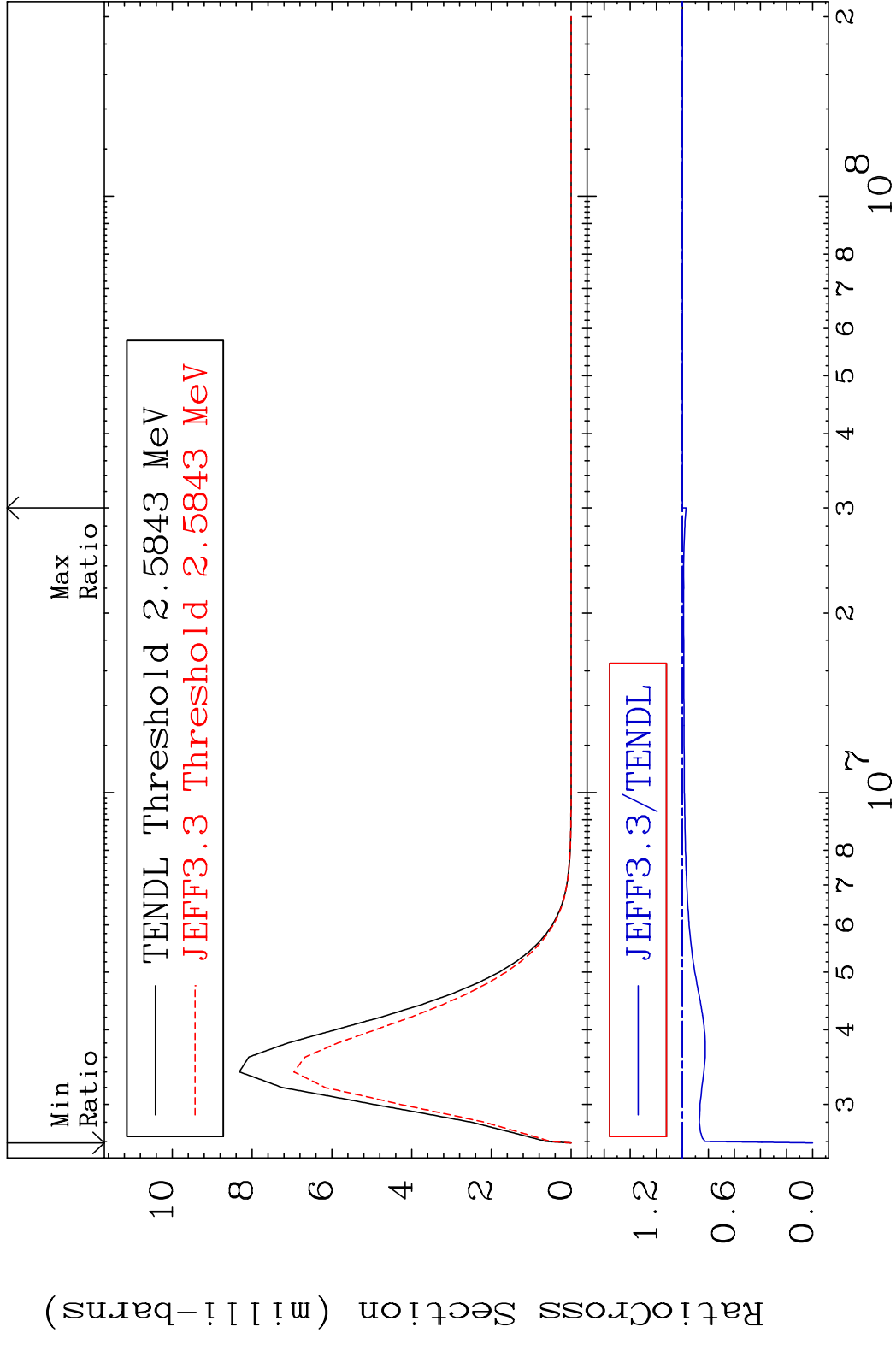
Cross Section -15.04 To 0.000 %



MAT 6413 MT= 66 (n,n') Level 64-Gd-148
 Cross Section -100.0 To 0.000 %



MAT 6413 MT= 67 (n, n') Level 64-Gd-148
 Cross Section -100.0 To 0.000 %

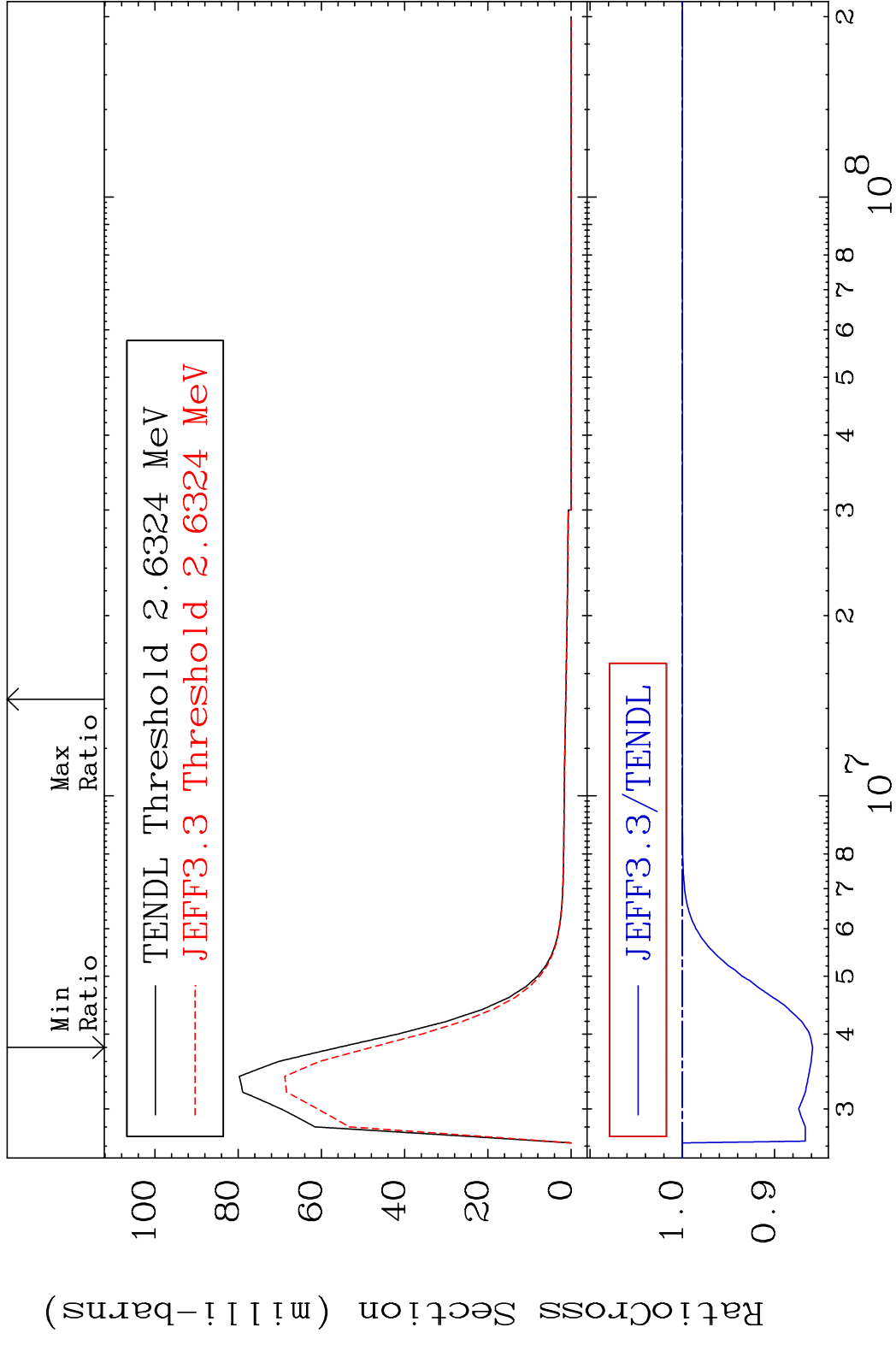


MAT 6413

MT= 68 (n, n') Level

64-Gd-148

Cross Section -14.12 To 0.000 %

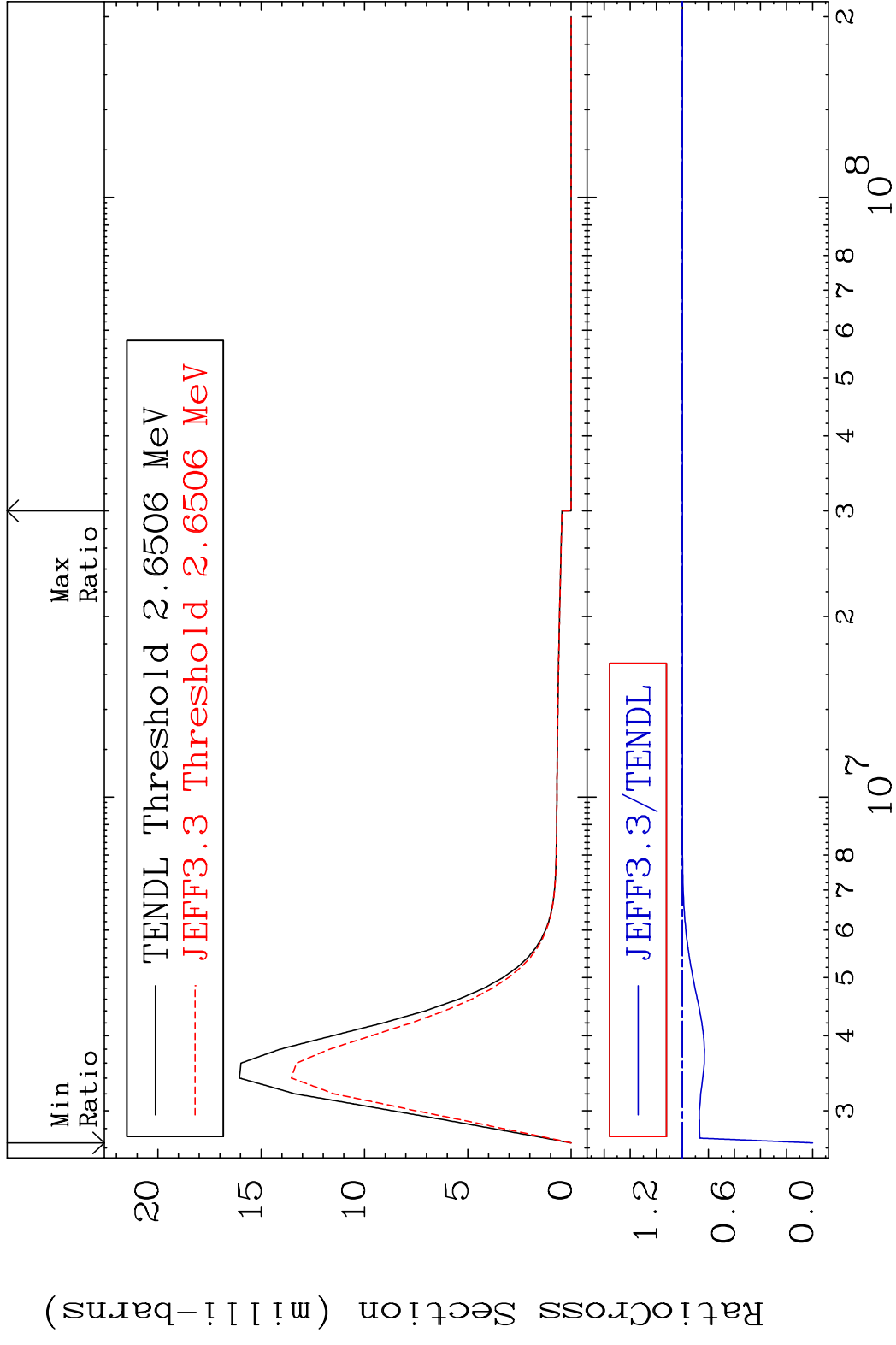


37

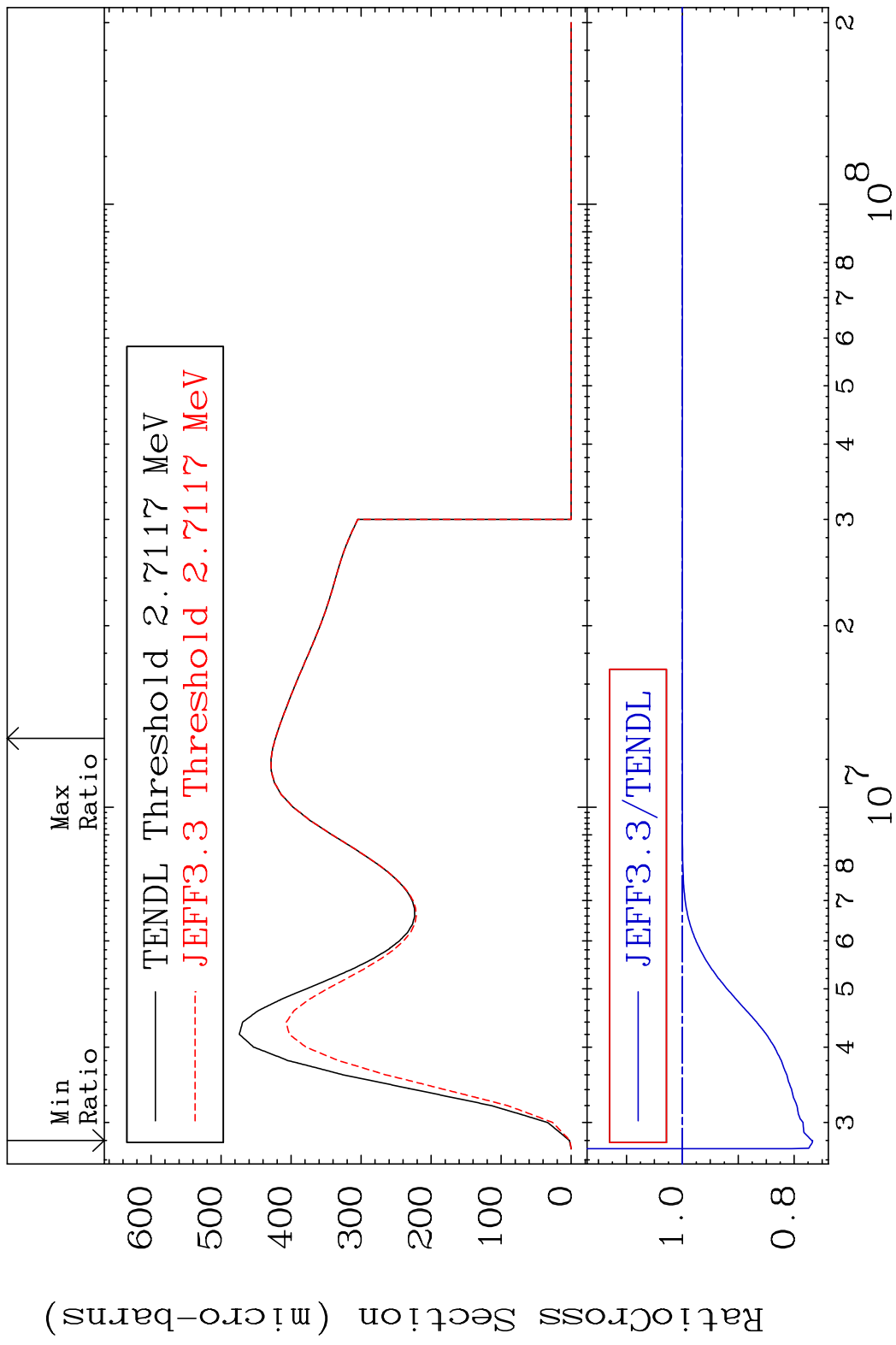
Incident Energy (eV)

64-Gd-148

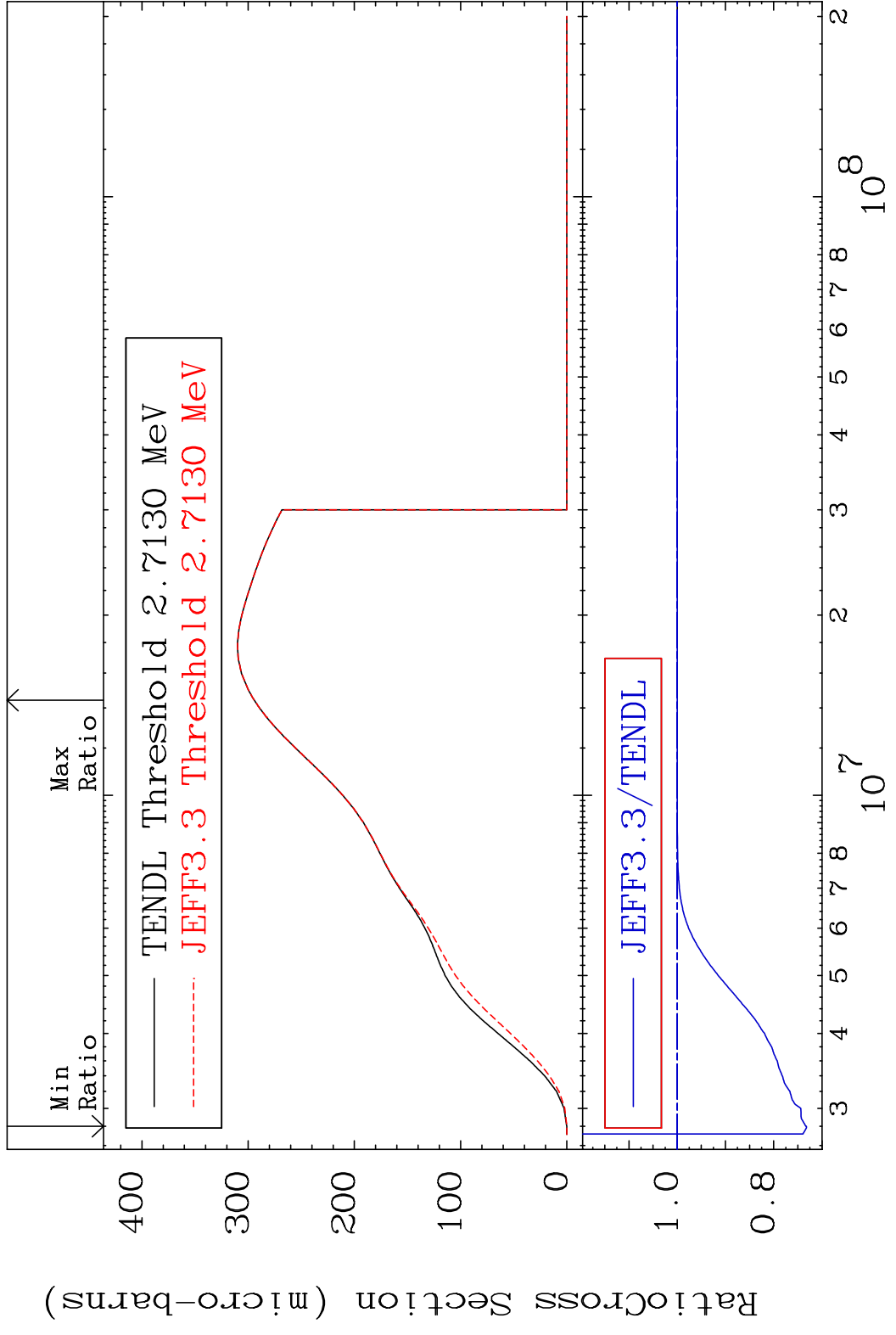
MAT 6413 MT= 69 (n, n') Level 64-Gd-148
 Cross Section -100.0 To 0.000 %



