

Program Complot
(Version 2021-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

U.S.A.

Tele: 925-443-1911

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

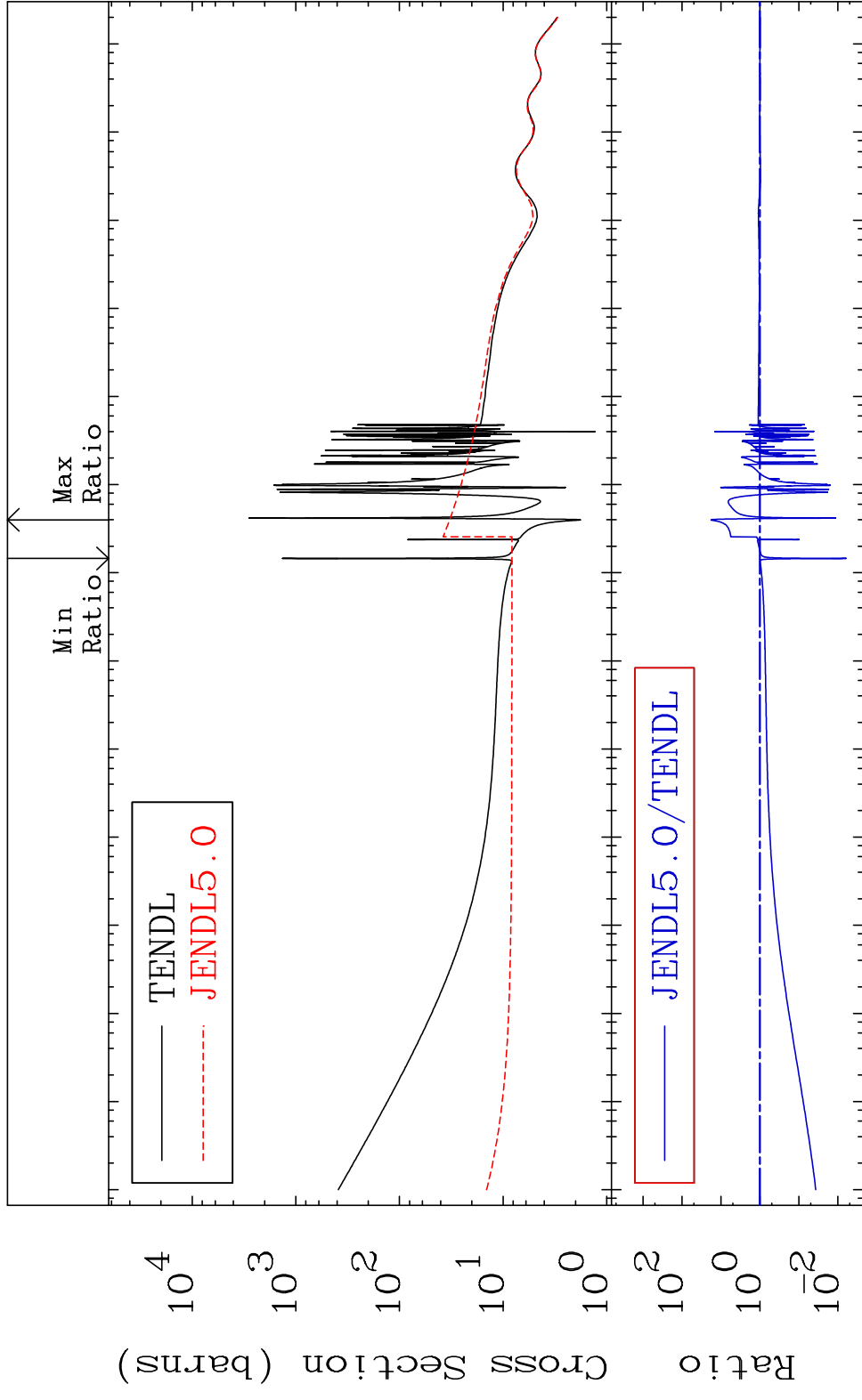
Press Mouse Button to Start

MAT 8322

83-Bi-208

Total

Cross Section -99.39 To 1742. %



1

Incident Energy (eV)

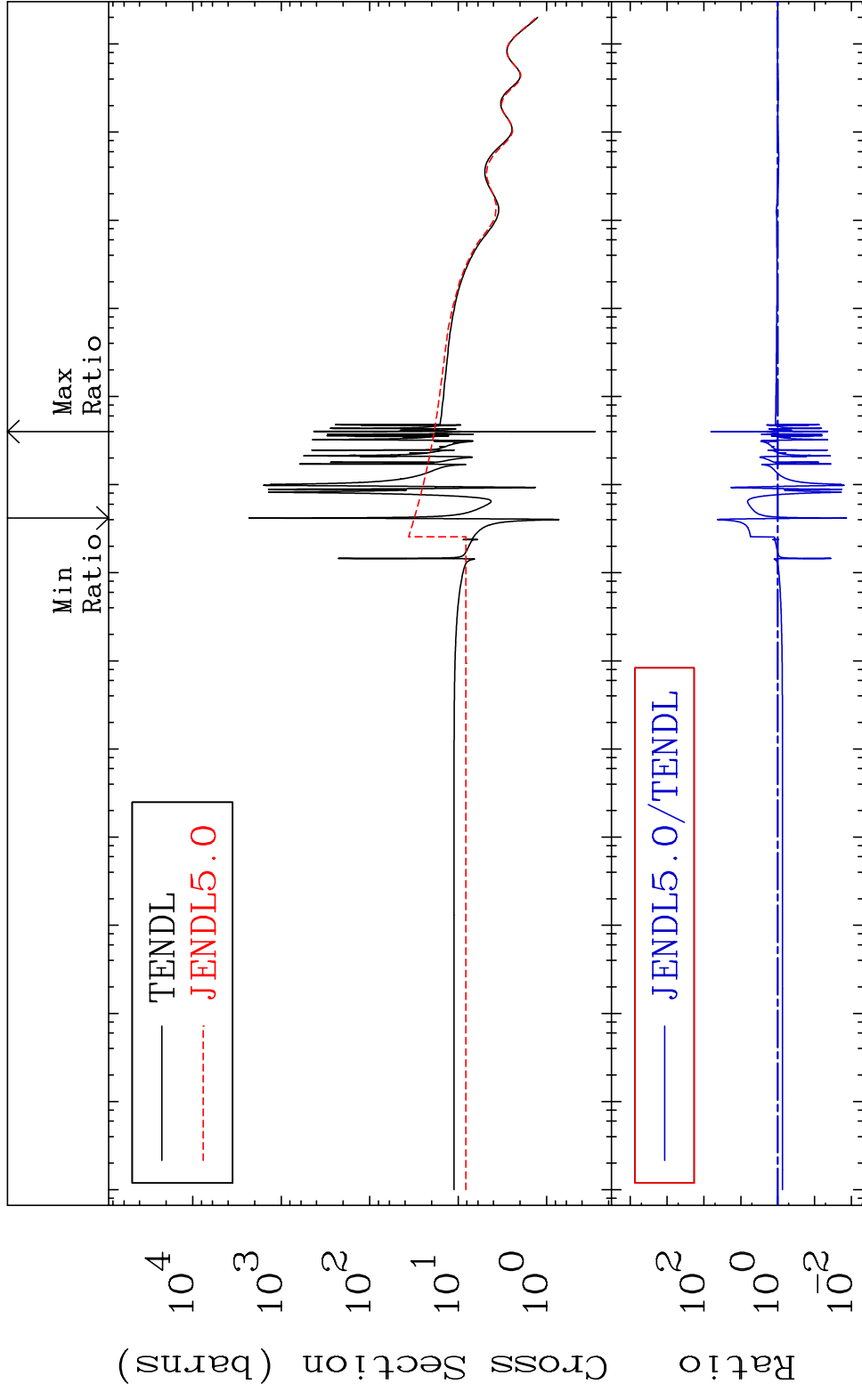
83-Bi-208

MAT 8322

Elastic

83-Bi-208

Cross Section -98.64 To 6462. %

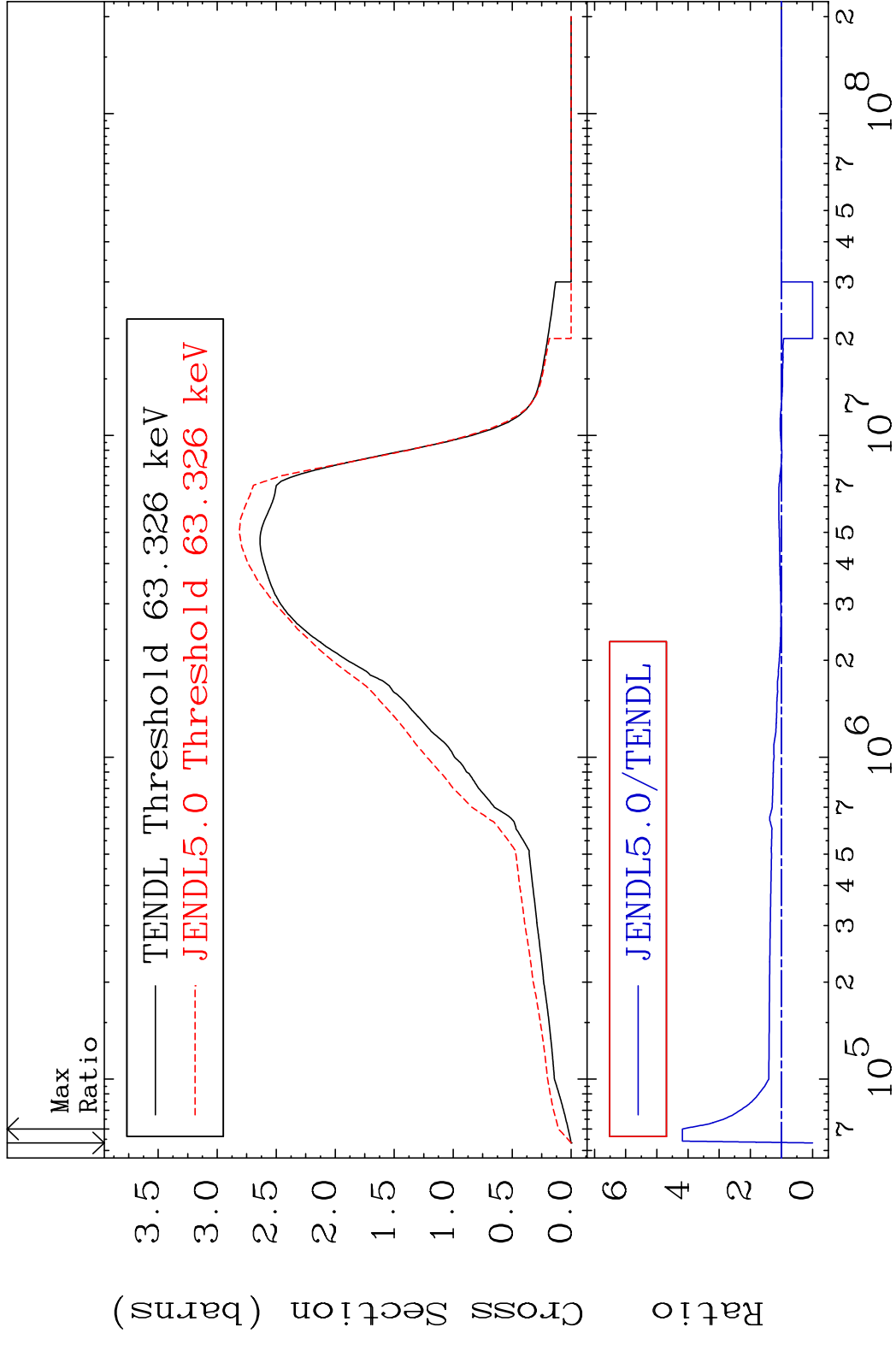


2

Incident Energy (eV)

83-Bi-208

MAT 8322 Inelastic 83-Bi-208
 Cross Section -100.0 To 318.1 %



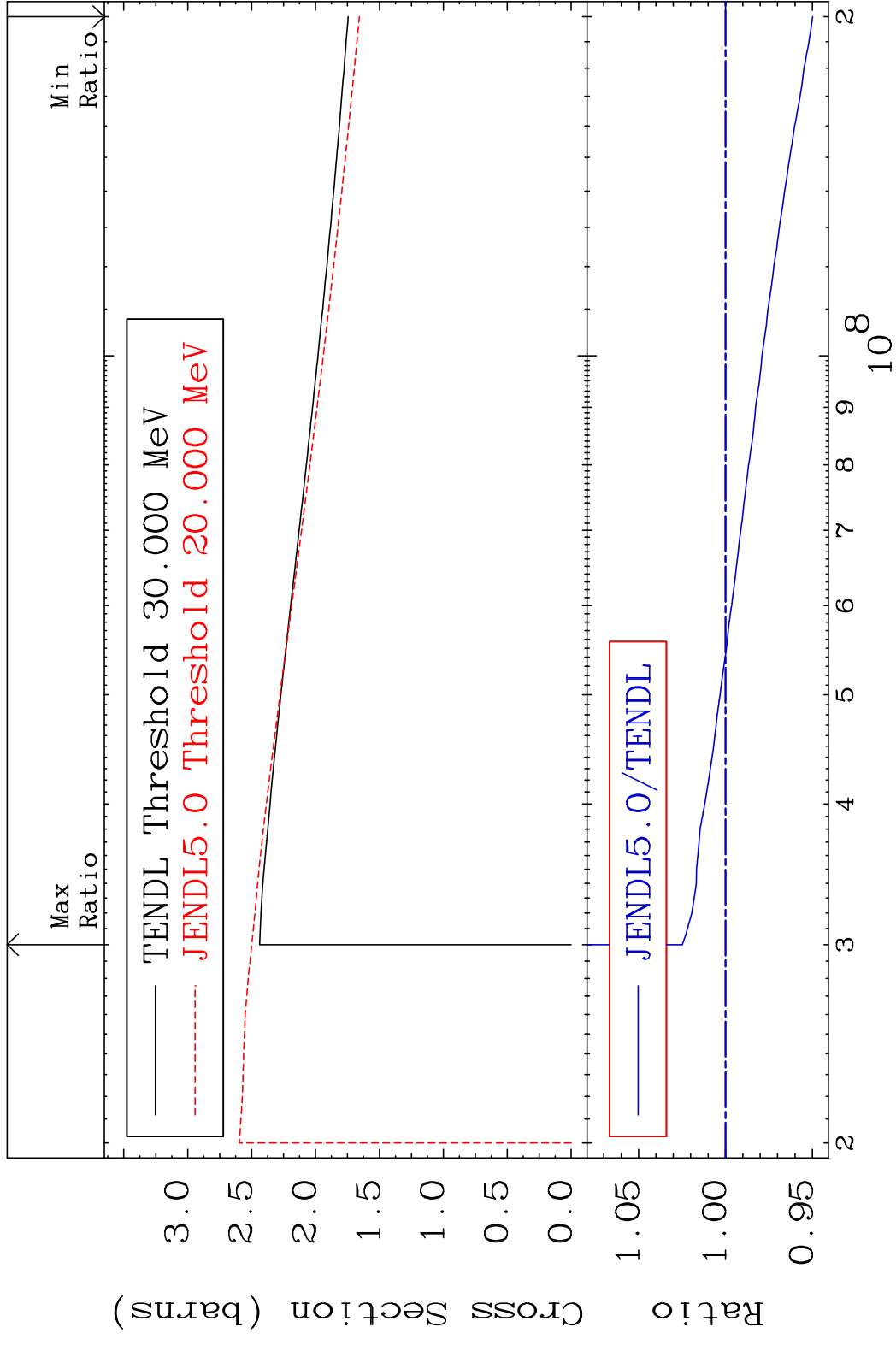
3 Incident Energy (eV) 83-Bi-208

MAT 8322

(n, remainder)

83-Bi-208

Cross Section -5.012 To 2.481 %



4

Incident Energy (eV)