MAT 6413 MT= 70 (n,n') Level 64-Gd-148
 Cross Section -23.29 To 0.000 %

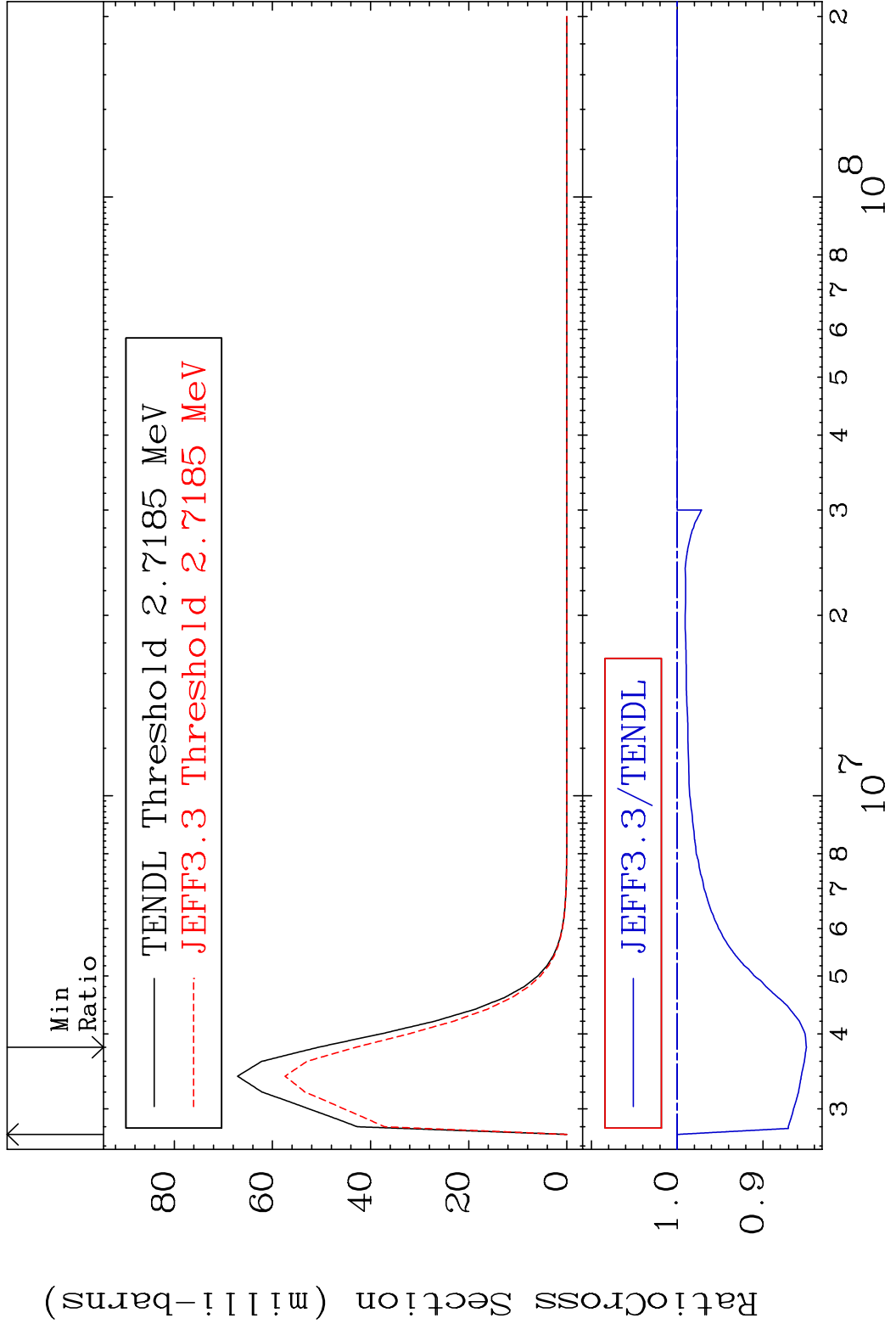


MAT 6413 MT= 71 (n,n') Level 64-Gd-148
 Cross Section -26.77 To 0.000 %

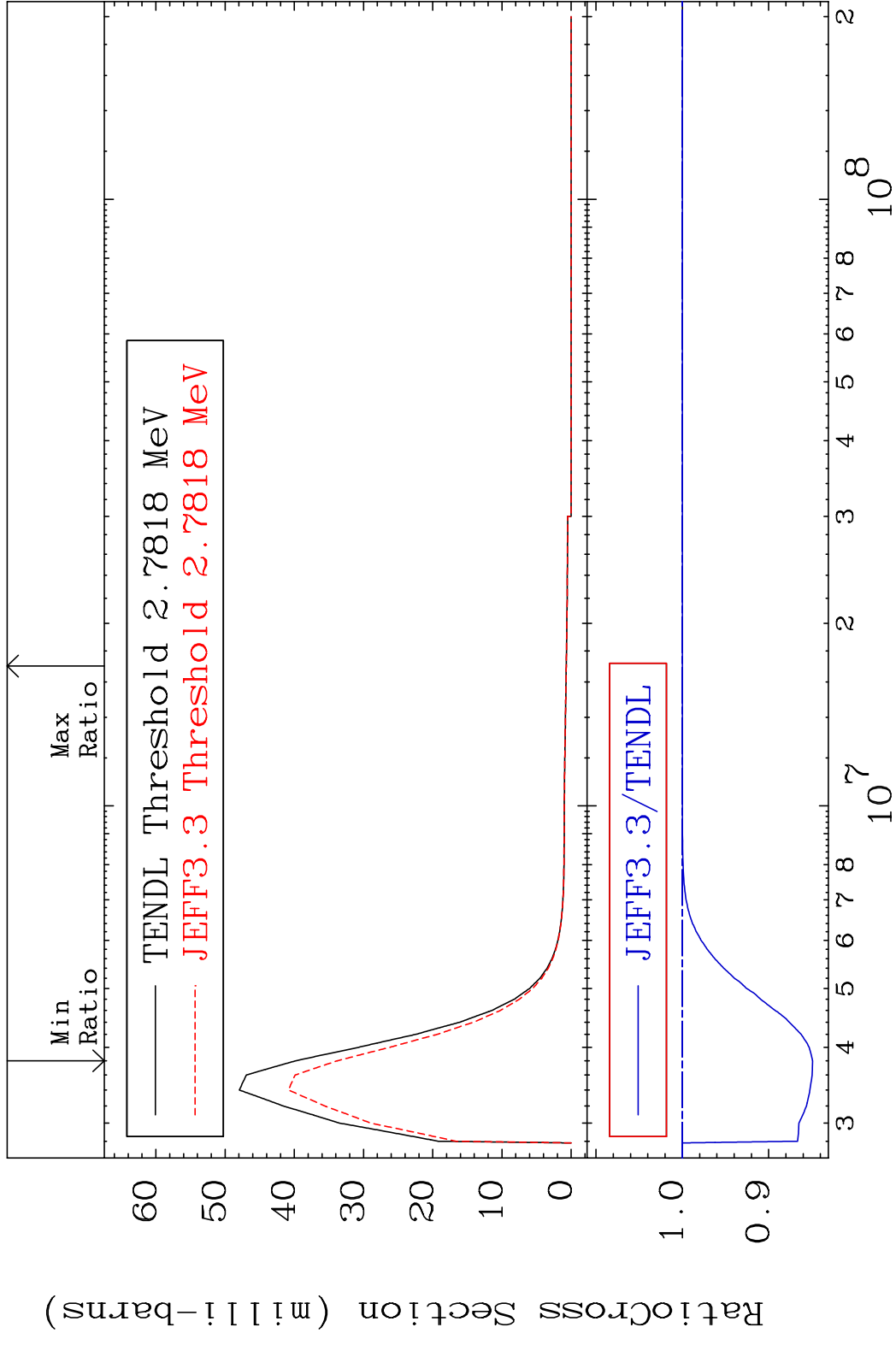


40 64-Gd-148

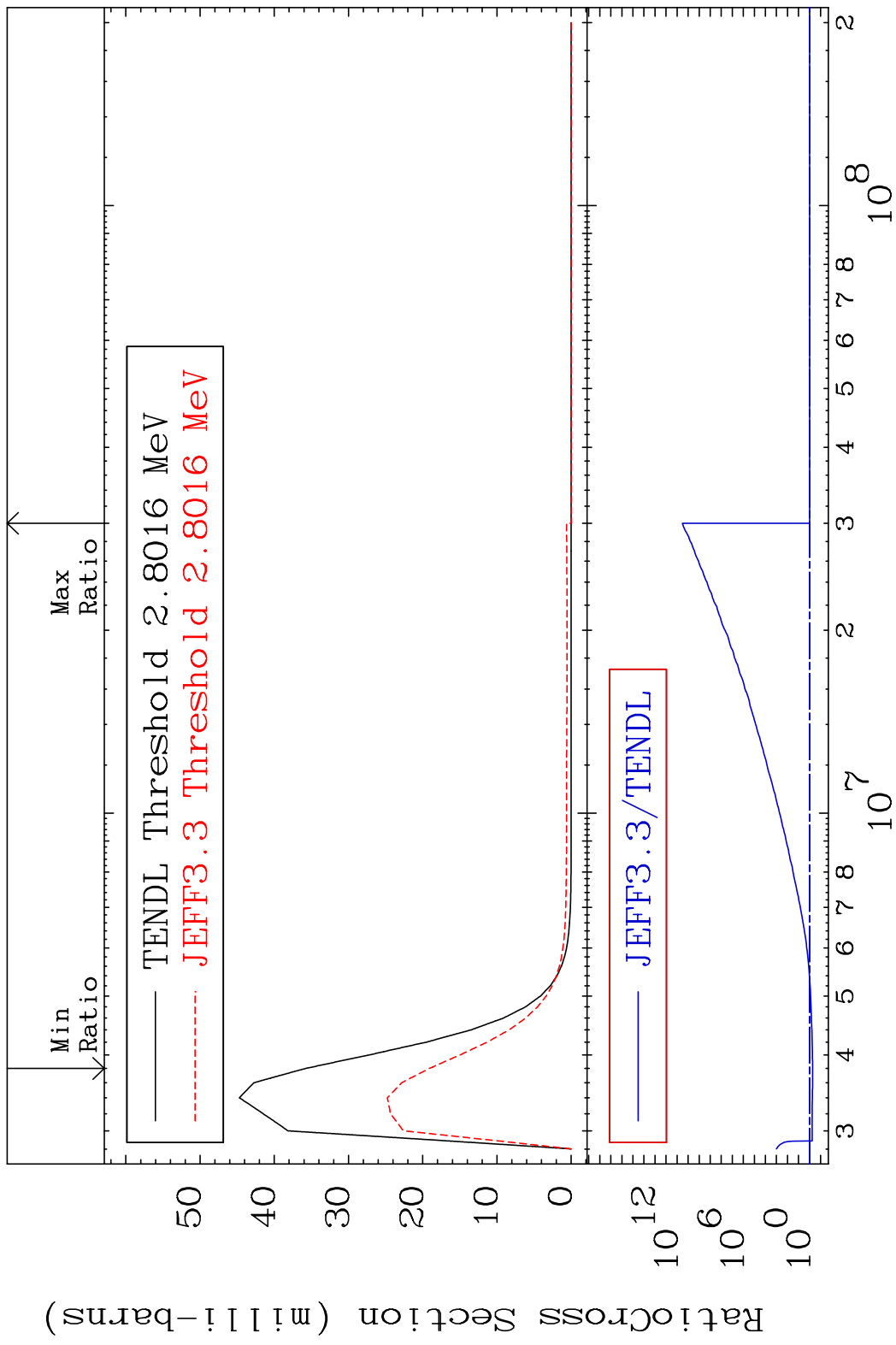
MAT 6413 MT= 72 (n,n') Level 64-Gd-148
 Cross Section -15.06 To 0.000 %



MAT 6413 MT= 73 (n, n') Level 64-Gd-148
 Cross Section -15.09 To 0.000 %

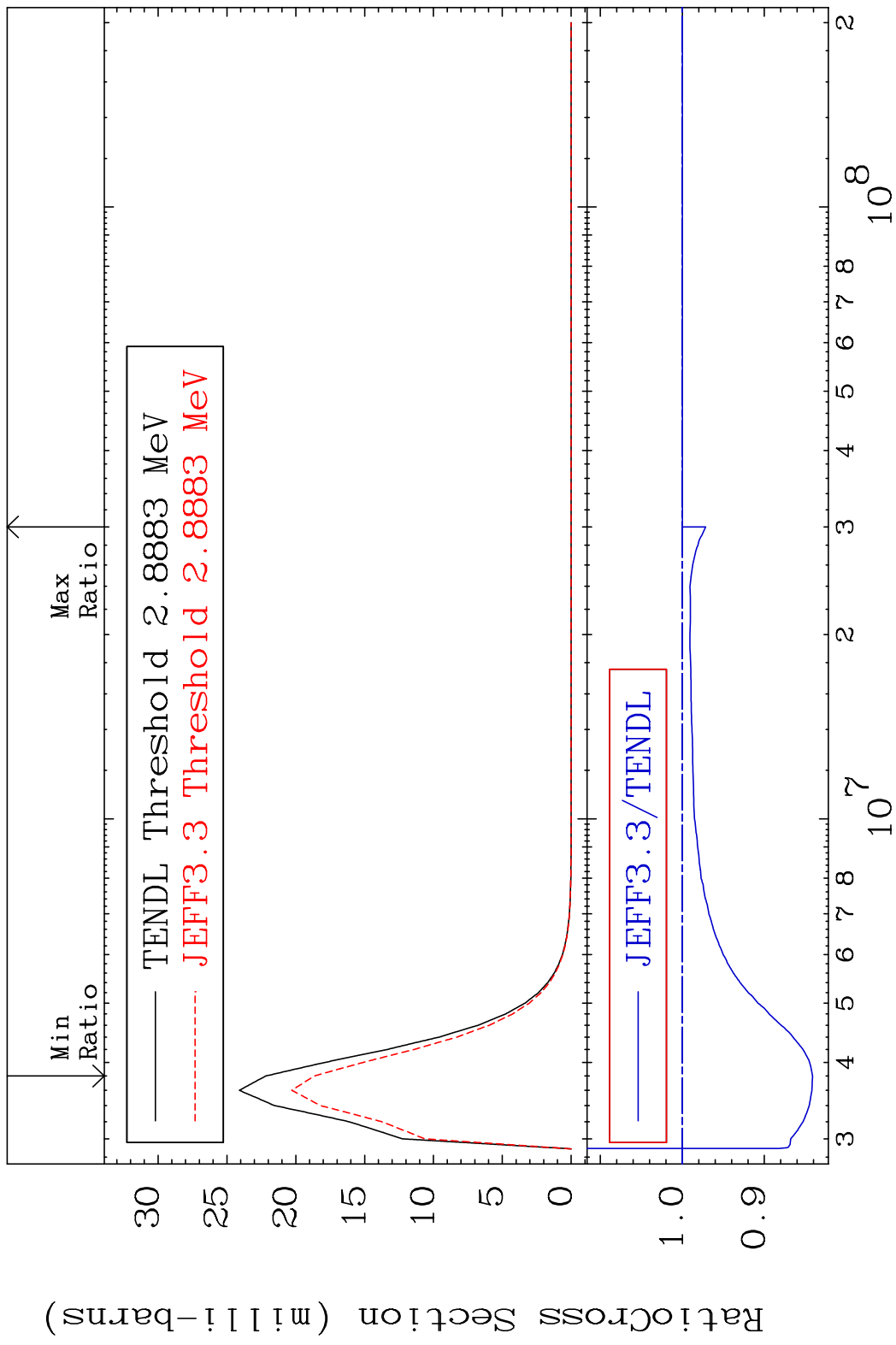


MAT 6413 MT= 74 (n, n') Level 64-Gd-148
 Cross Section -46.59 To 9999. %

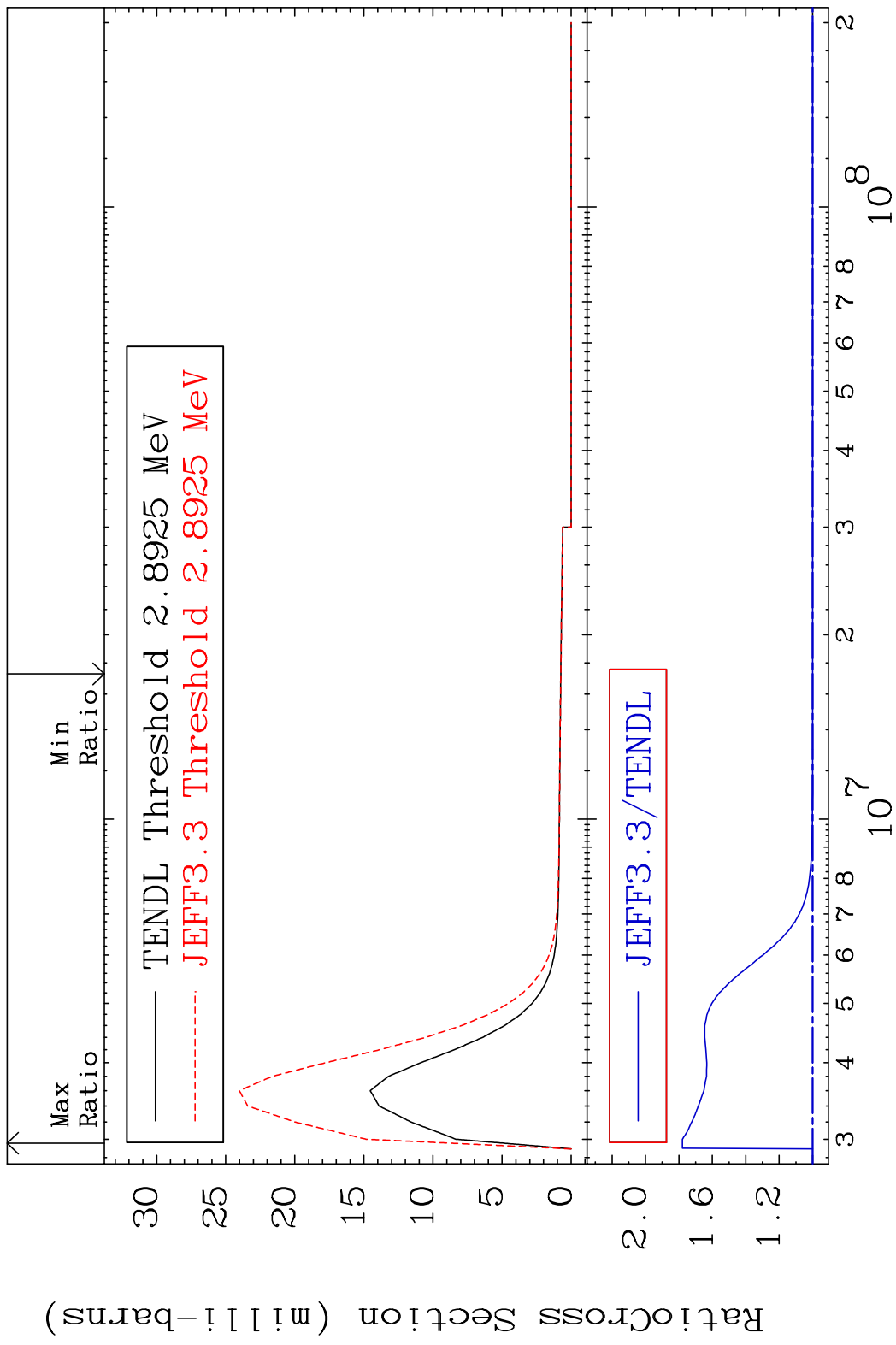


43 Incident Energy (eV) 64-Gd-148

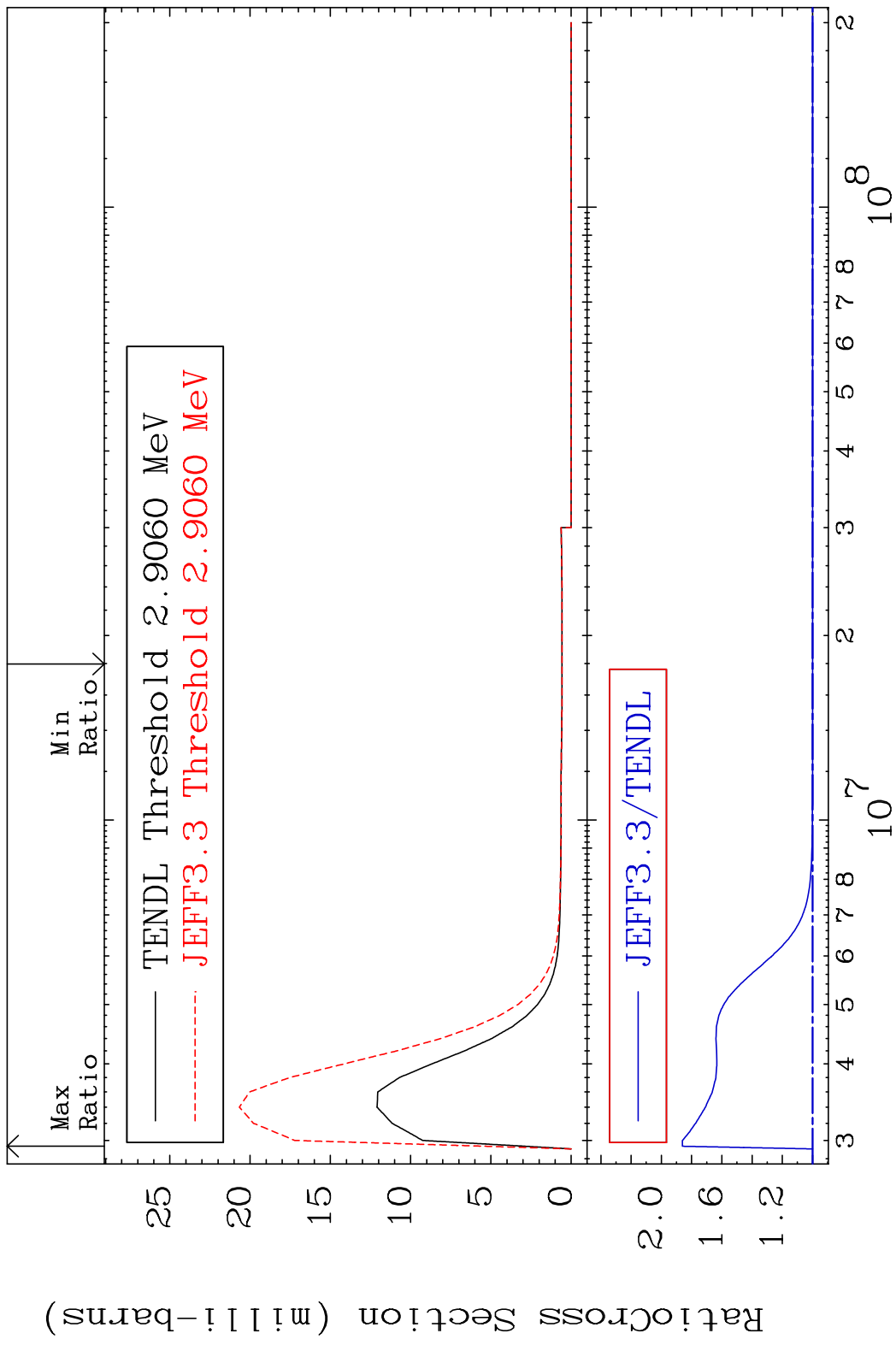
MAT 6413 MT= 75 (n,n') Level 64-Gd-148
 Cross Section -15.87 To 0.000 %