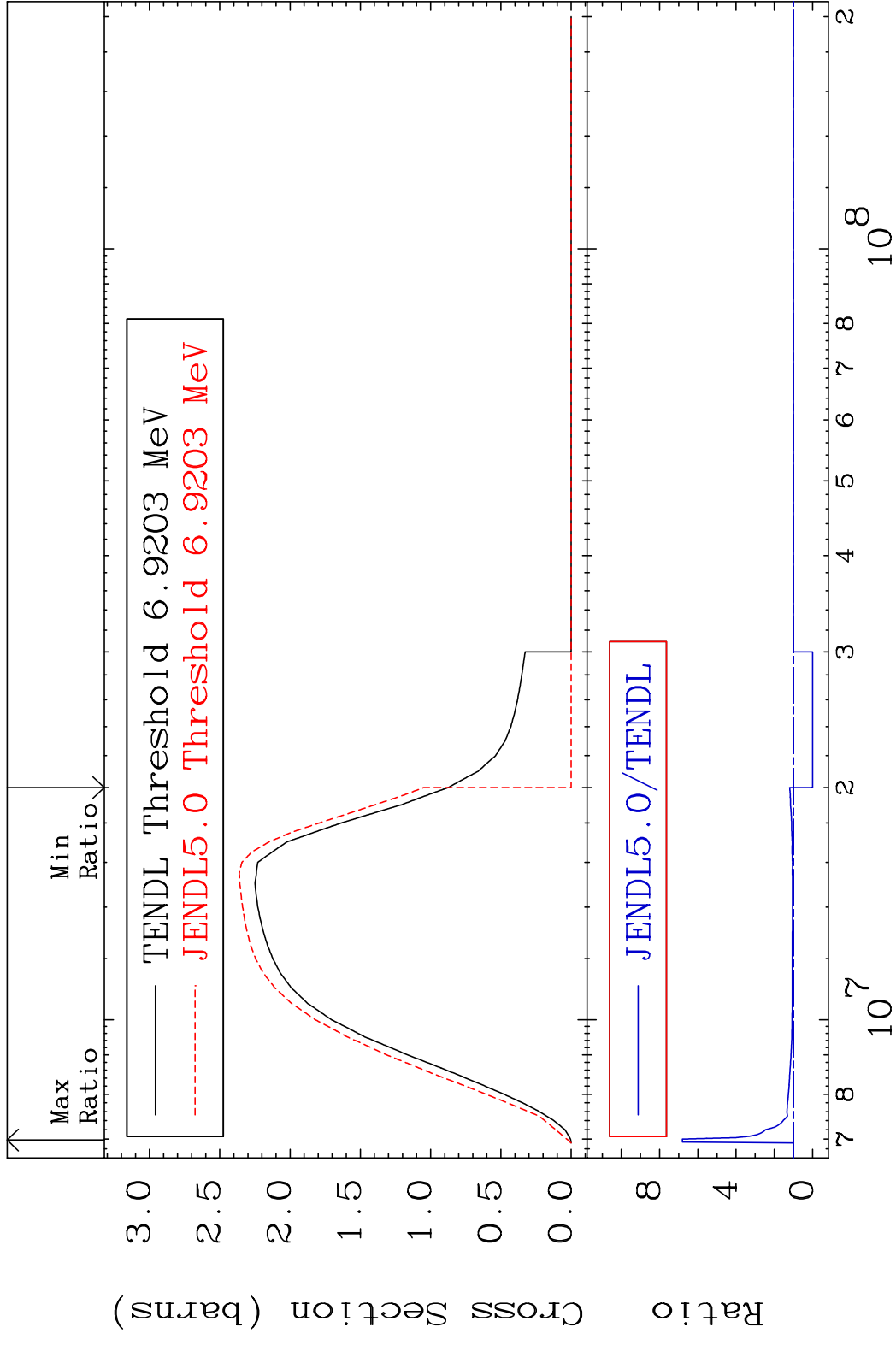
83-Bi-208

MAT 8322

(n,2n)

83-Bi-208

Cross Section -100.0 To 581.0 %



5

Incident Energy (eV)

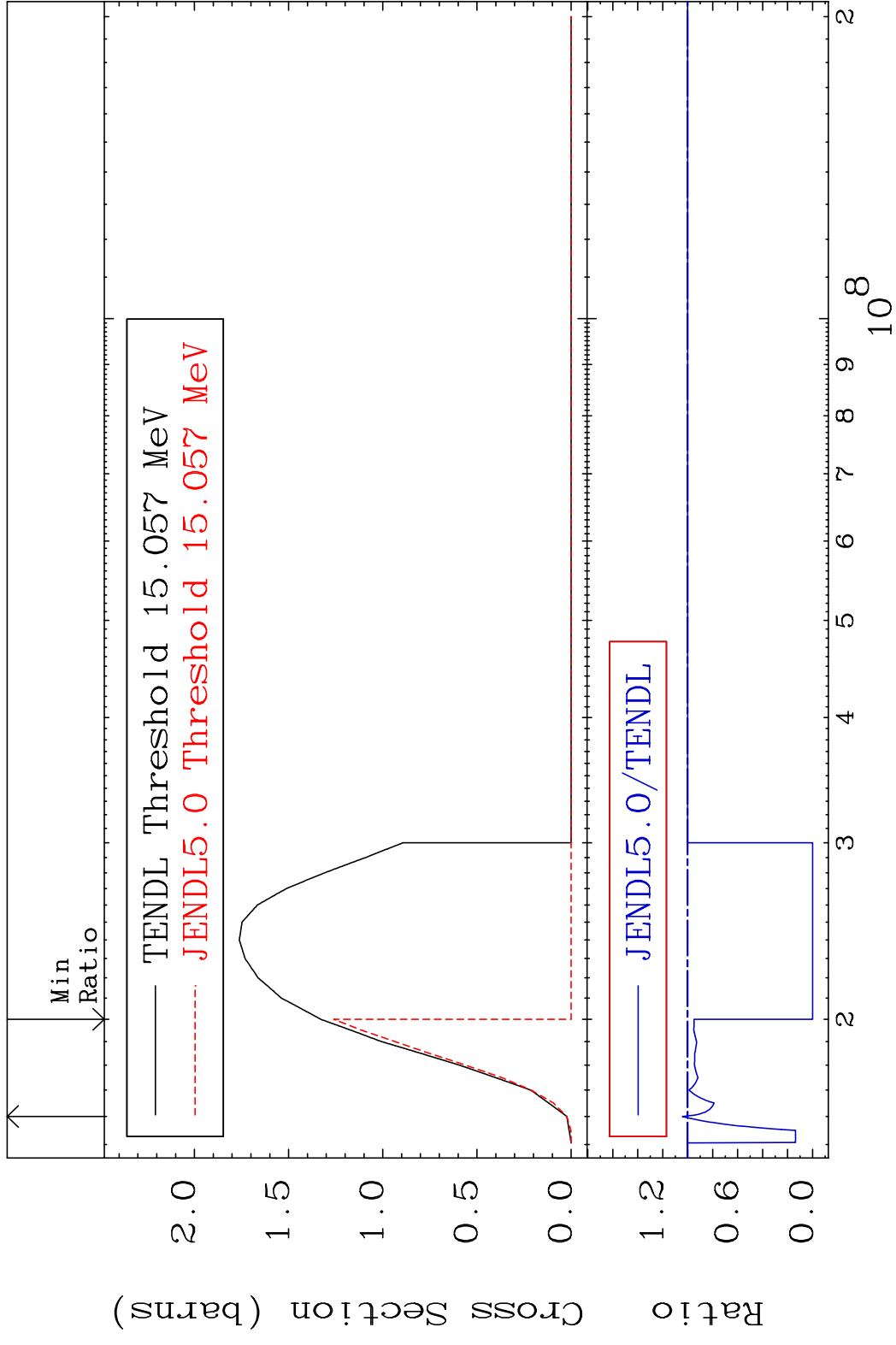
83-Bi-208

MAT 8322

(n,3n)

83-Bi-208

Cross Section -100.0 To 4.276 %

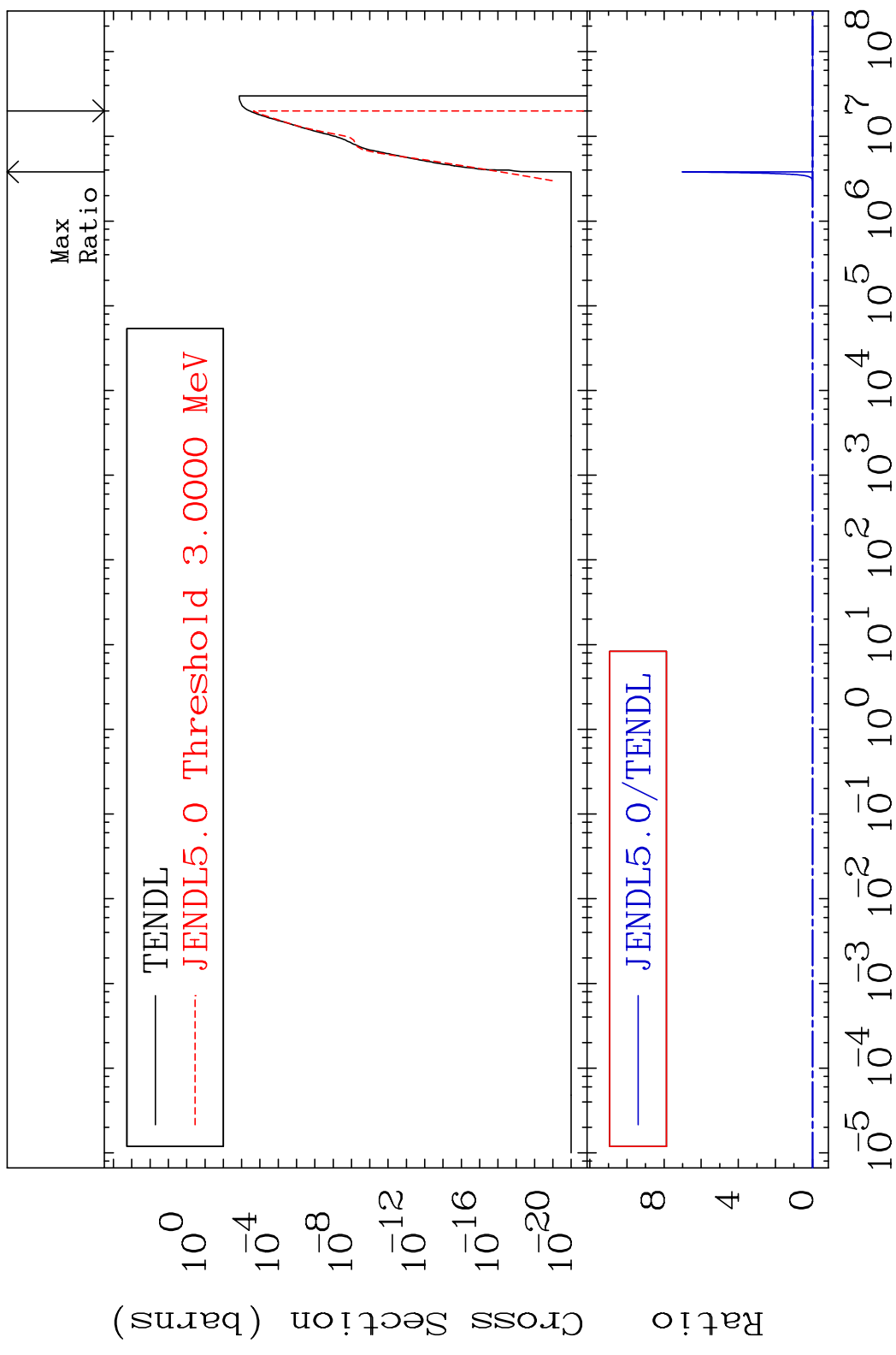


MAT 8322

(n, n') α

83-Bi-208

Cross Section -100.0 To 9999. %



7

Incident Energy (eV)

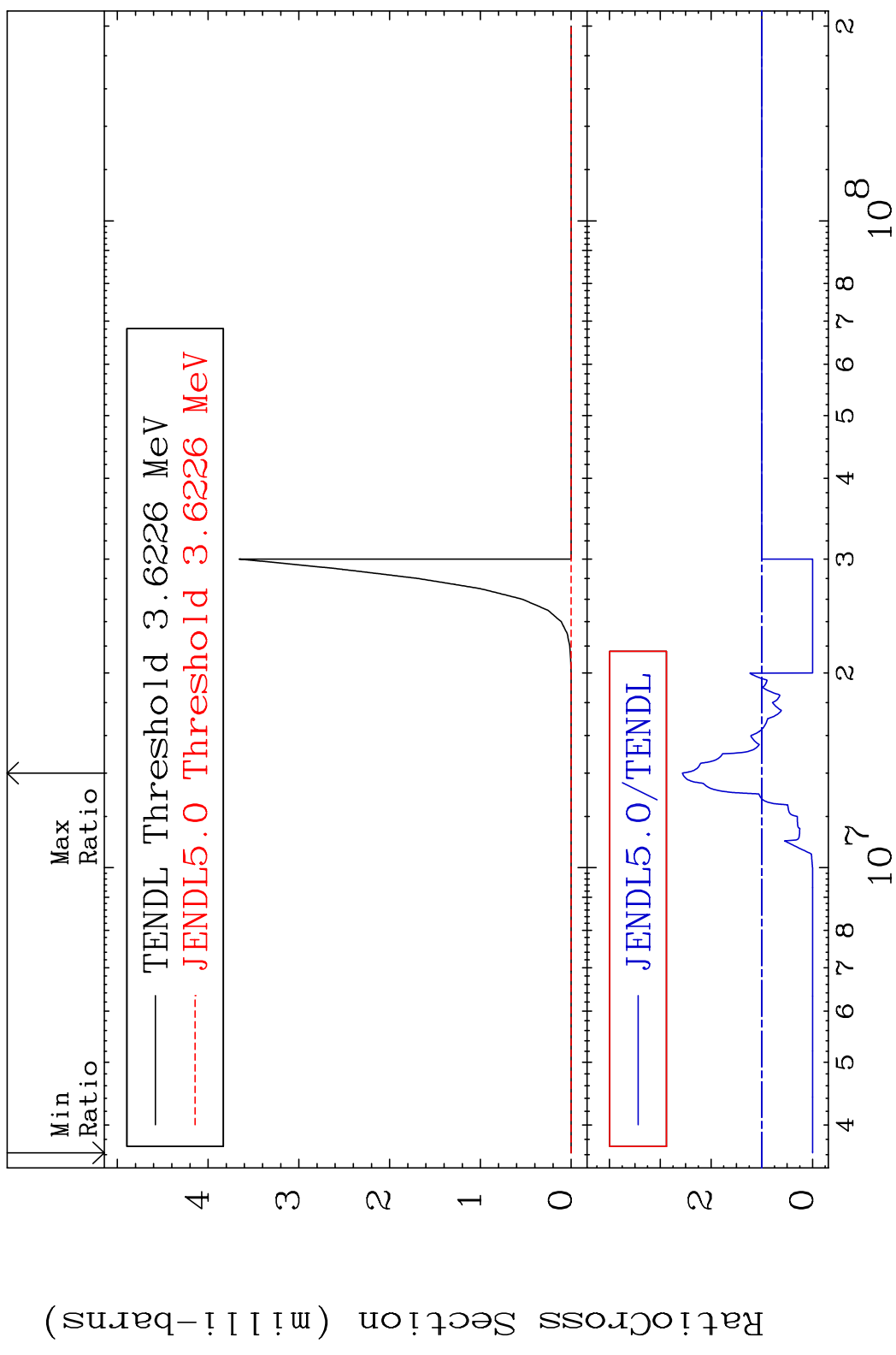
83-Bi-208

MAT 8322

(n,2n) α

83-Bi-208

Cross Section -100.0 To 156.5 %

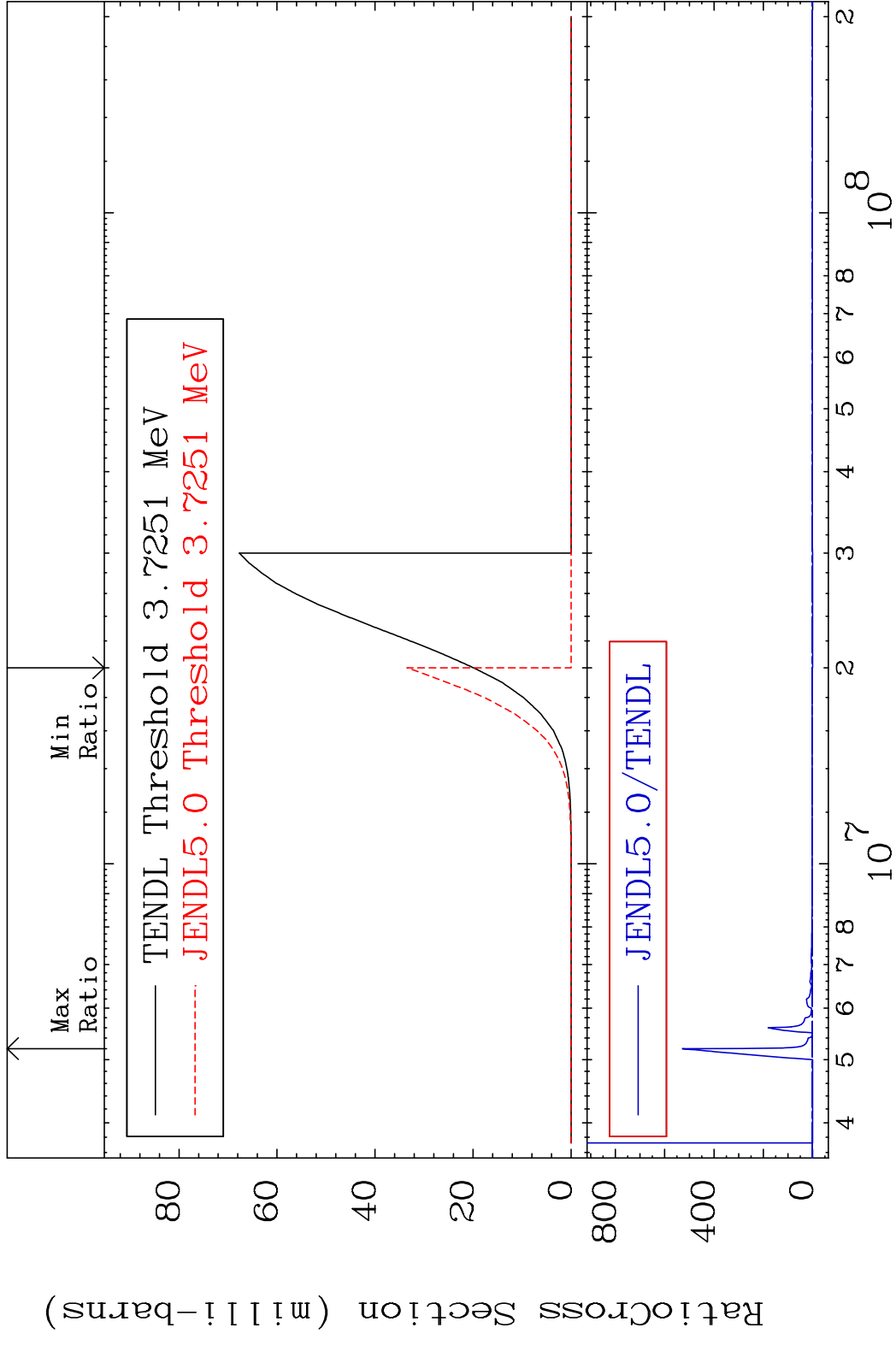


MAT 8322

(n, n') p

83-Bi-208

Cross Section -100.0 To 9999. %



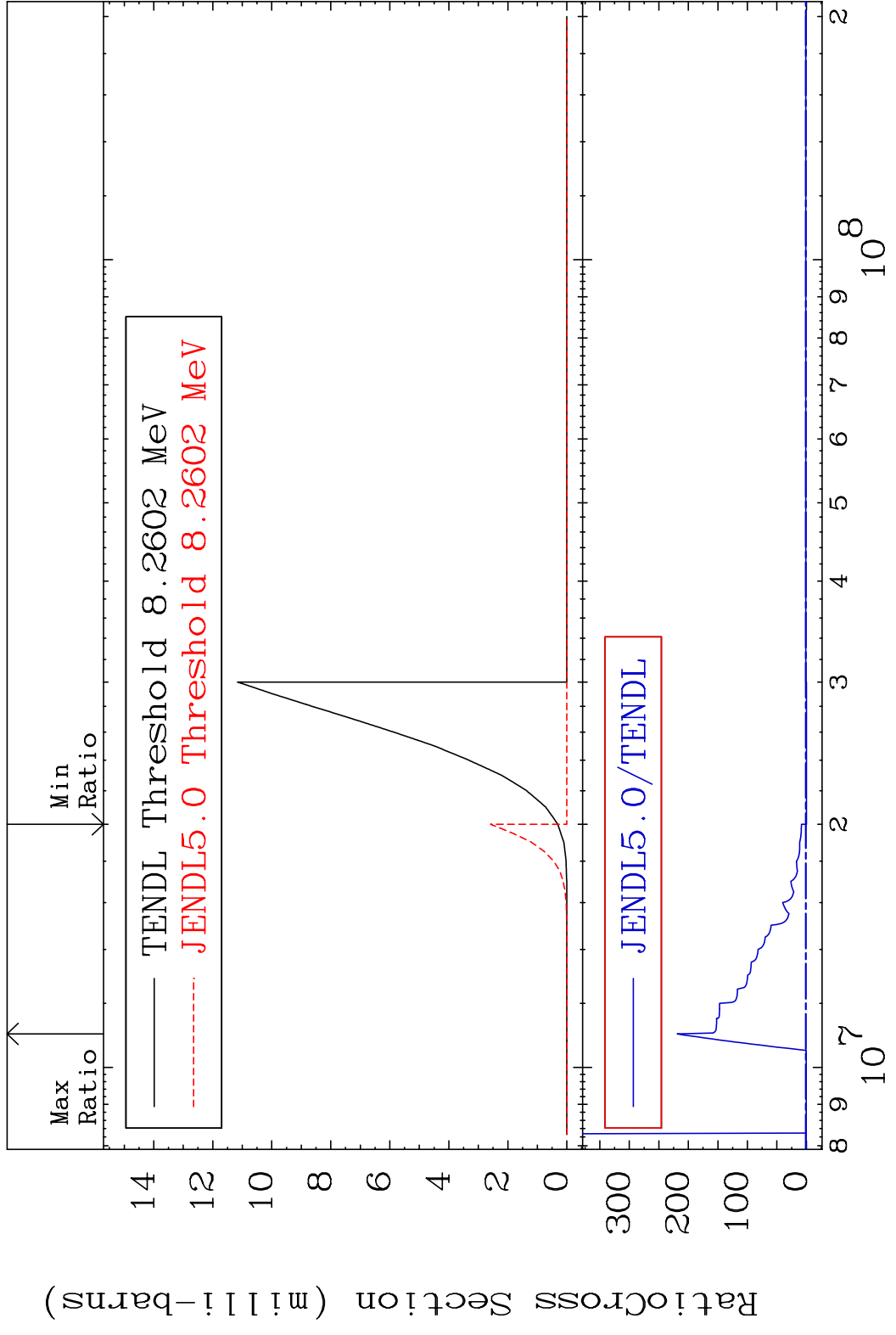
Ratio Cross Section (milli-barns)

9

Incident Energy (eV)