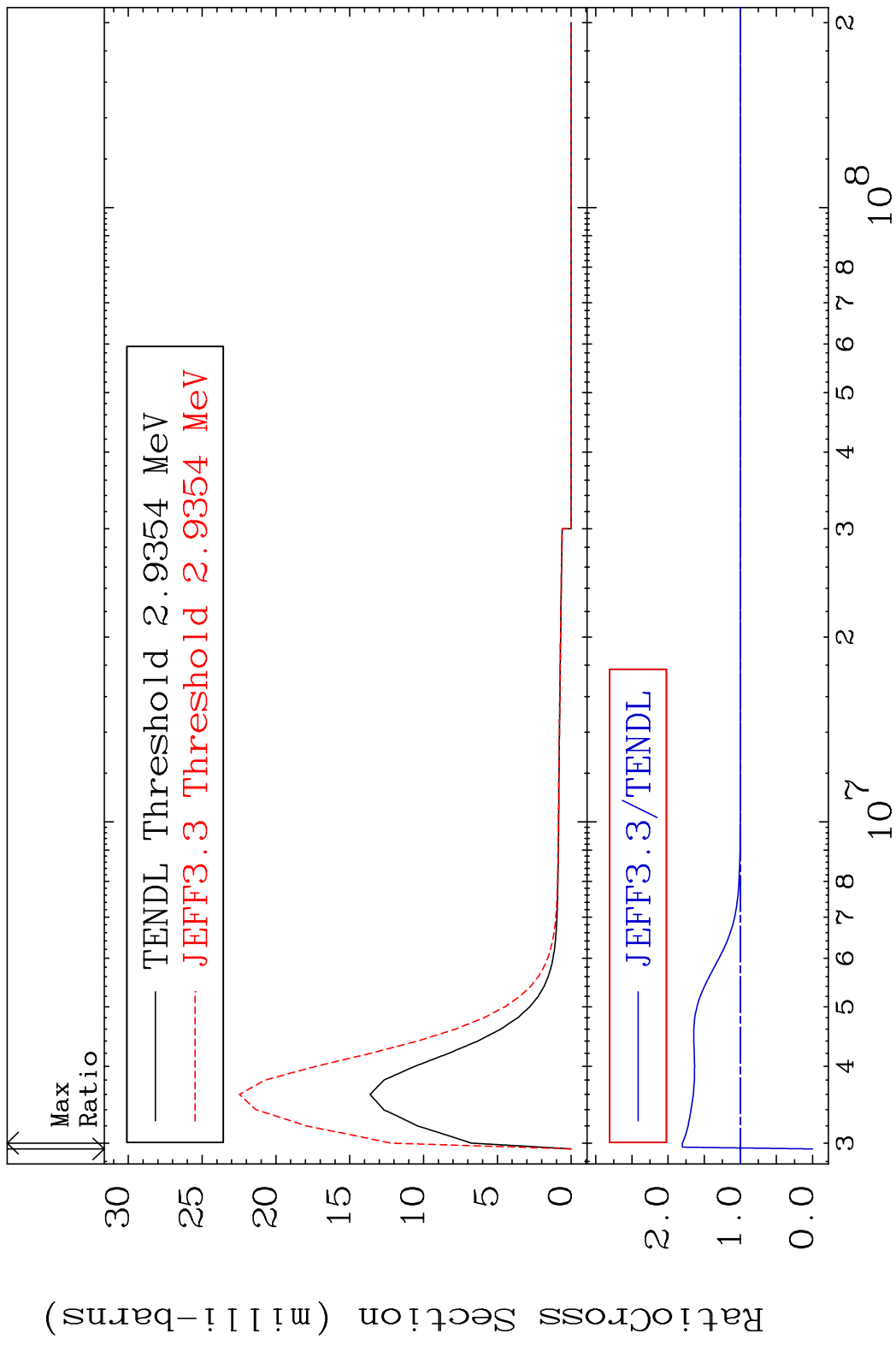
MAT 6413 MT= 76 (n,n') Level 64-Gd-148
 Cross Section 0.000 To 77.94 %



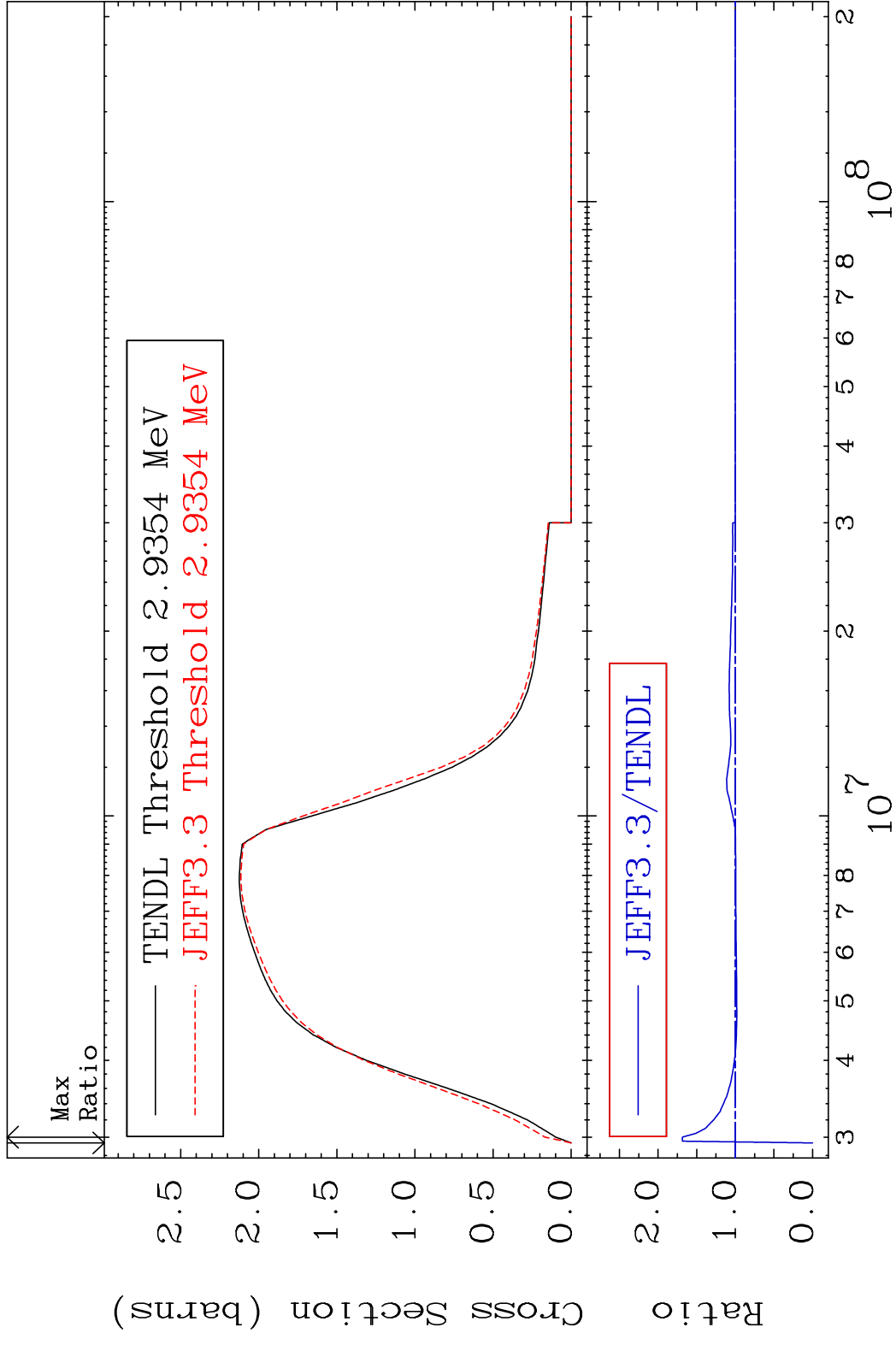
MAT 6413 MT= 77 (n,n') Level 64-Gd-148
 Cross Section 0.000 To 86.11 %



MAT 6413 MT= 78 (n, n') Level 64-Gd-148
 Cross Section -100.0 To 80.19 %



MAT 6413 (n,n') Continuum 64-Gd-148
 Cross Section -100.0 To 68.55 %

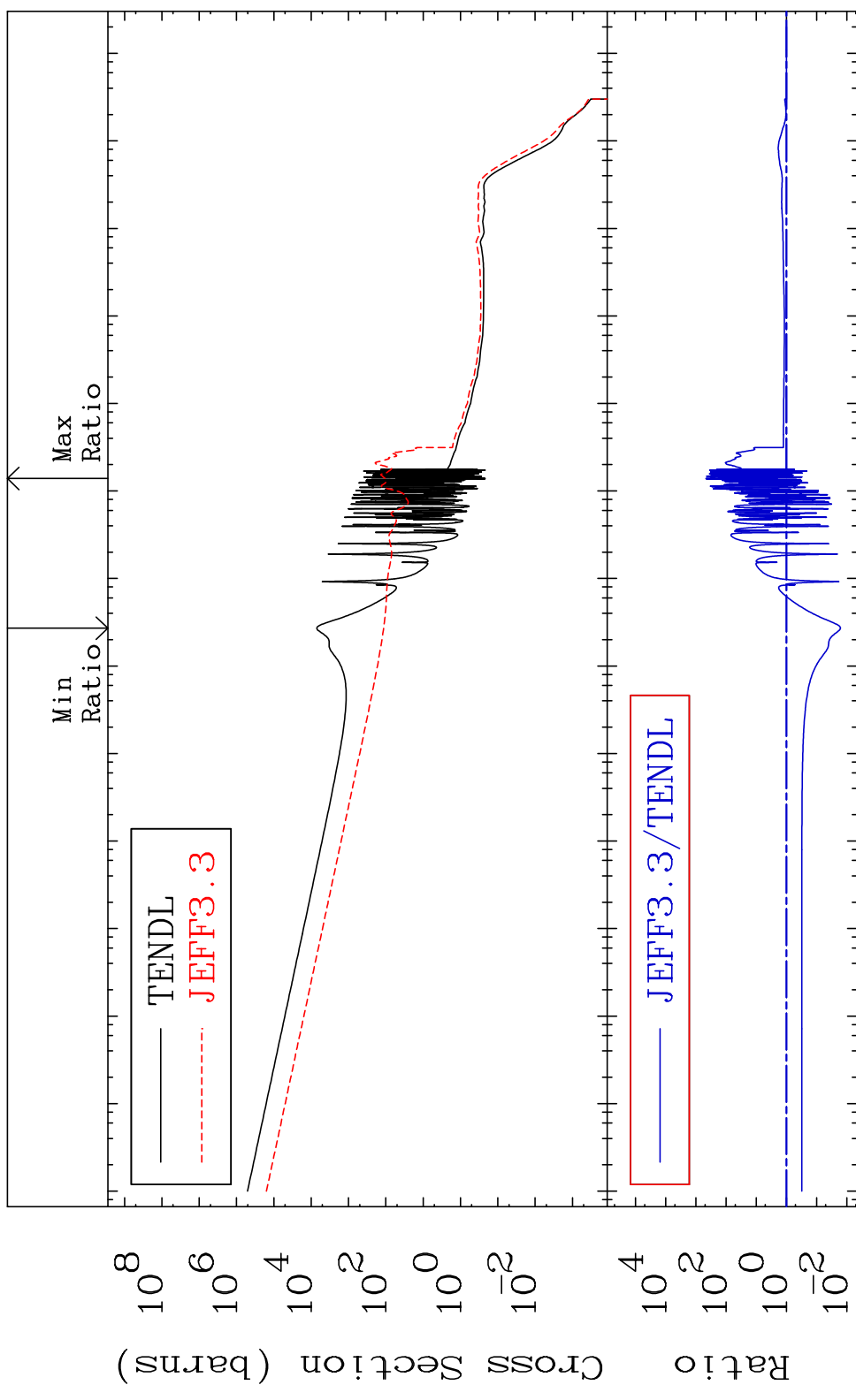


MAT 6413

(n, γ)

64-Gd-148

Cross Section -98.38 To 9999. %

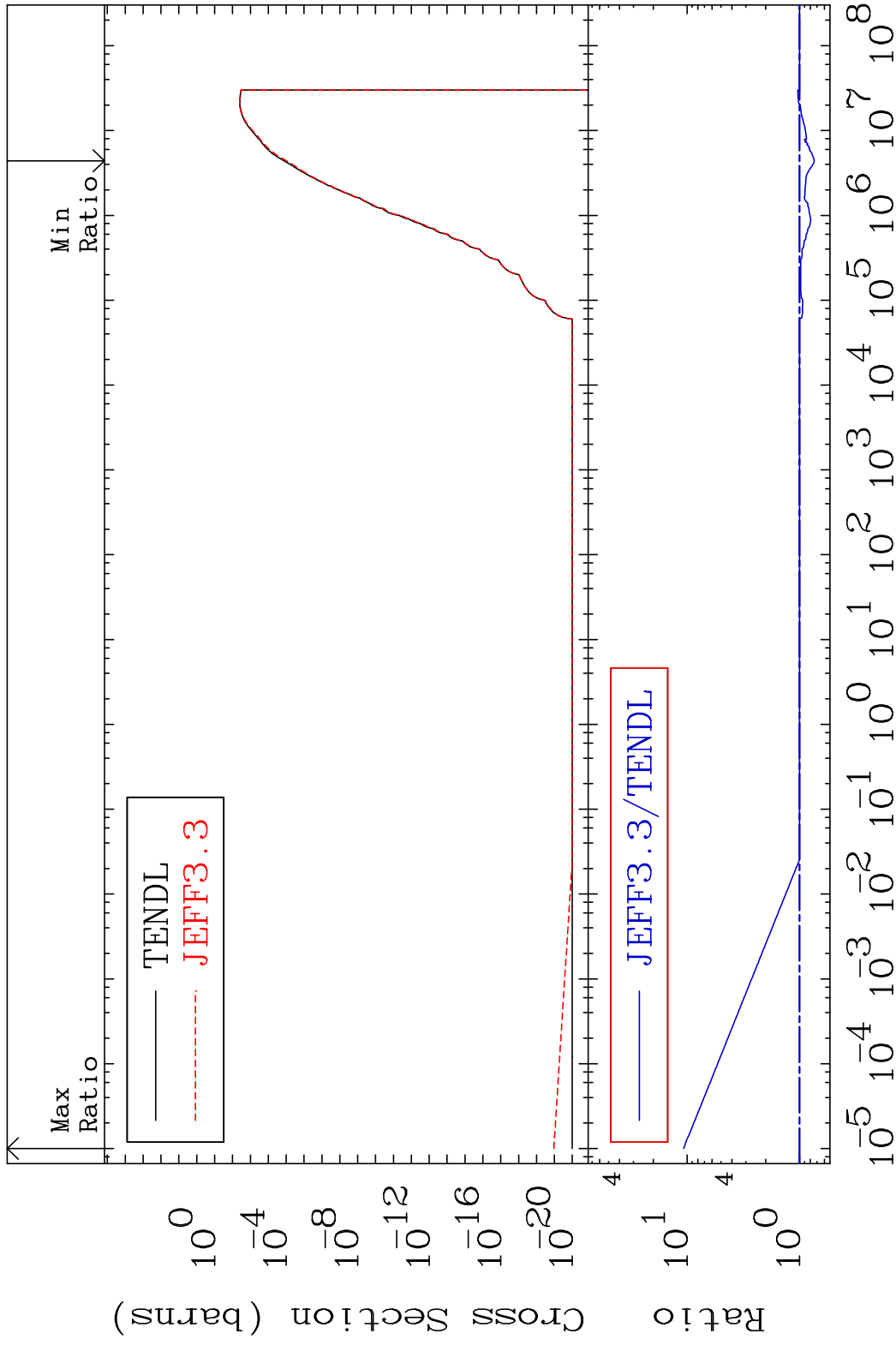


MAT 6413

(n, p)

64-Gd-148

Cross Section -25.91 To 972.4 %



50

Incident Energy (eV)

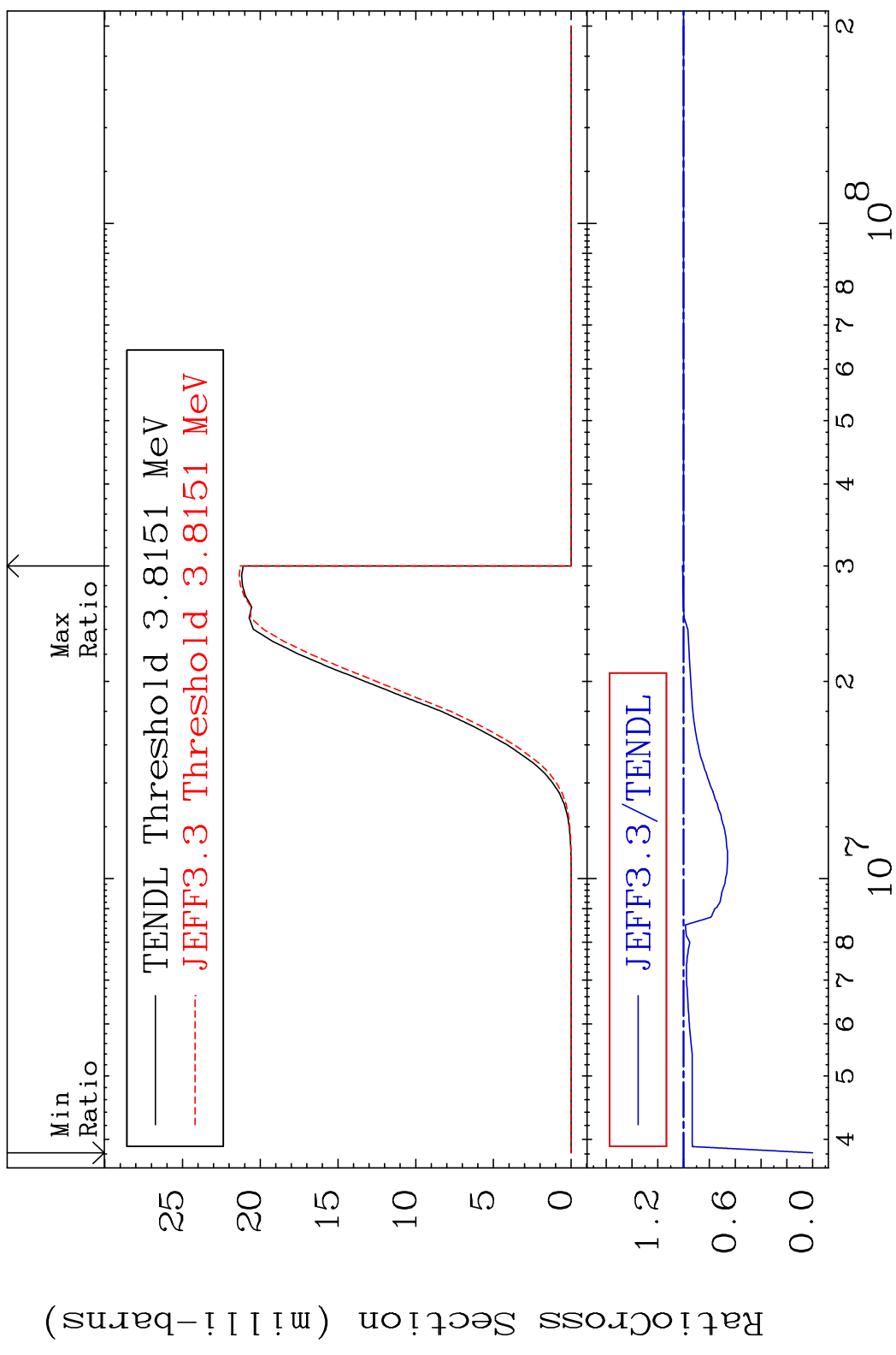
64-Gd-148

MAT 6413

(n, d)