83-Bi-208

MAT 8322 (n, n') d 83-Bi-208
 Cross Section -100.0 To 9999. %



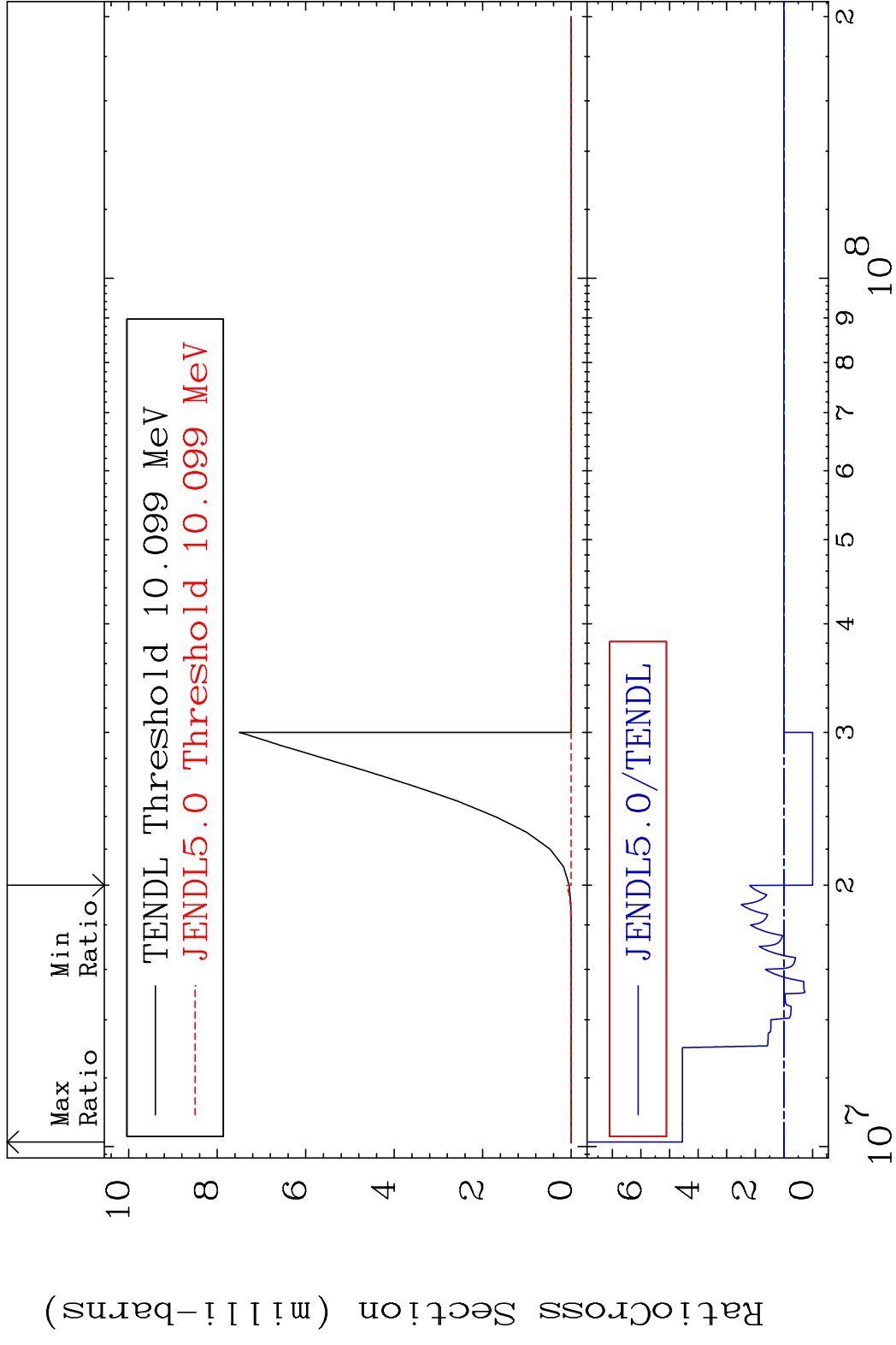
10 10 Incident Energy (eV) 83-Bi-208

MAT 8322

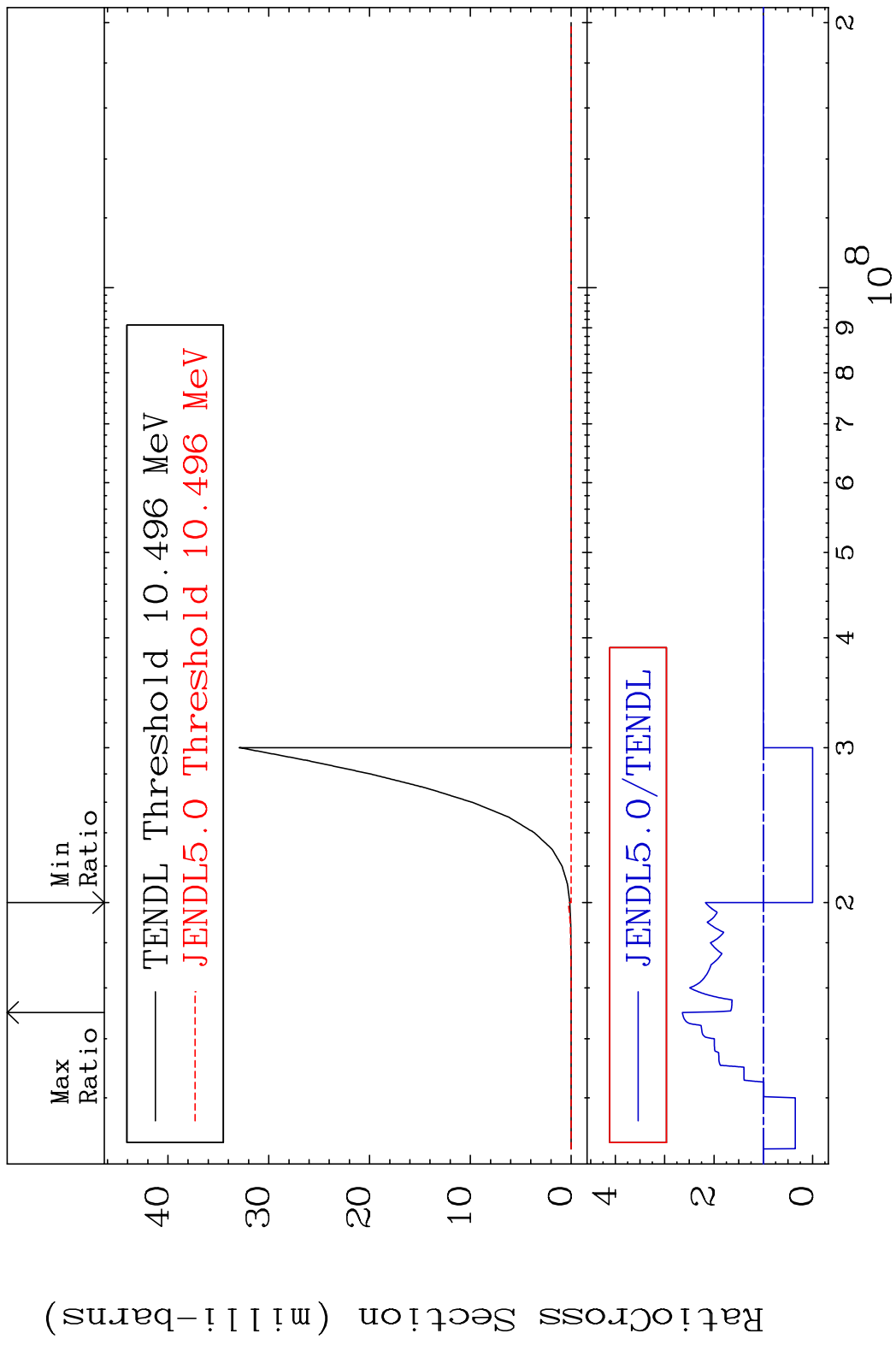
(n, n') t