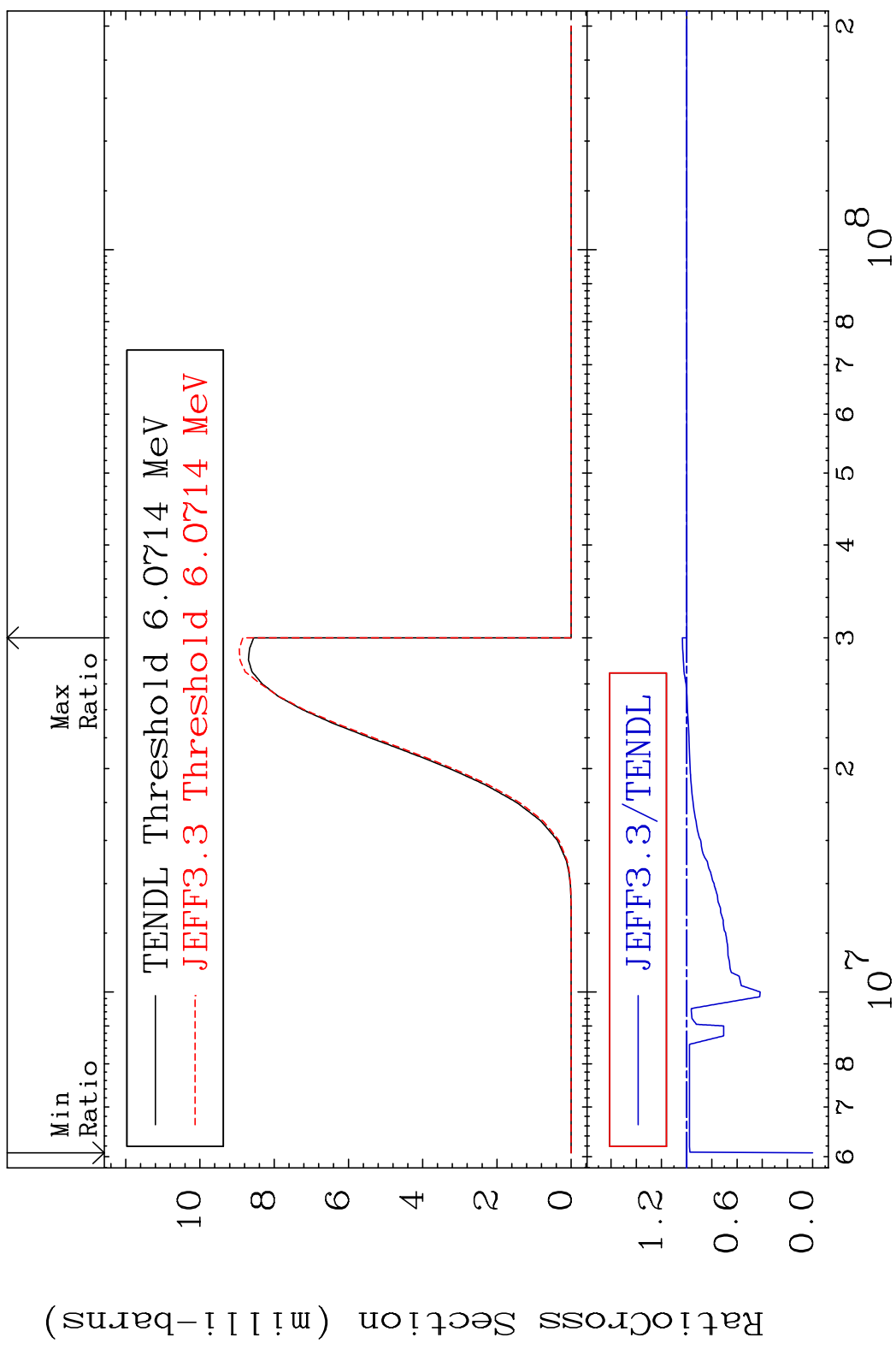
64-Gd-148

Cross Section -100.0 To 0.986 %



MAT 6413

(n, t) Cross Section -100.0 To 3.411 %
64-Gd-148

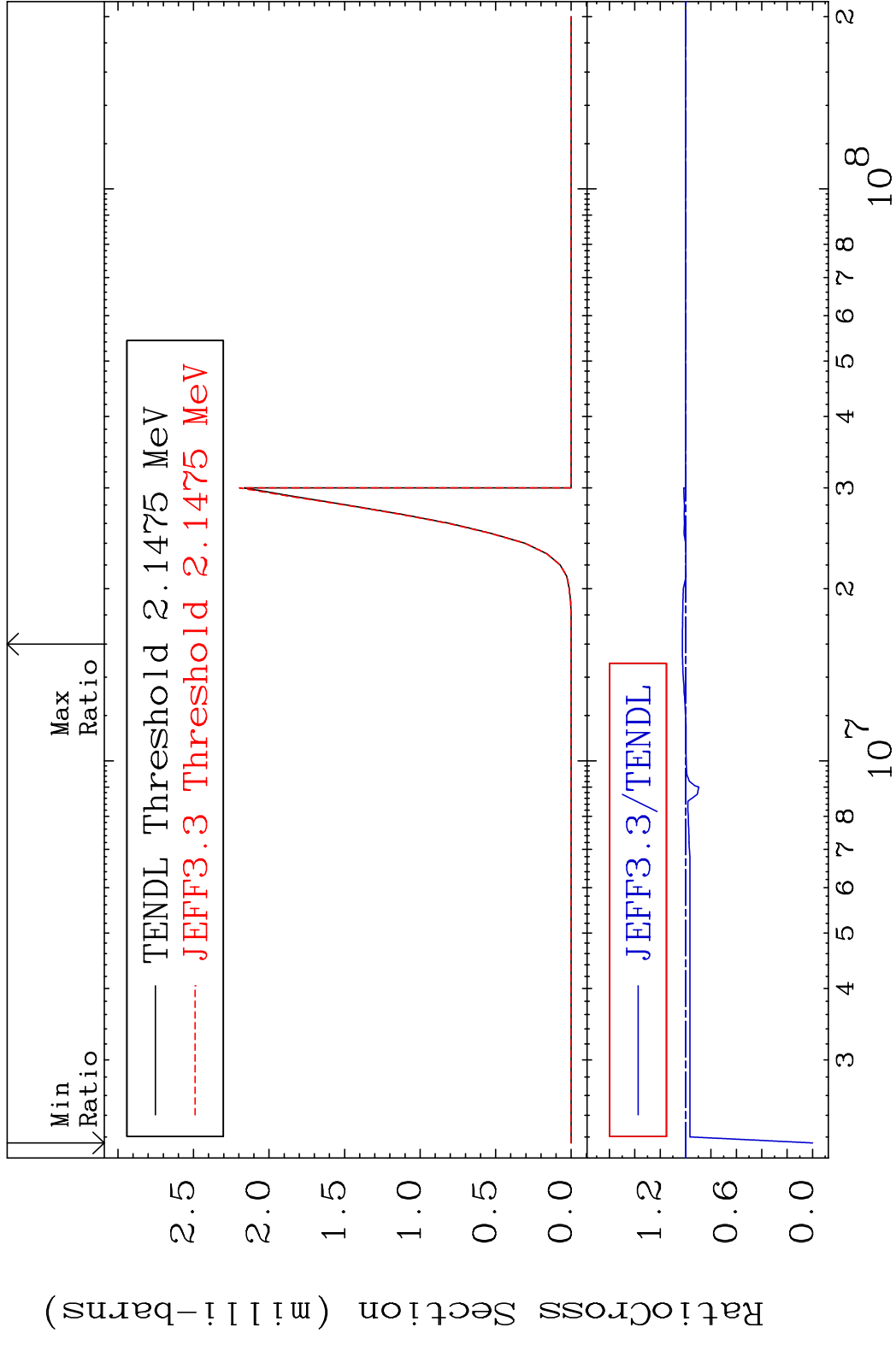


MAT 6413

(n, He-3)

64-Gd-148

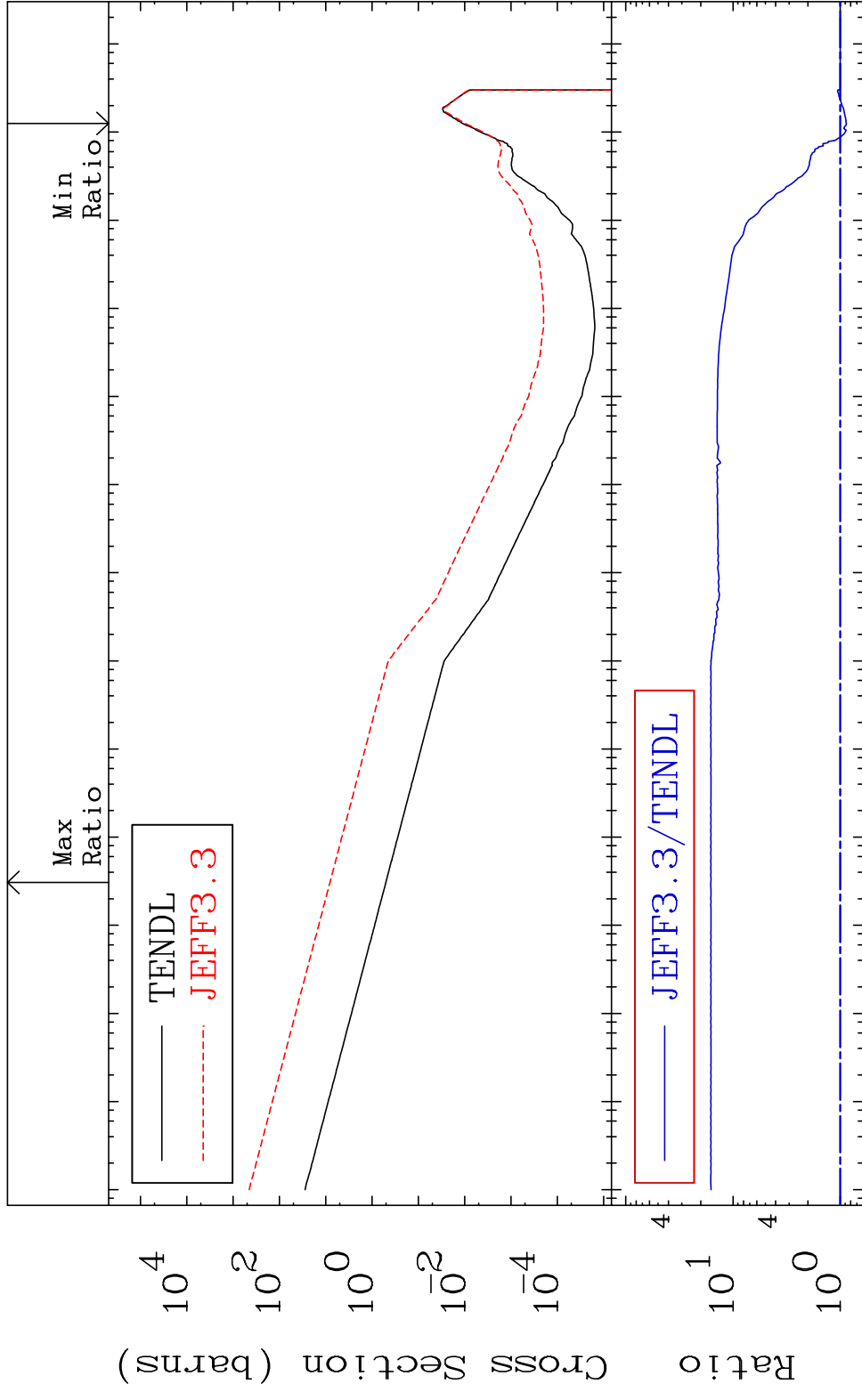
Cross Section -100.0 To 2.552 %



MAT 6413

(n, α)
Cross Section -12.20 To 1515. %

64-Gd-148

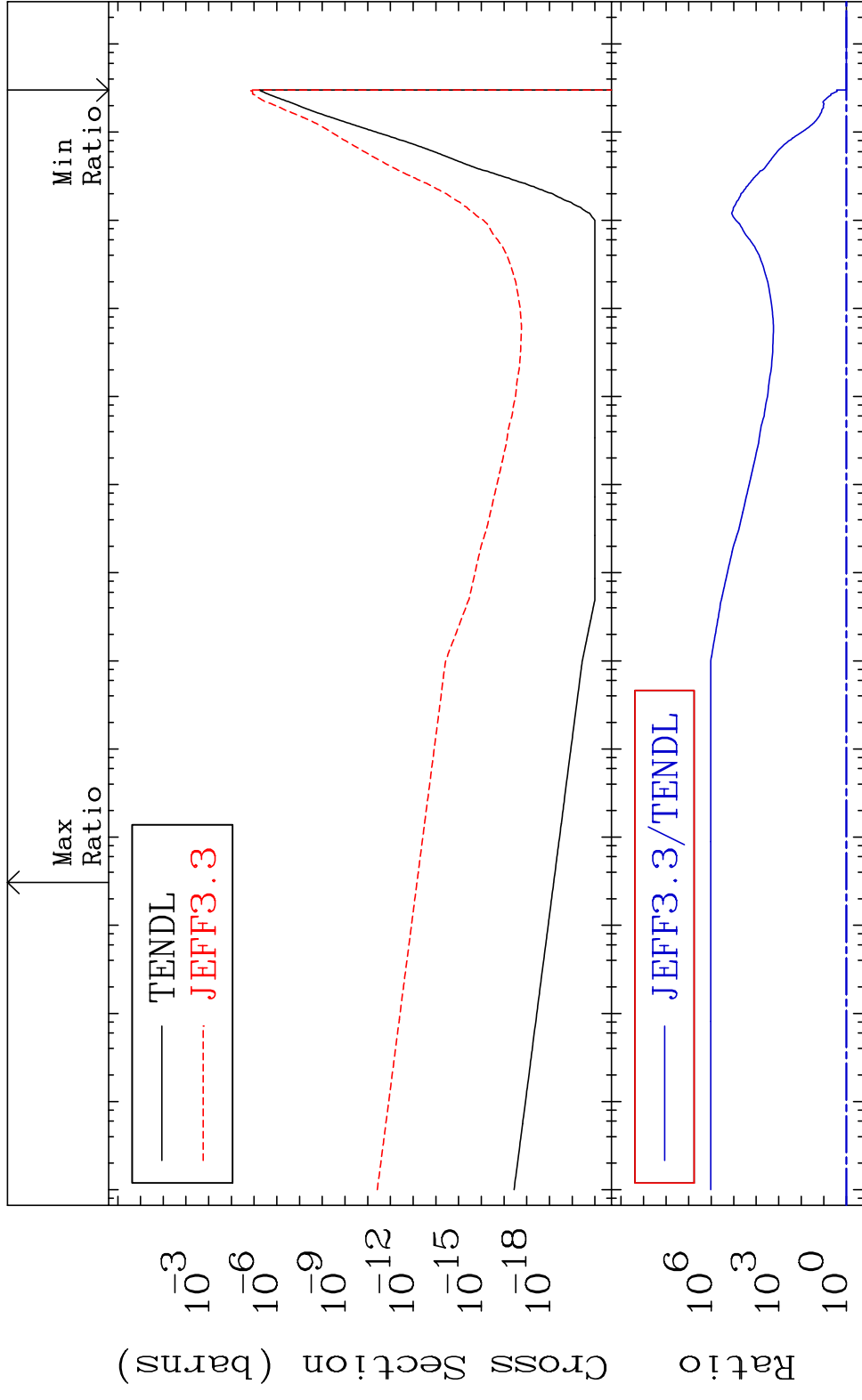


MAT 6413

(n, 2α)

64-Gd-148

Cross Section 0.000 To 9999. %



Max Ratio

Min Ratio

— TENDL
 - - - JEFF3.3

— JEFF3.3/TENDL

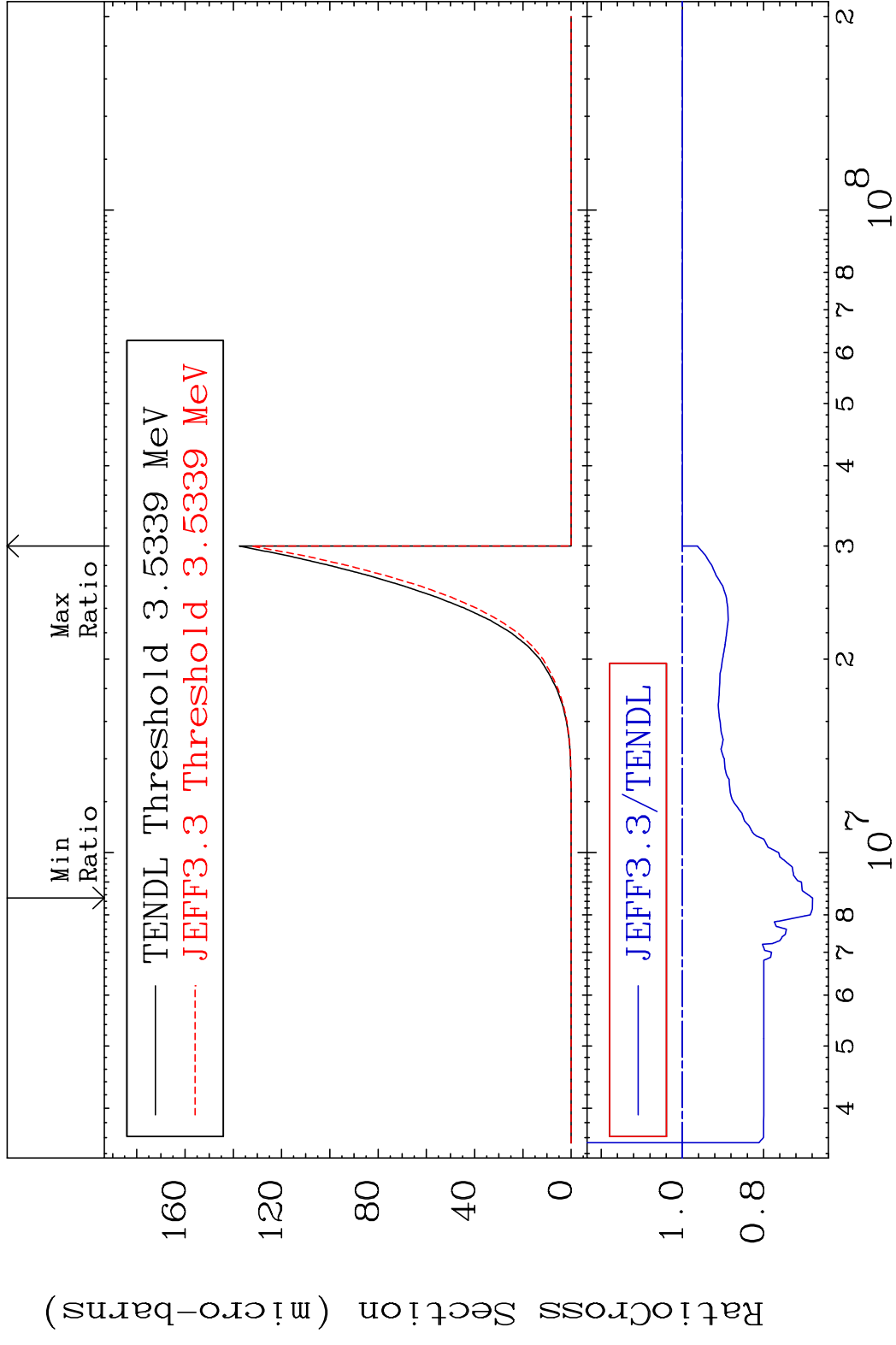
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8

MAT 6413

(n,2p)

64-Gd-148

Cross Section -32.09 To 0.000 %



MAT 6413

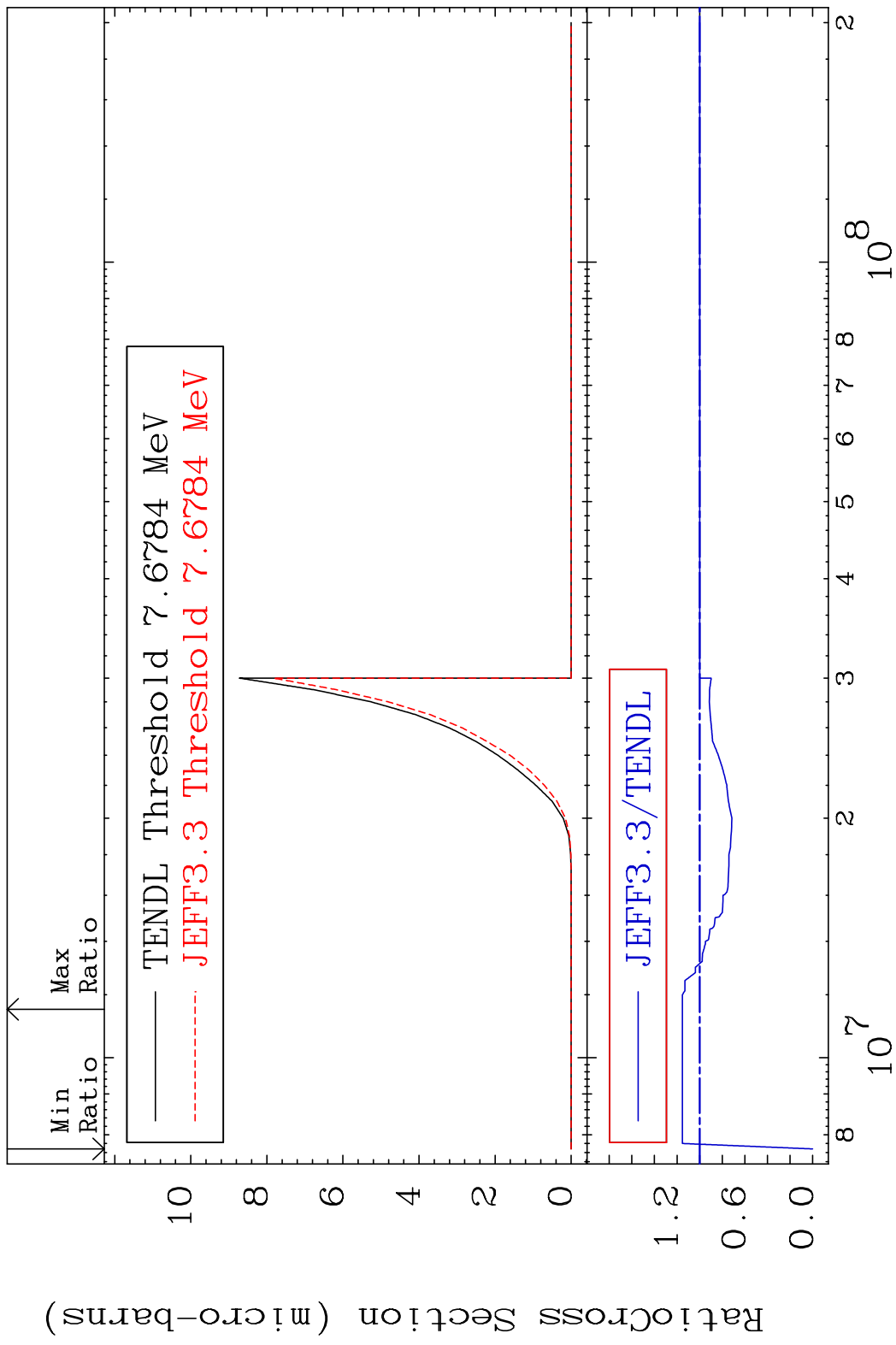
(n,p) α

64-Gd-148

Cross Section -0.371 To 9999. %



MAT 6413 (n,p) d 64-Gd-148
 Cross Section -100.0 To 15.29 %



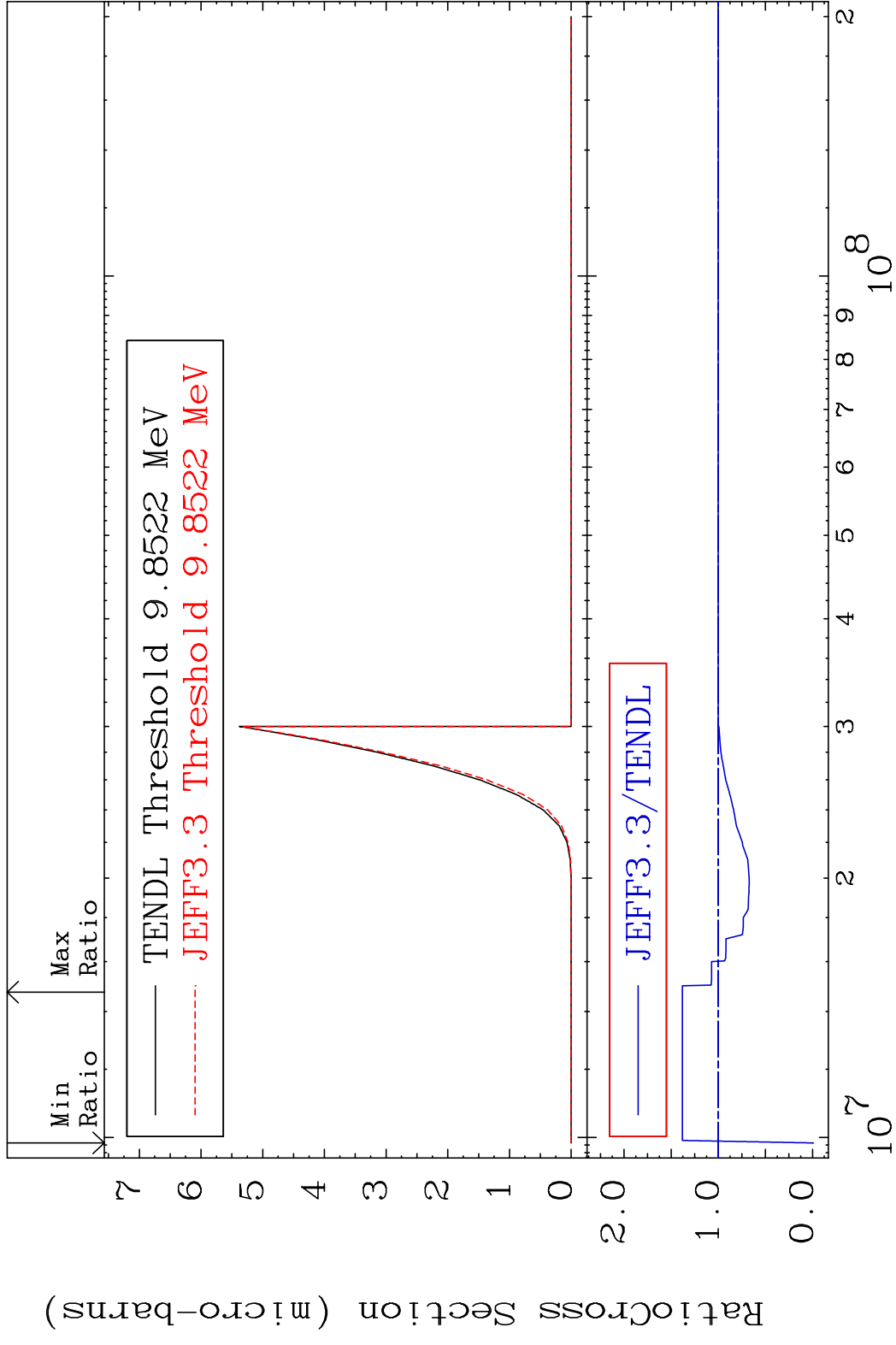
58 Incident Energy (eV) 64-Gd-148

MAT 6413

(n,p) t

64-Gd-148

Cross Section -100.0 To 38.10 %



59

Incident Energy (eV)

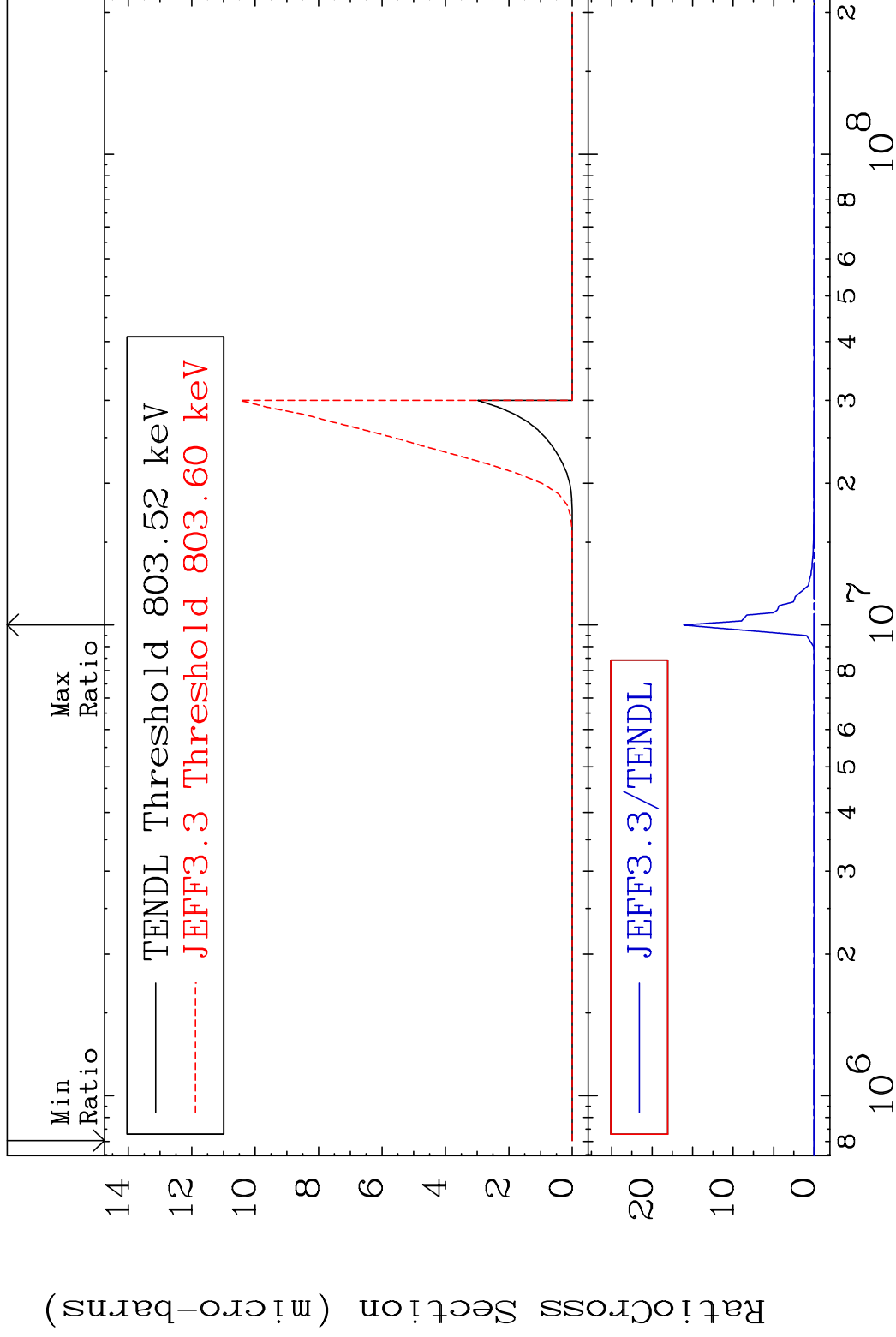
64-Gd-148

MAT 6413

(n,d) α

64-Gd-148

Cross Section -100.0 To 9999. %



60

Incident Energy (eV)

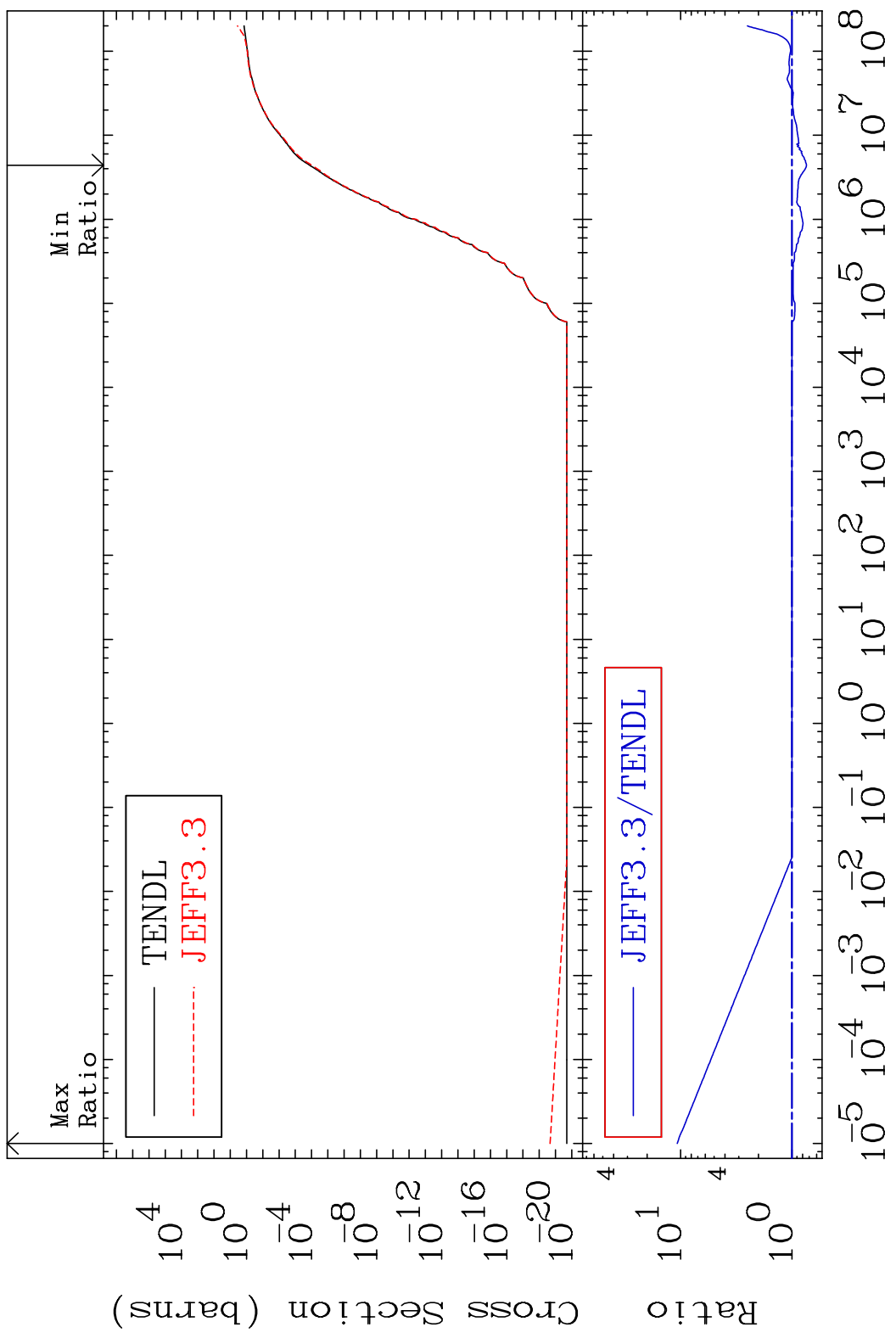
64-Gd-148

MAT 6413

Hydrogen Production

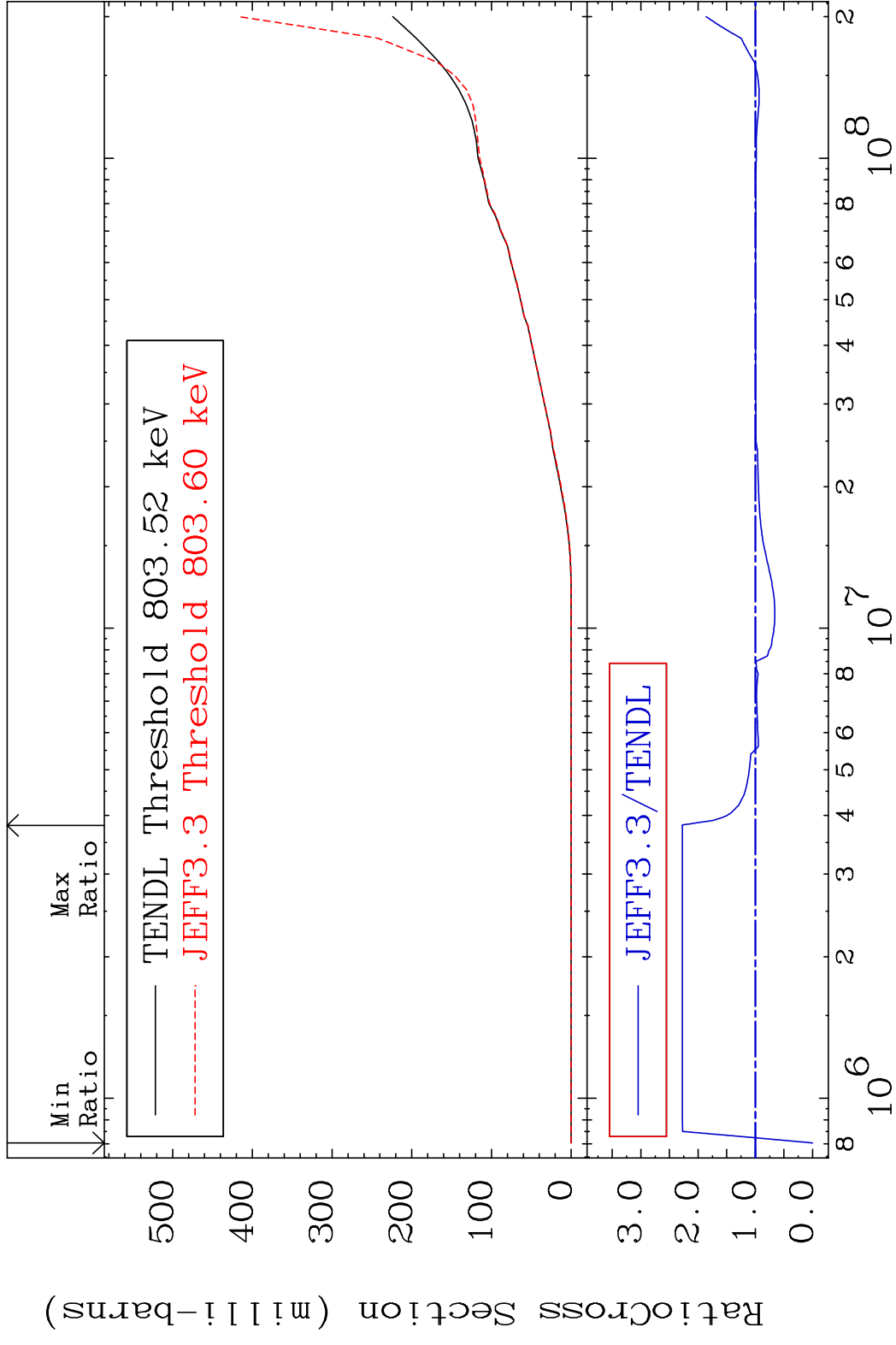
64-Gd-148

Cross Section -25.91 To 972.4 %



MAT 6413

Deuterium Production 64-Gd-148
Cross Section -100.0 To 127.5 %

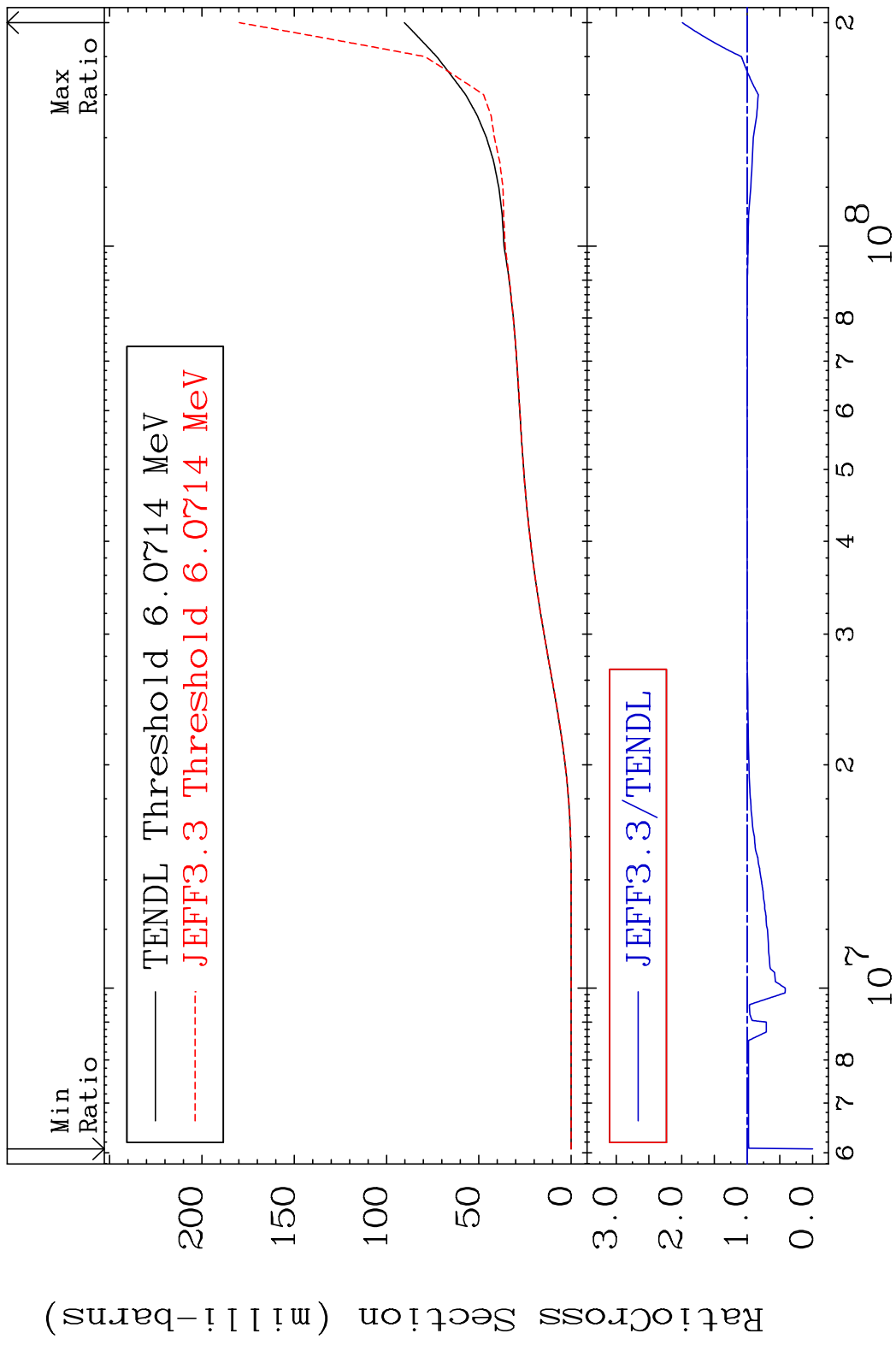


62

Incident Energy (eV)