83-Bi-208

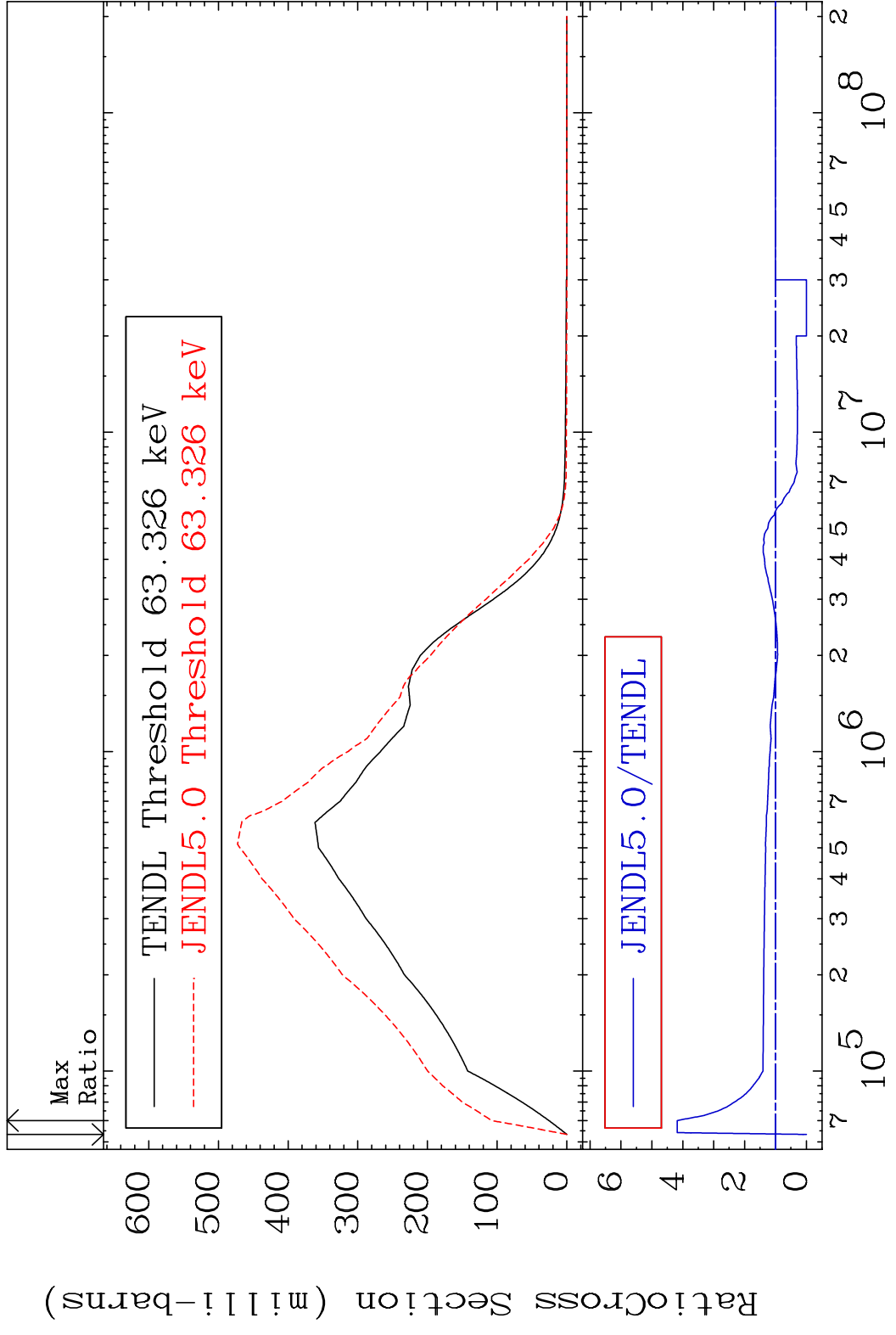
Cross Section -100.0 To 355.2 %



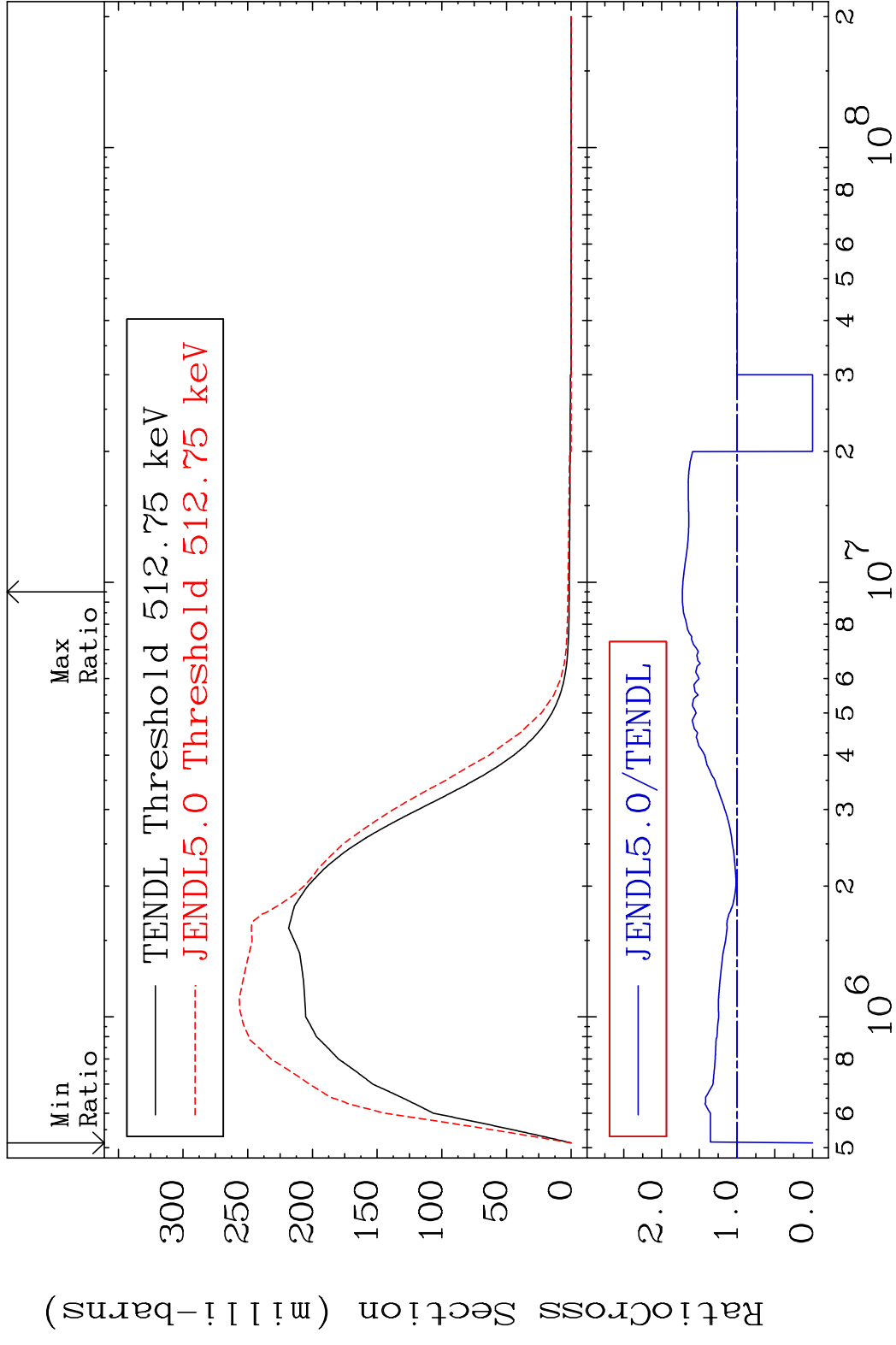
MAT 8322 (n,2n) p 83-Bi-208
 Cross Section -100.0 To 164.2 %



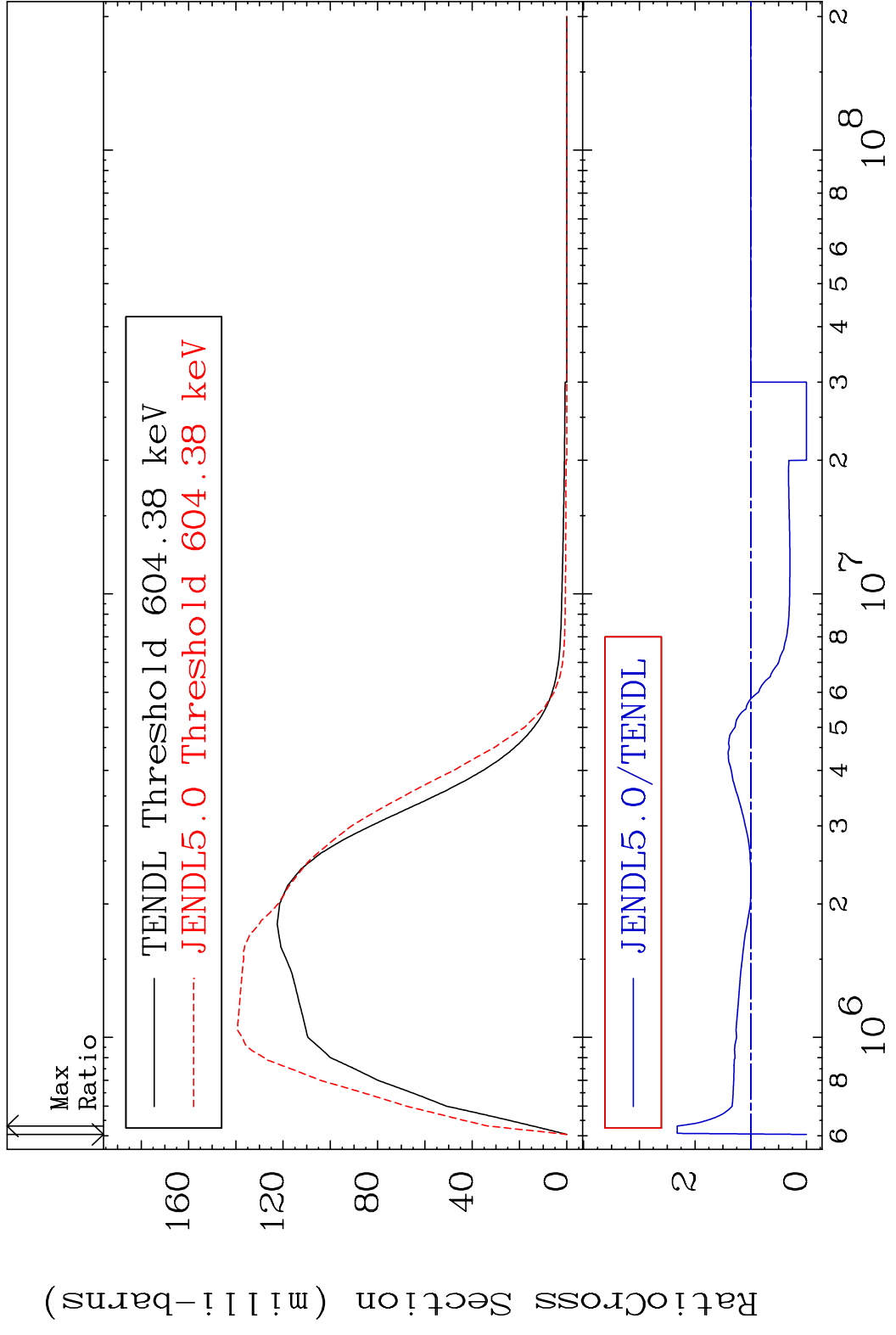