64-Gd-148

MAT 6413 Tritium Production 64-Gd-148
 Cross Section -100.0 To 98.91 %



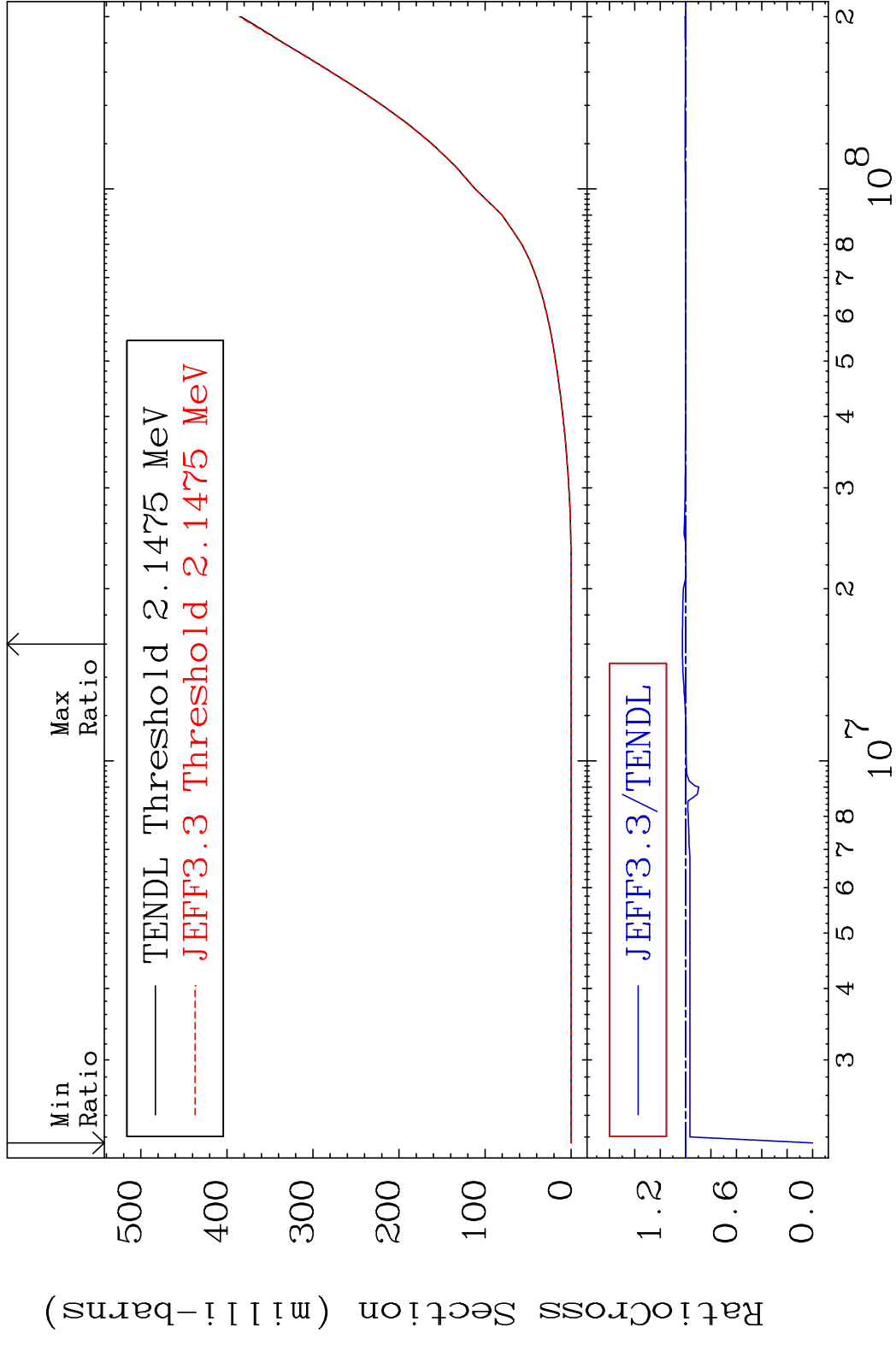
63 Incident Energy (eV) 64-Gd-148

MAT 6413

He-3 Production

64-Gd-148

Cross Section -100.0 To 2.552 %



64

Incident Energy (eV)

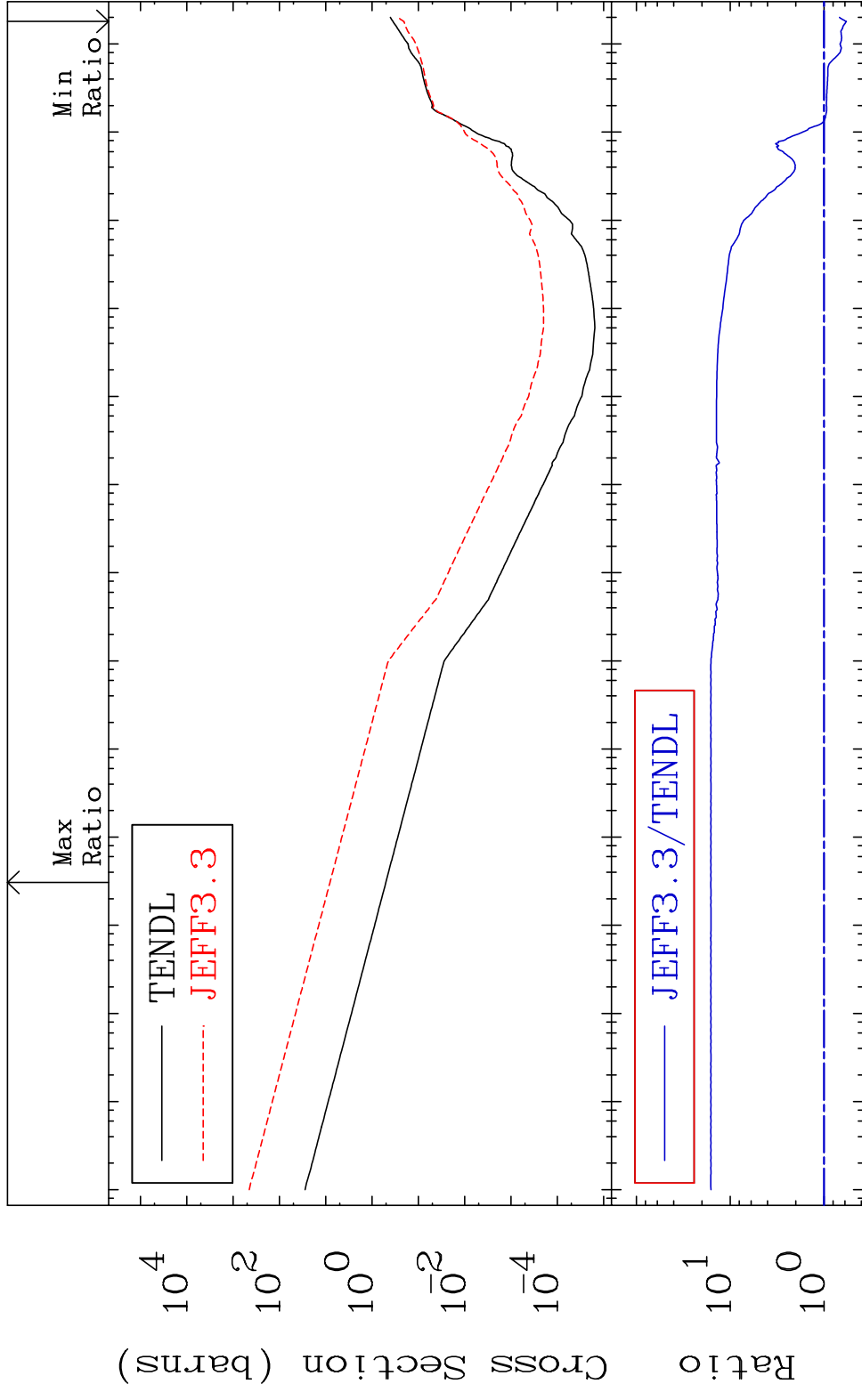
64-Gd-148

MAT 6413

He-4 Production

64-Gd-148

Cross Section -42.15 To 1515. %



Cross Section (barns)

Ratio

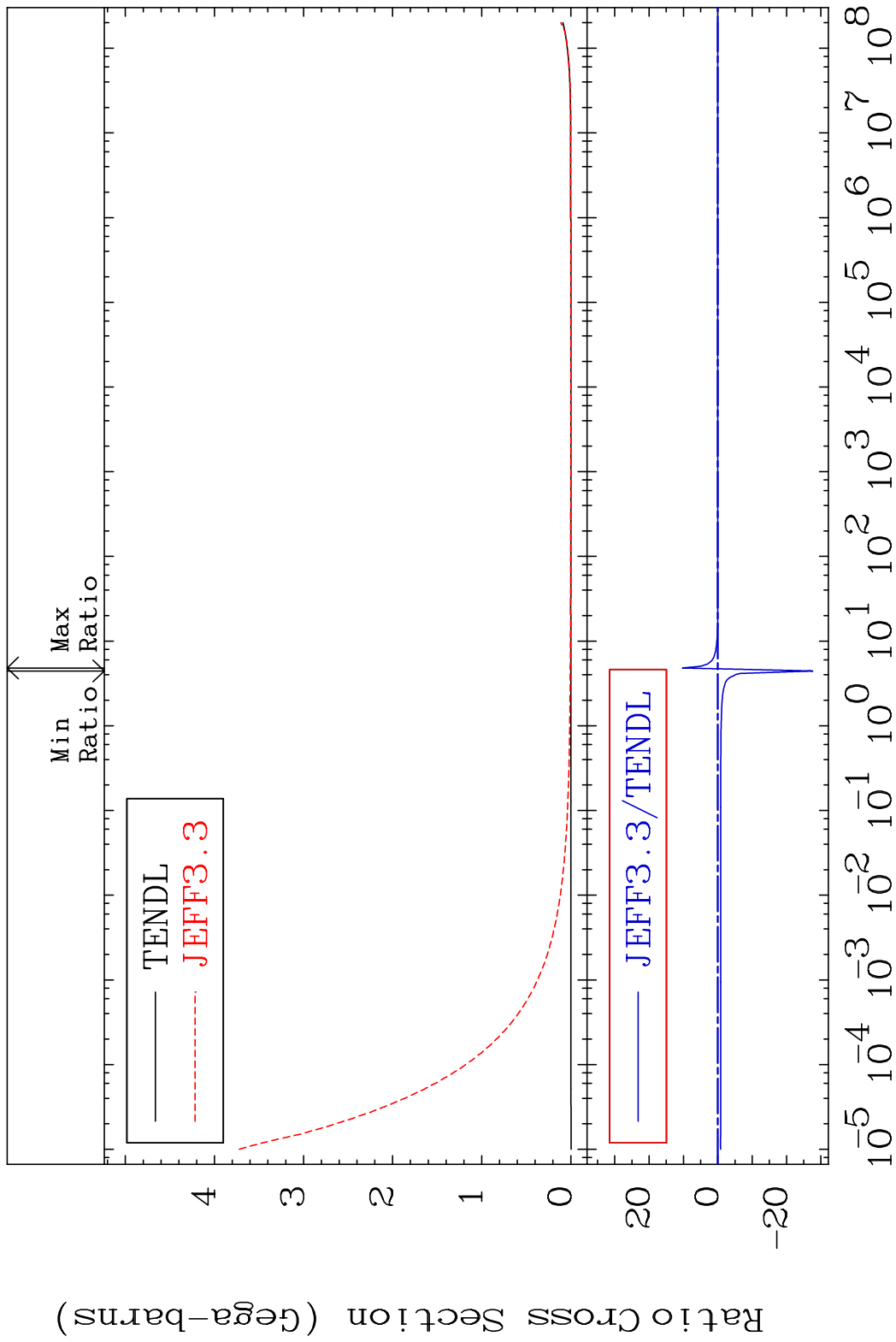
10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

65

Incident Energy (eV)

64-Gd-148

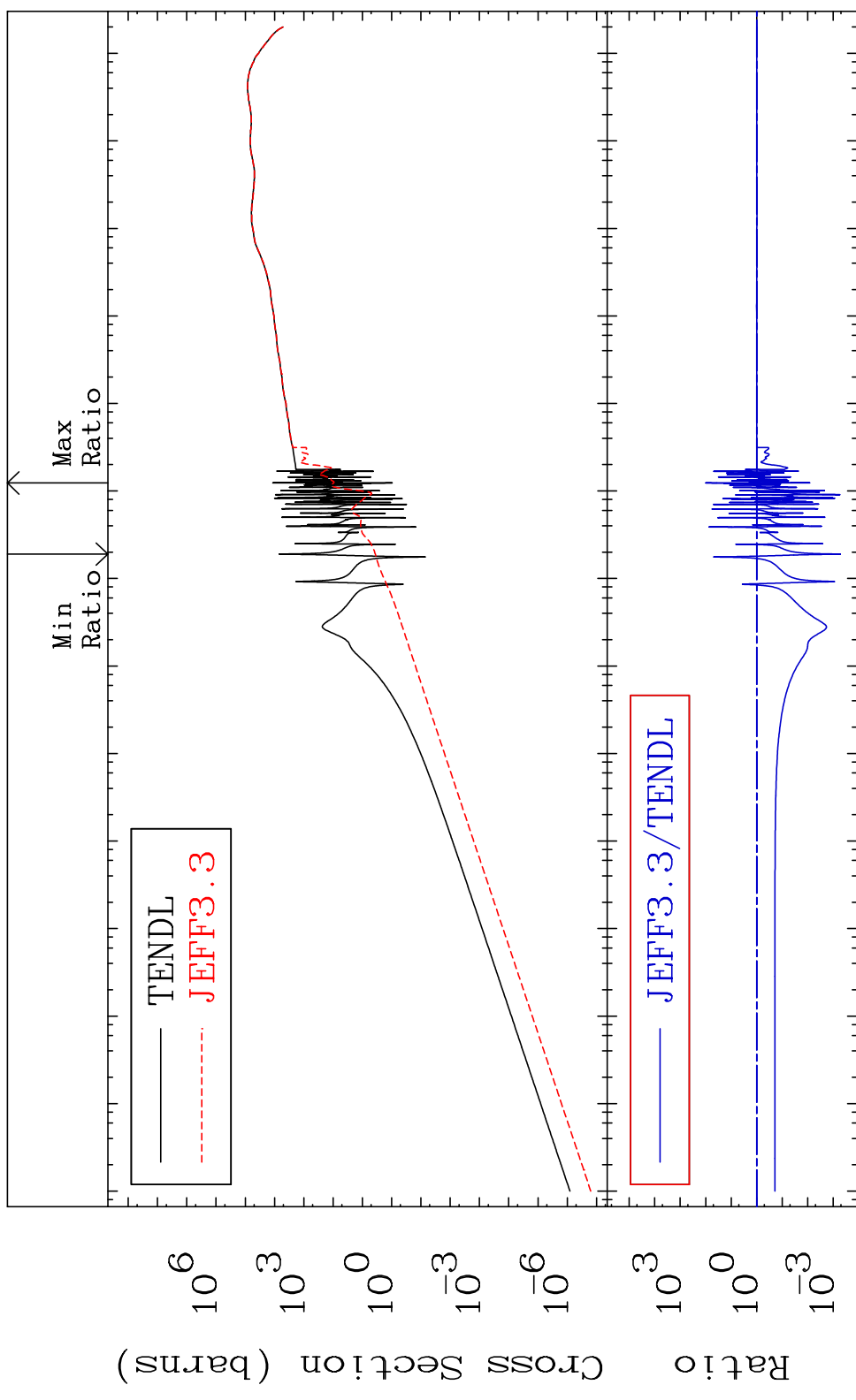
MAT 6413 Kerma total (eV-barns) 64-Gd-148
 Cross Section -9999. To 9999. %



MAT 6413

Kerma elastic Cross Section -99.95 To 9844. %

64-Gd-148

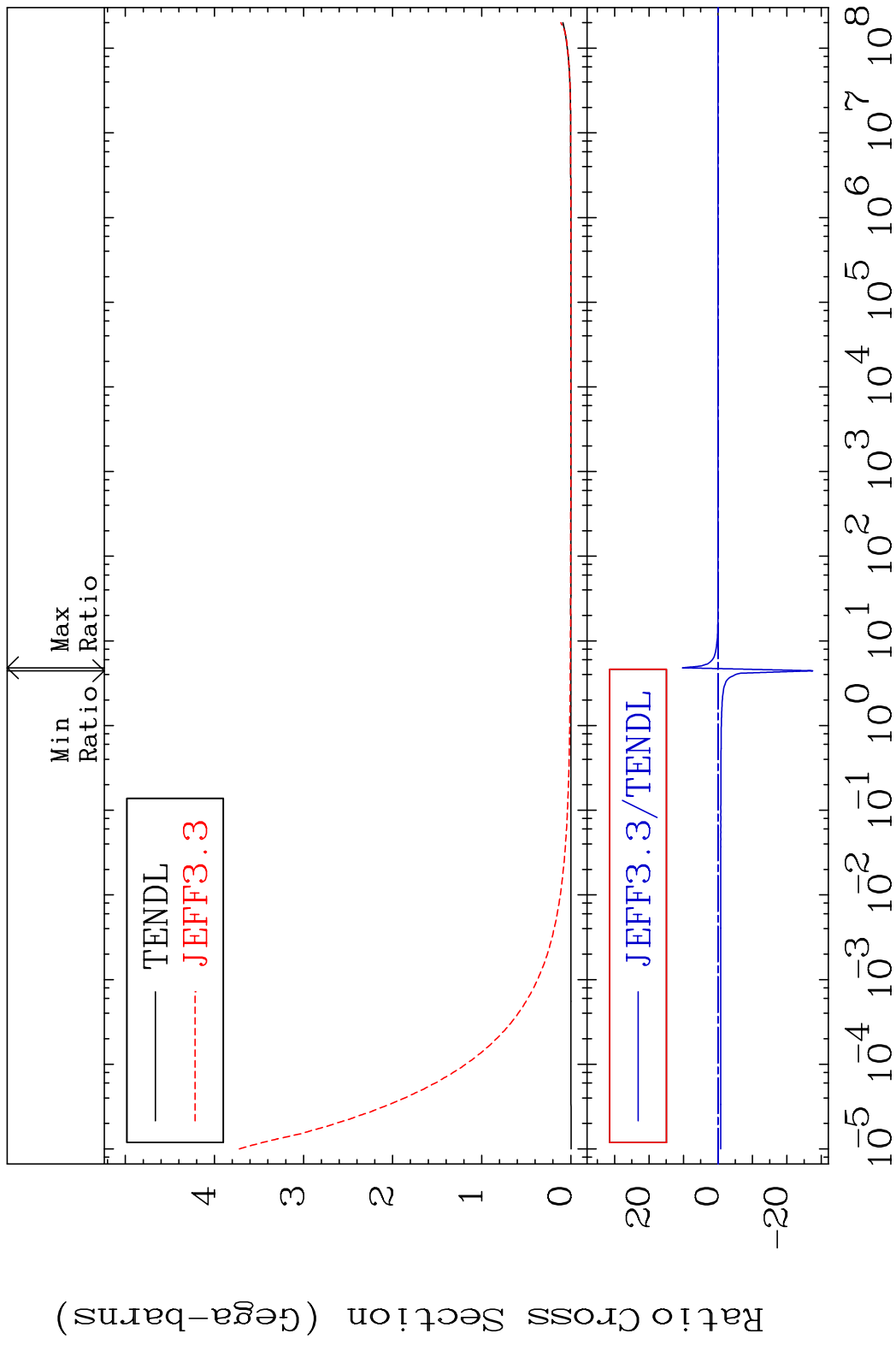


67

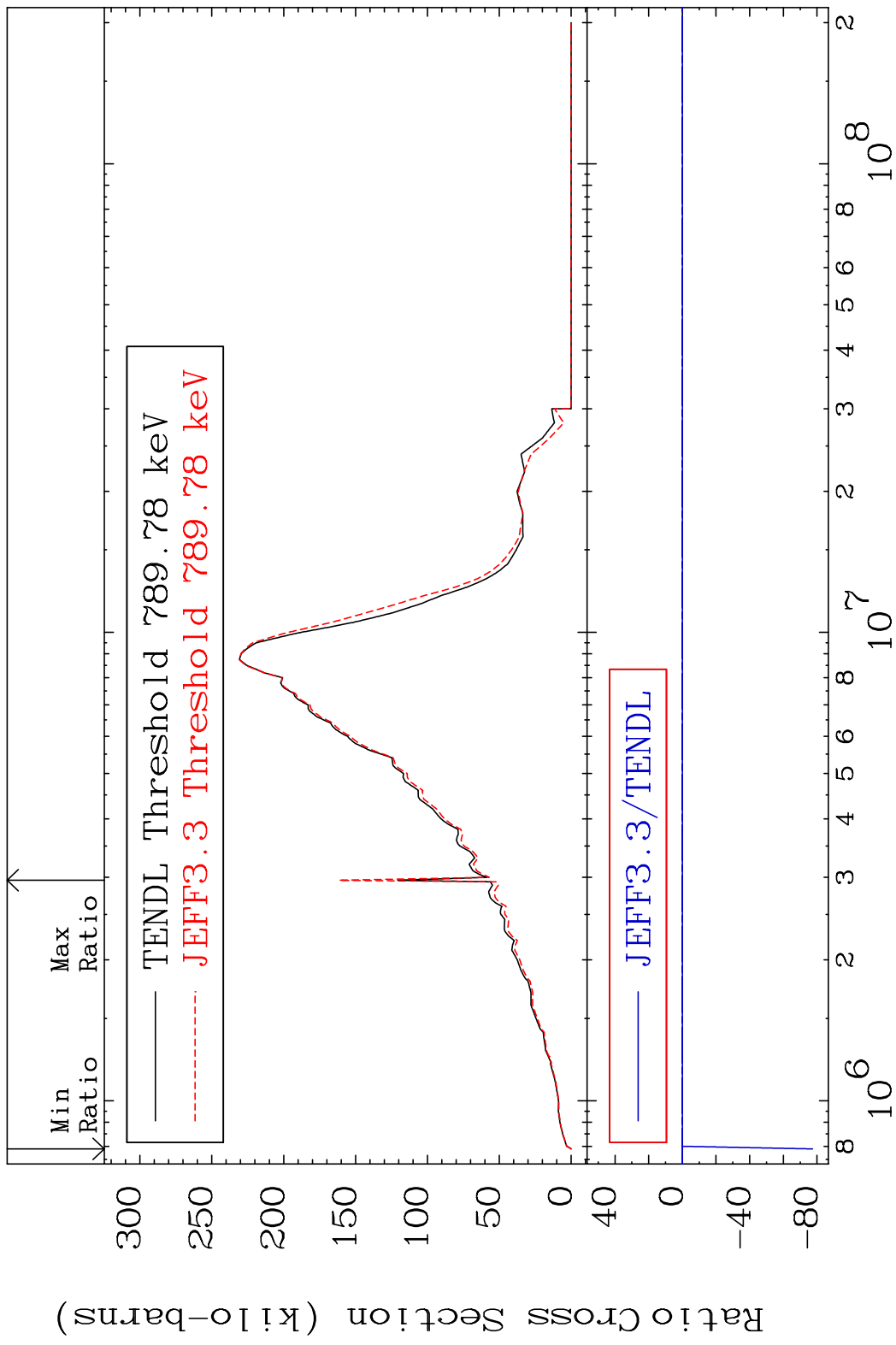
Incident Energy (eV)

64-Gd-148

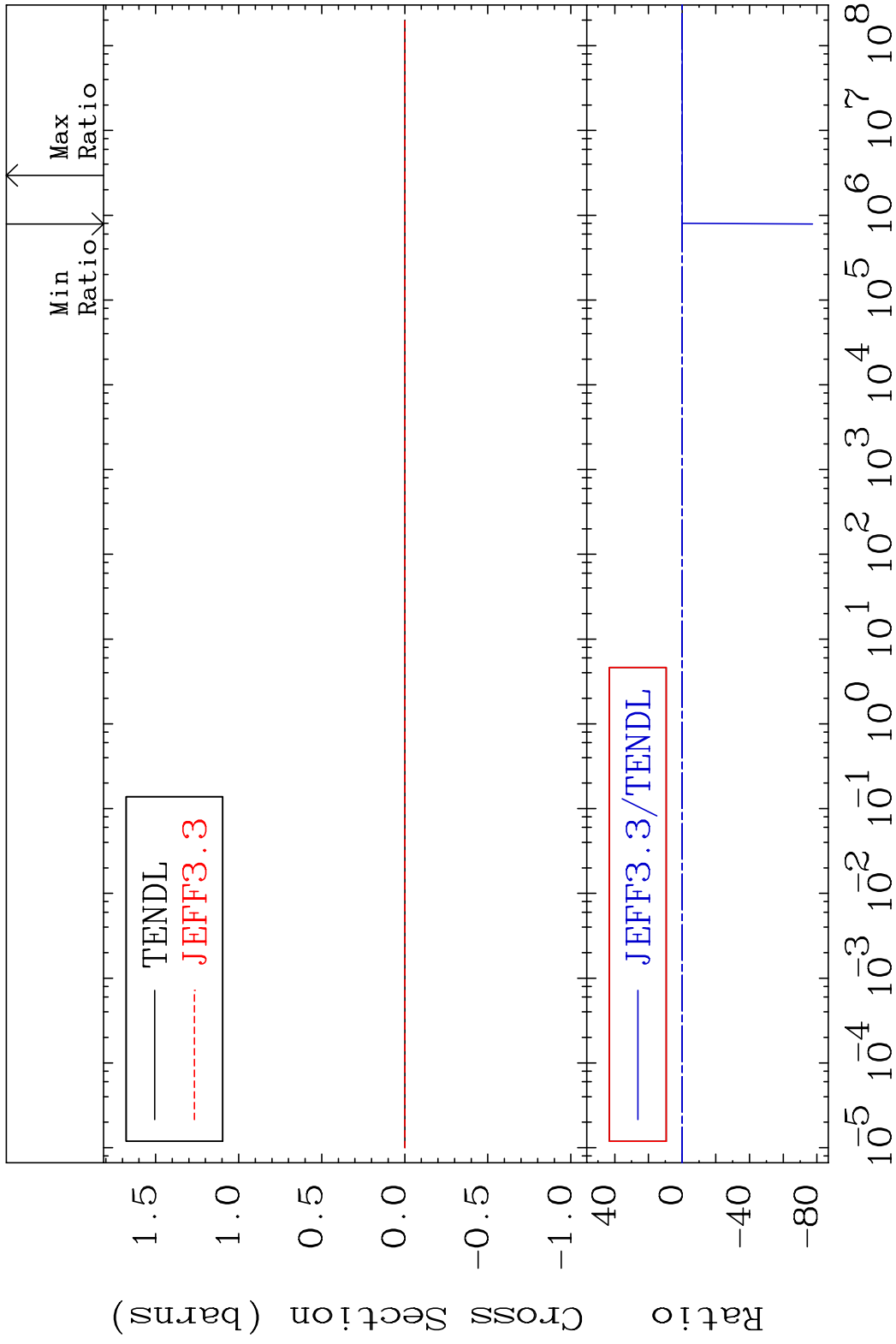
MAT 6413 Kerma non-elastic (all but mt2) 64-Gd-148
 Cross Section -9999. To 9999. %



MAT 6413 Kerma inelastic (mt51-91) 64-Gd-148
Cross Section -9999. To 34.57 %



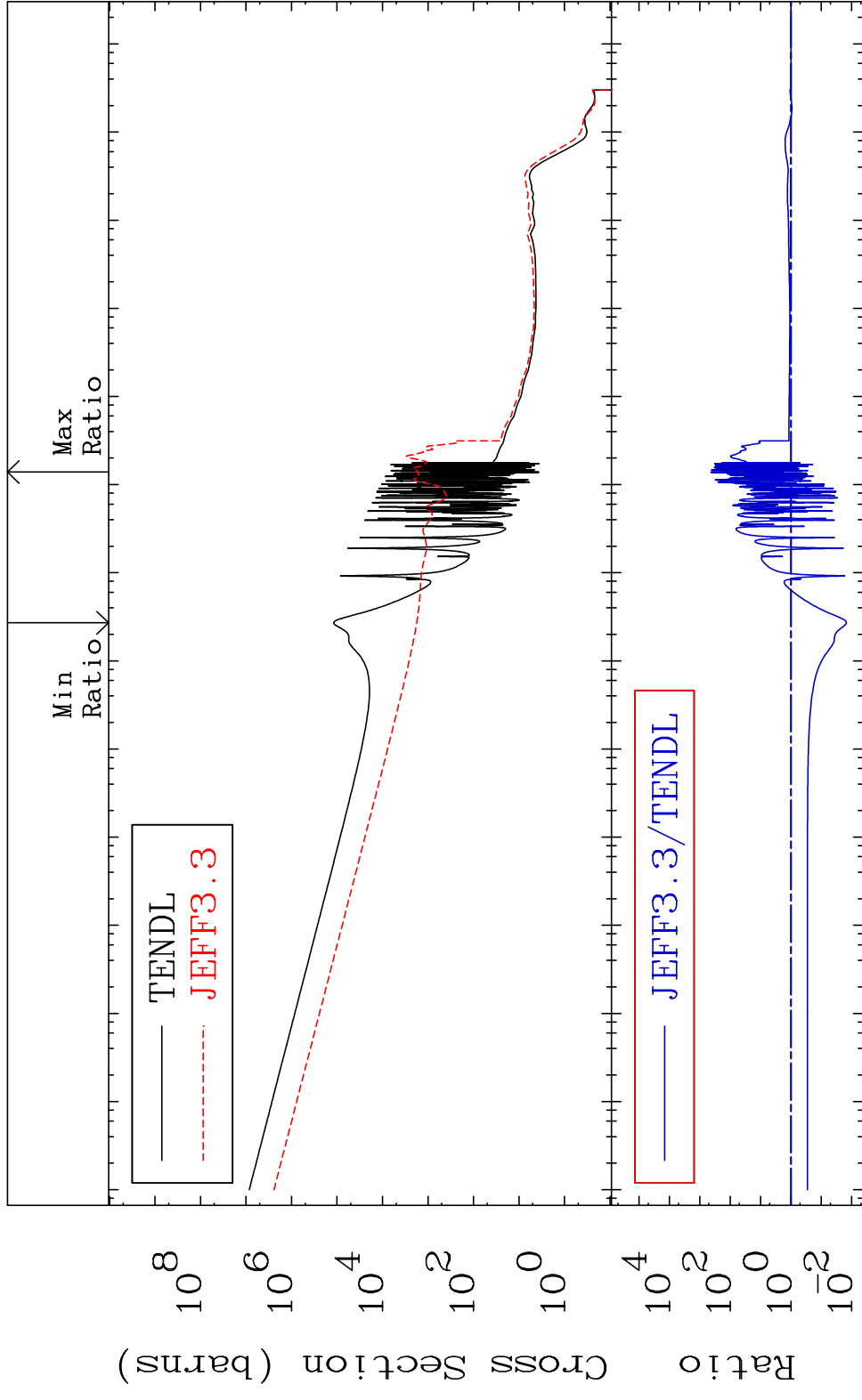
MAT 6413 Kerma fission (mt18 or mt19-20-21-38) 64-Gd-148
 Cross Section -9999. To 34.57 %



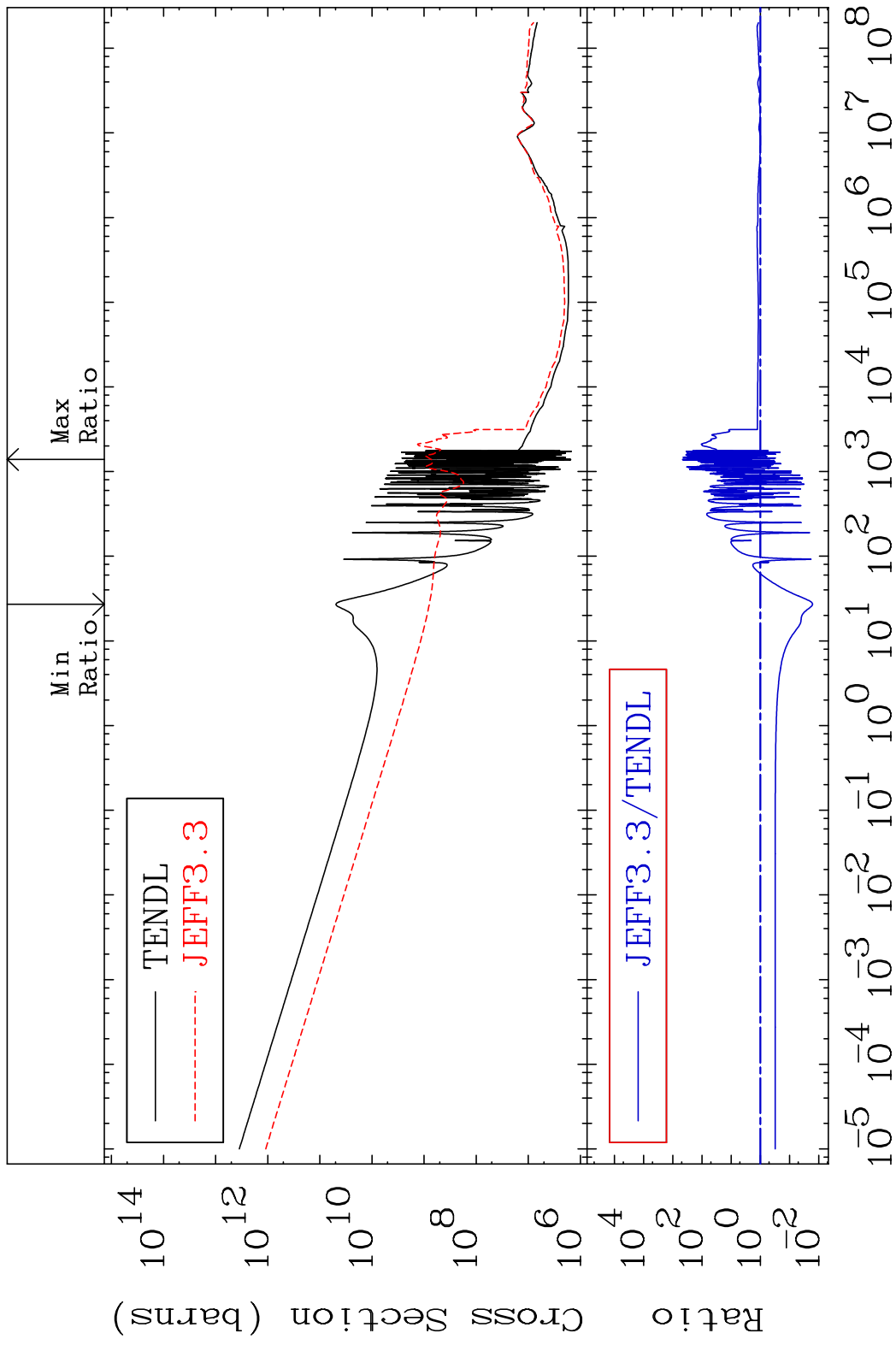
70 Incident Energy (eV) 64-Gd-148

MAT 6413

Kerma capture (mt102) 64-Gd-148
Cross Section -98.50 To 9999. %

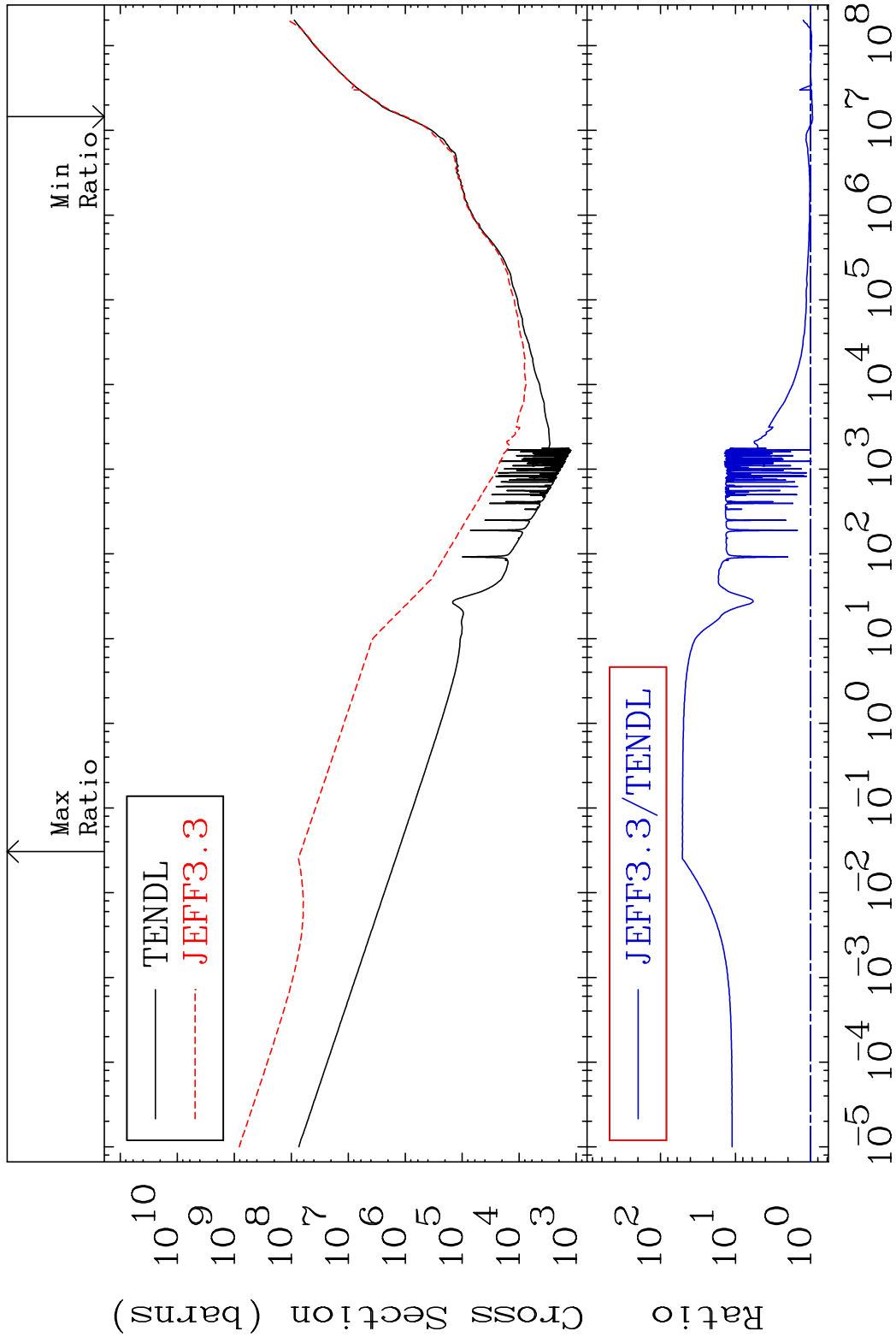


MAT 6413 Total photon (eV-barns) 64-Gd-148
 Cross Section -98.38 To 9999. %



72 Incident Energy (eV) 64-Gd-148

MAT 6413 Total kinematic kerma (high limit) 64-Gd-148
 Cross Section -5.777 To 5005. %

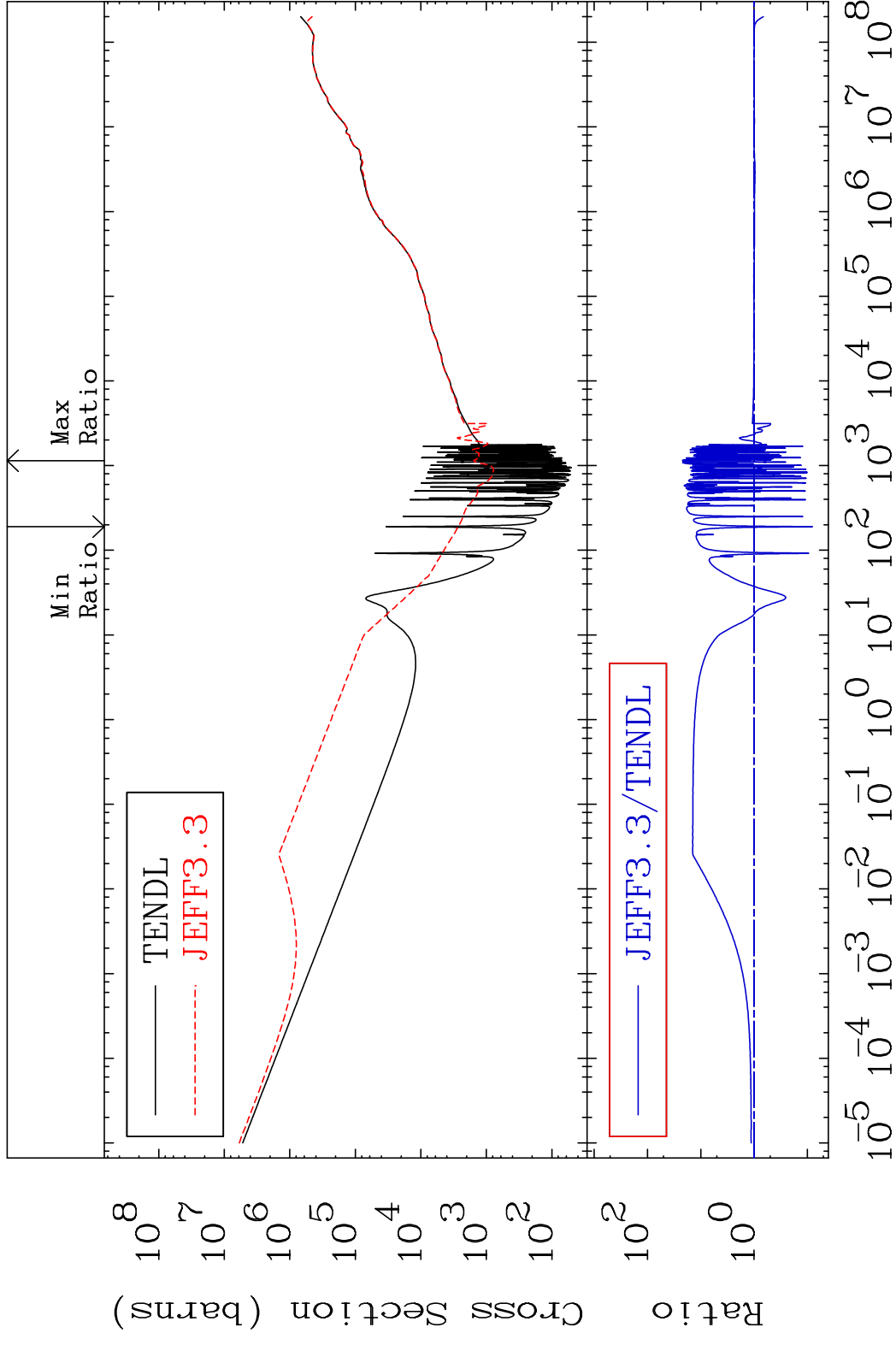


MAT 6413

Dpa total (eV-barns)

64-Gd-148

Cross Section -92.02 To 2114. %



74

Incident Energy (eV)