MAT 8322 MT= 51 (n,n') Level 83-Bi-208
 Cross Section -100.0 To 318.1 %



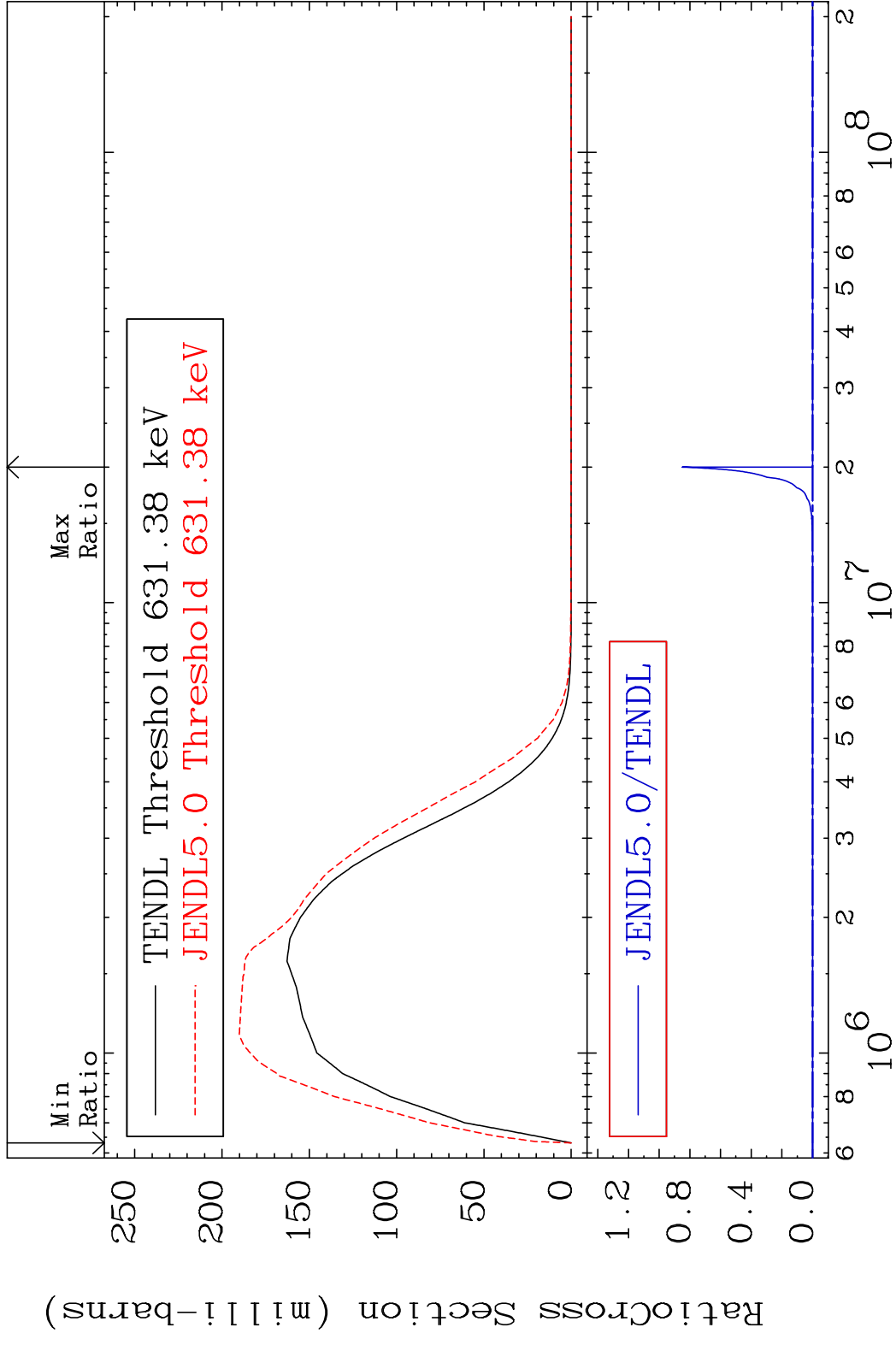
MAT 8322 MT= 52 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 72.44 %