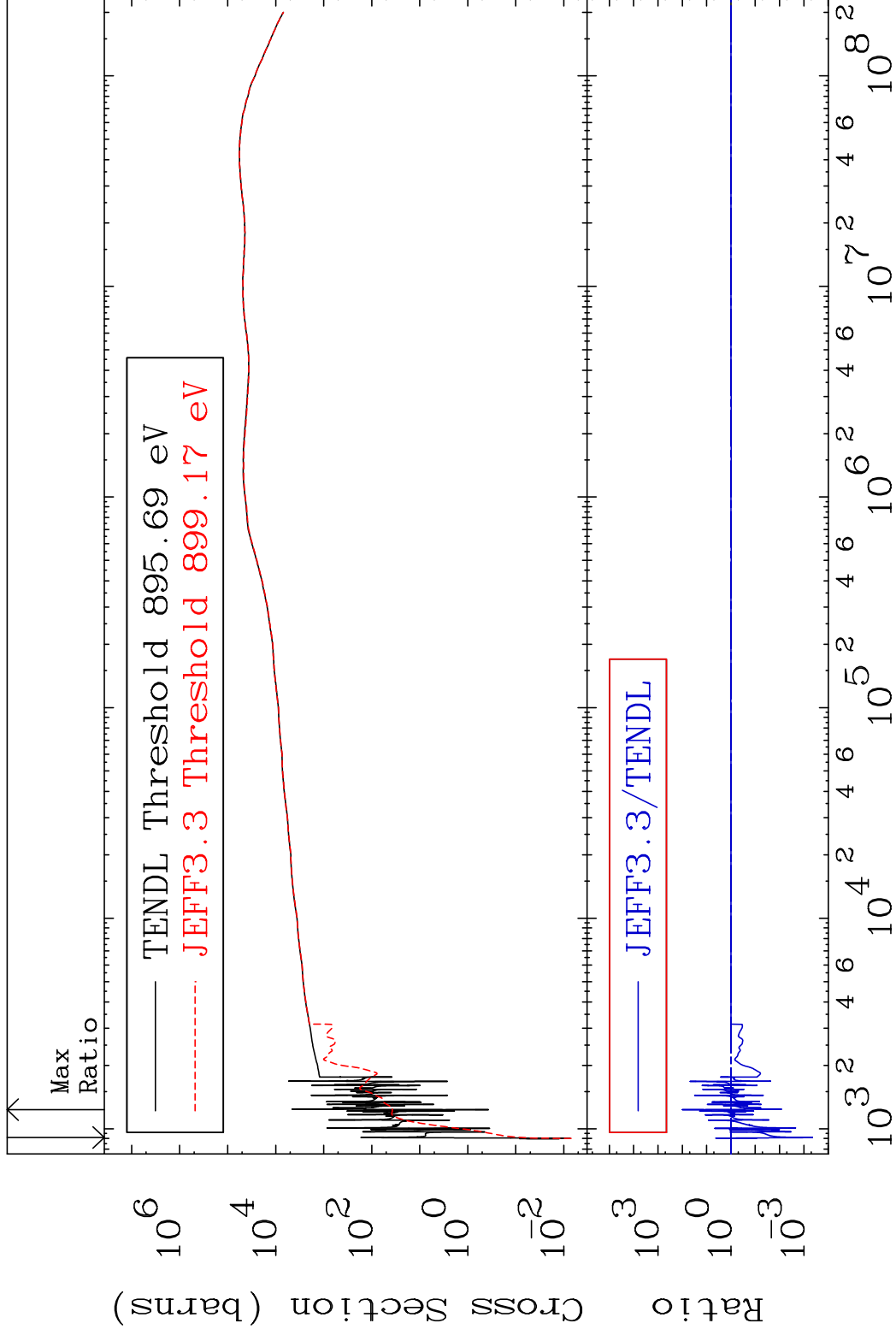
64-Gd-148

MAT 6413

Dpa elastic (mt2)

64-Gd-148

Cross Section -99.96 To 9843. %



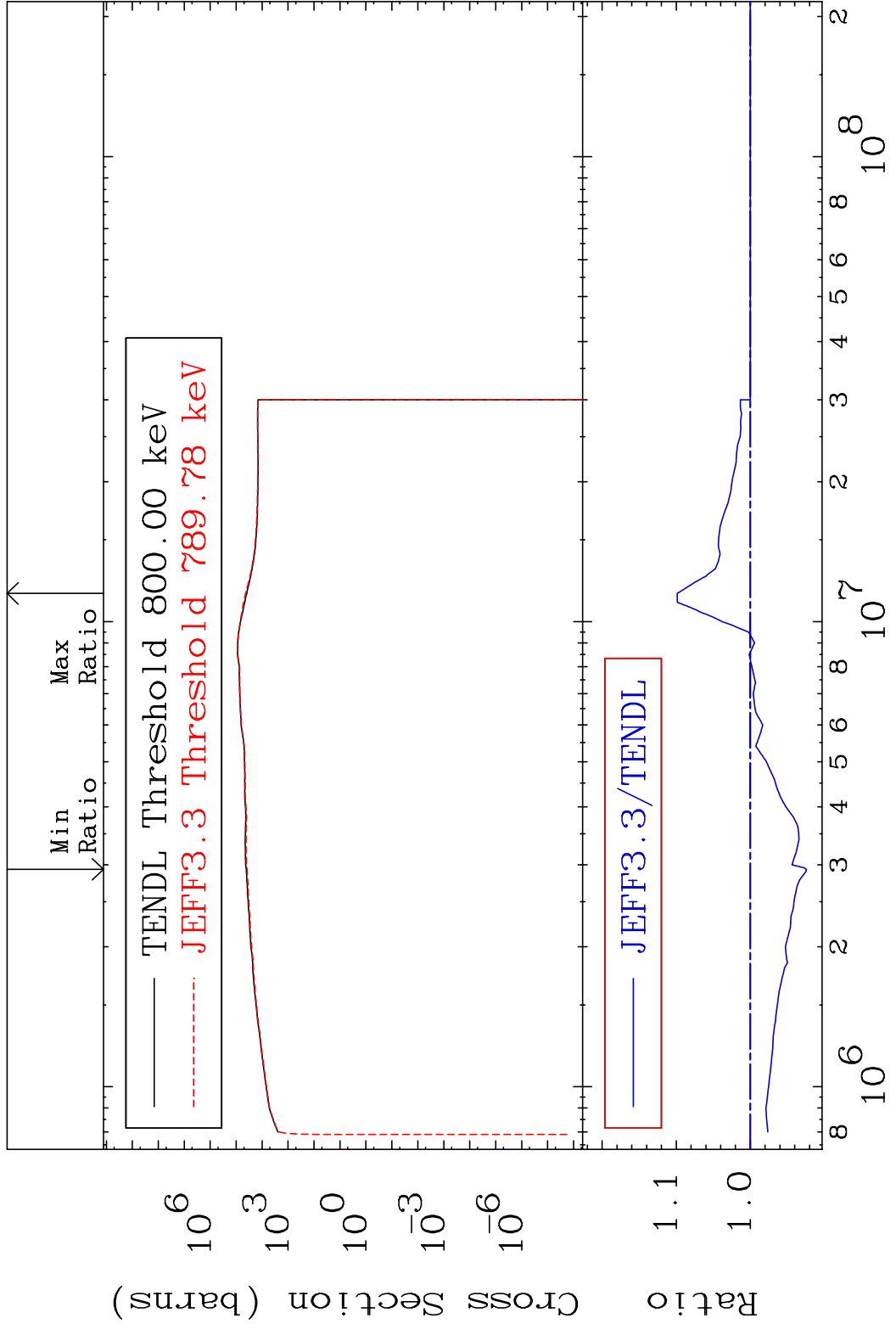
75

Incident Energy (eV)

64-Gd-148

MAT 6413

Dpa inelastic (mt51-91) 64-Gd-148
Cross Section -7.568 To 9.869 %

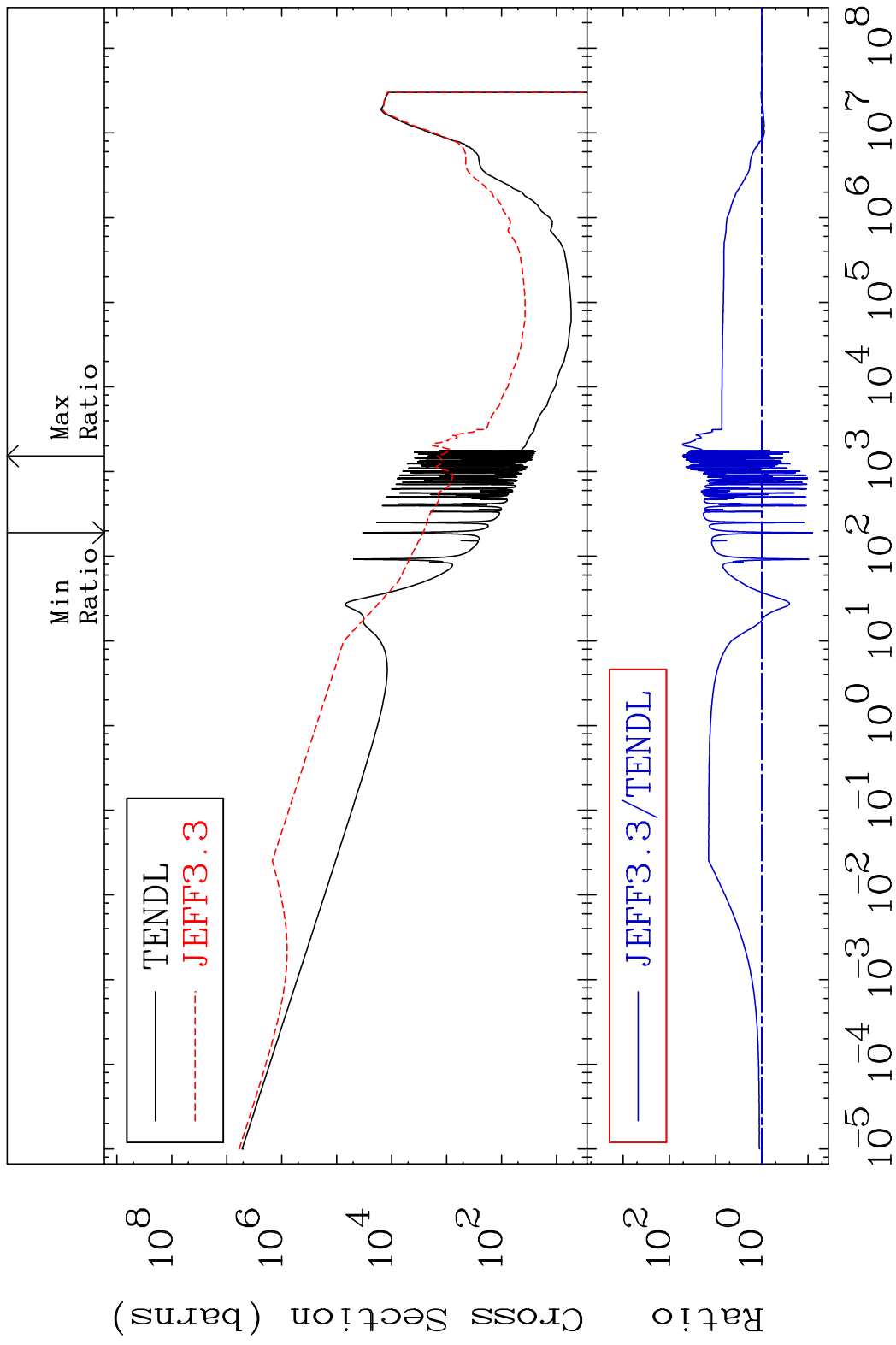


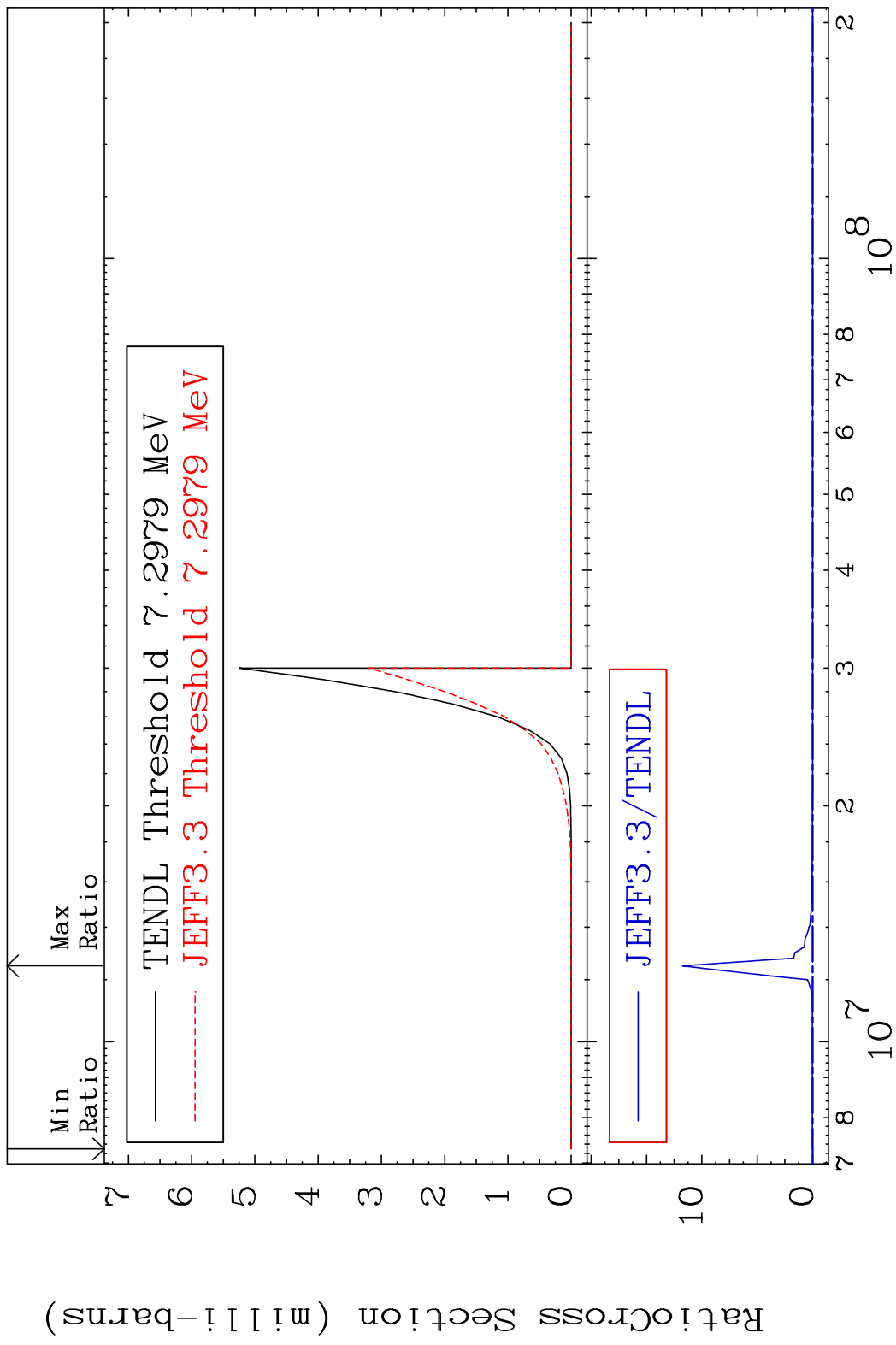
76

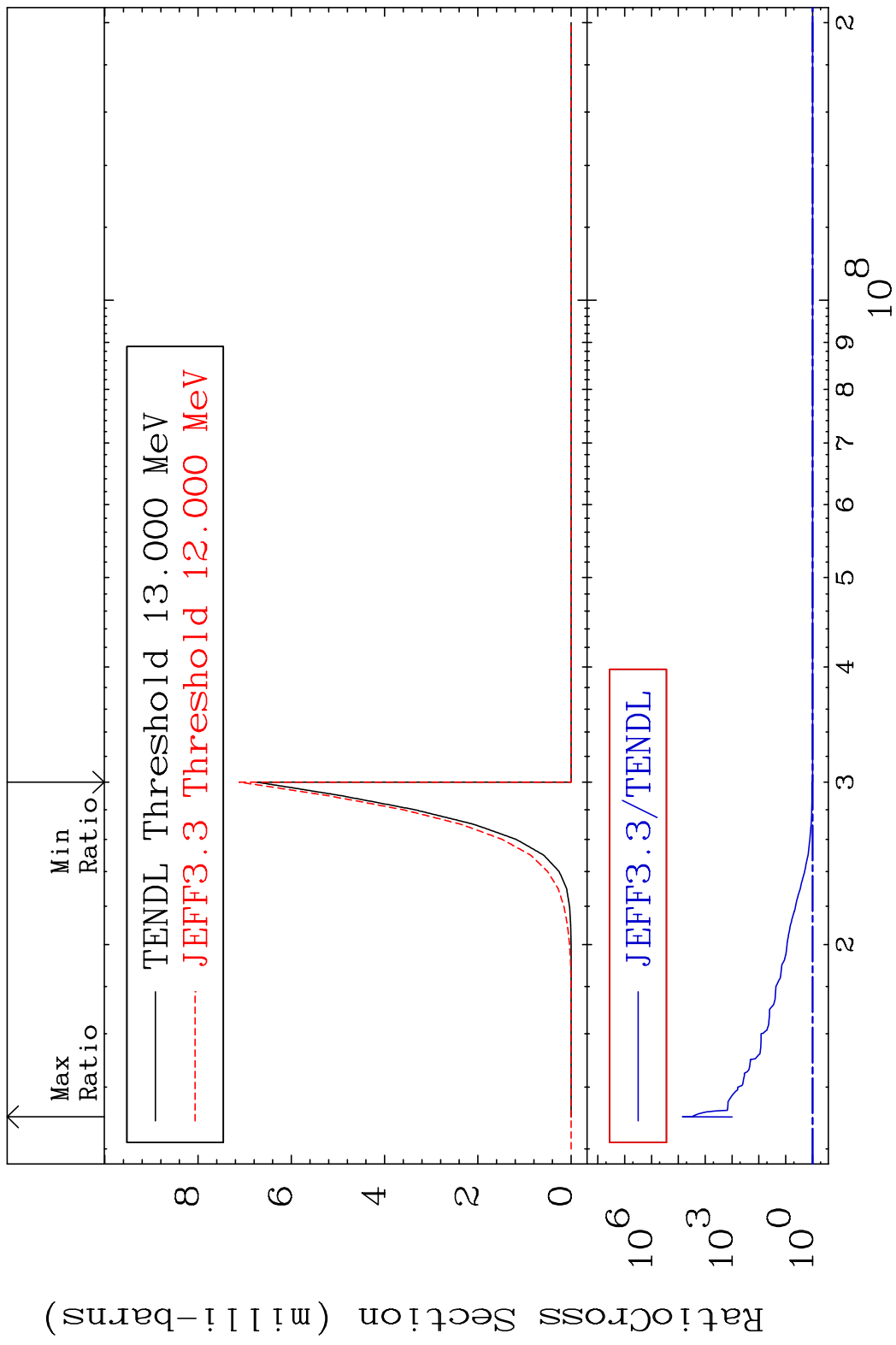
Incident Energy (eV)

64-Gd-148

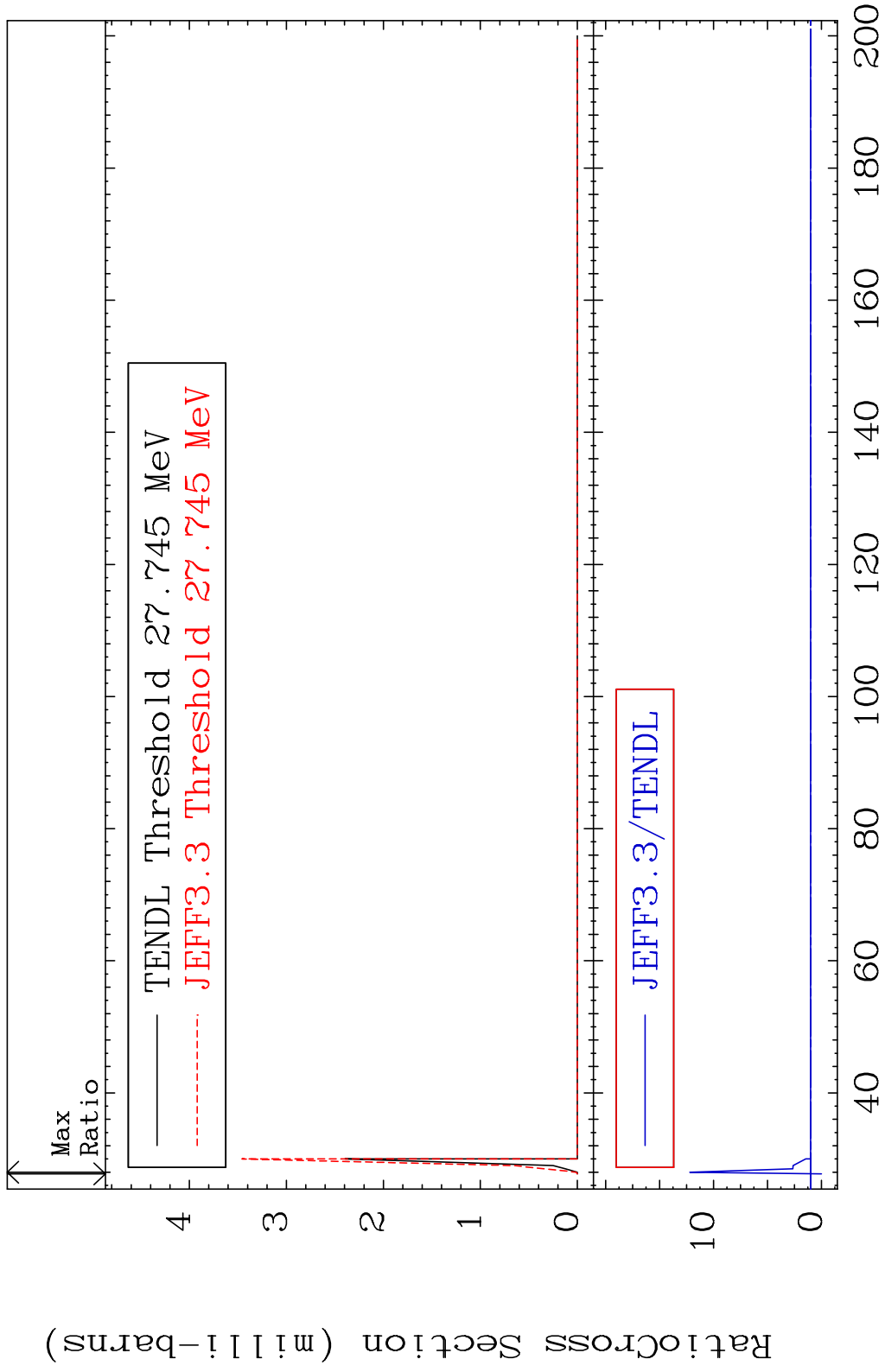
MAT 6413 Dpa disappearance (mt102 -120) 64-Gd-148
 Cross Section -92.02 To 5145. %







MAT 6413 (n,4n):64-Gd-145g 64-Gd-148
 Radionuclide Production Cross Section 1800 dpa 1120. %



80 Incident Energy (MeV) 64-Gd-148