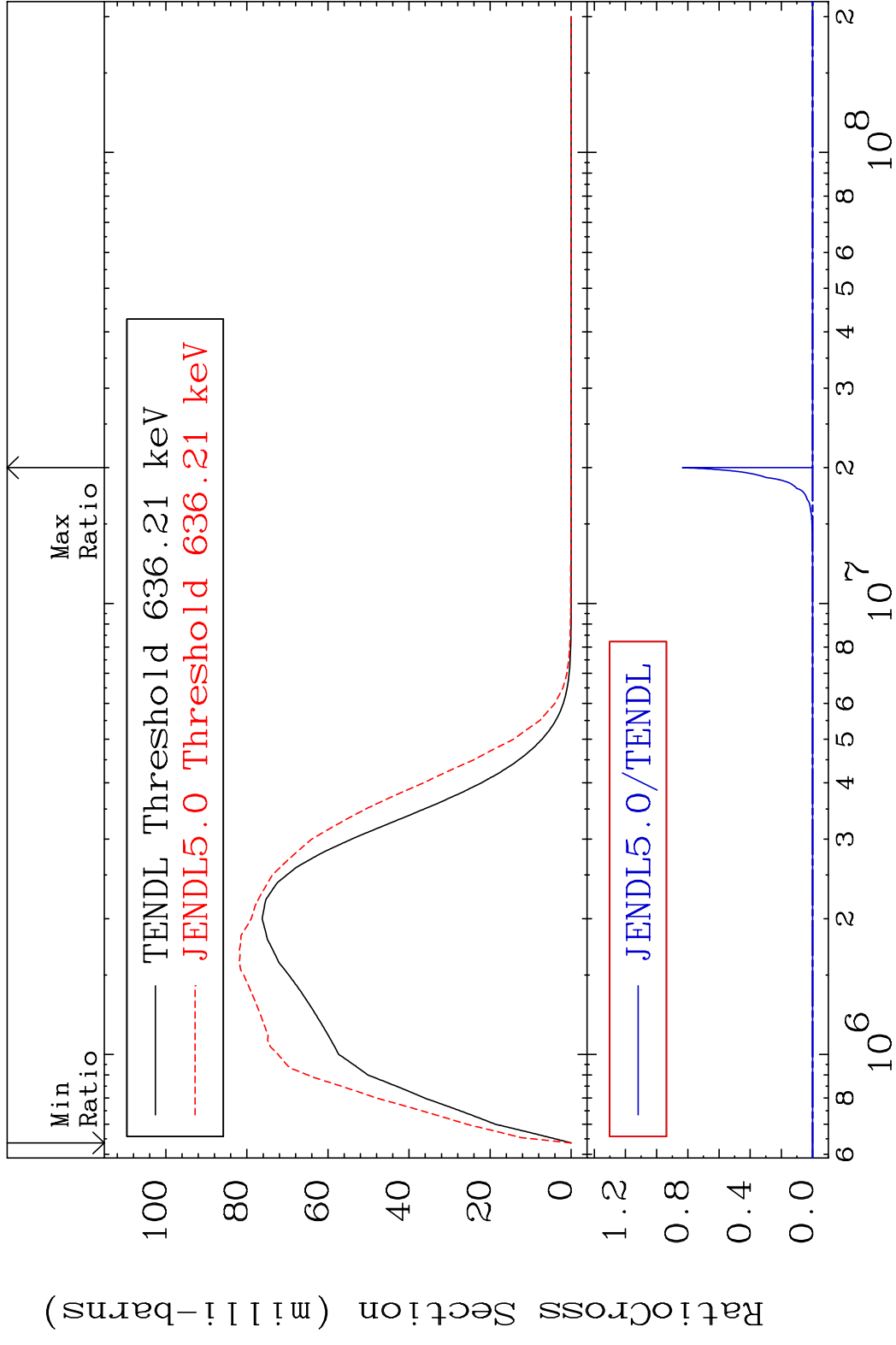
MAT 8322 MT= 53 (n,n') Level 83-Bi-208
 Cross Section -100.0 To 132.0 %



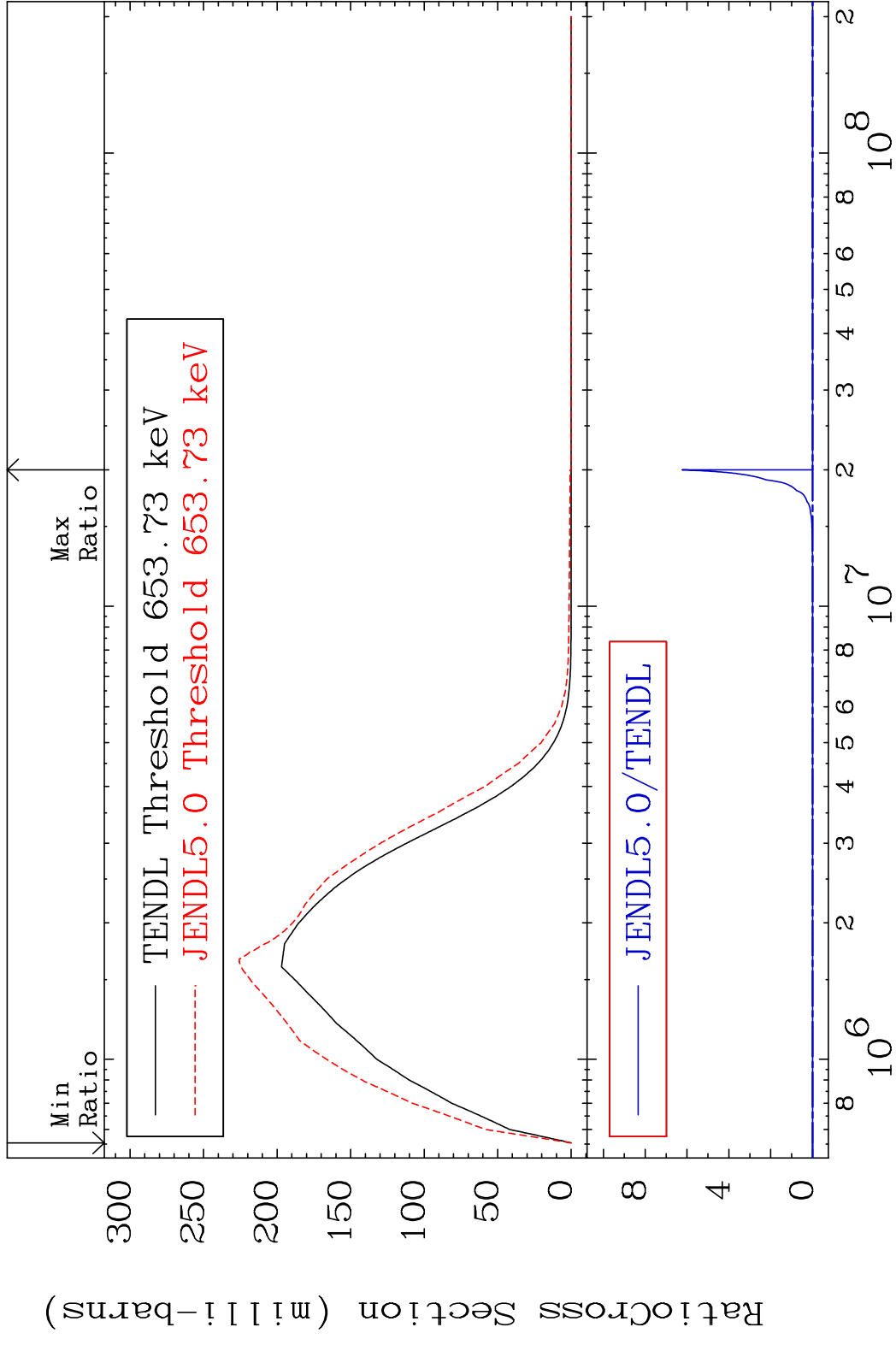
MAT 8322 MT= 54 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



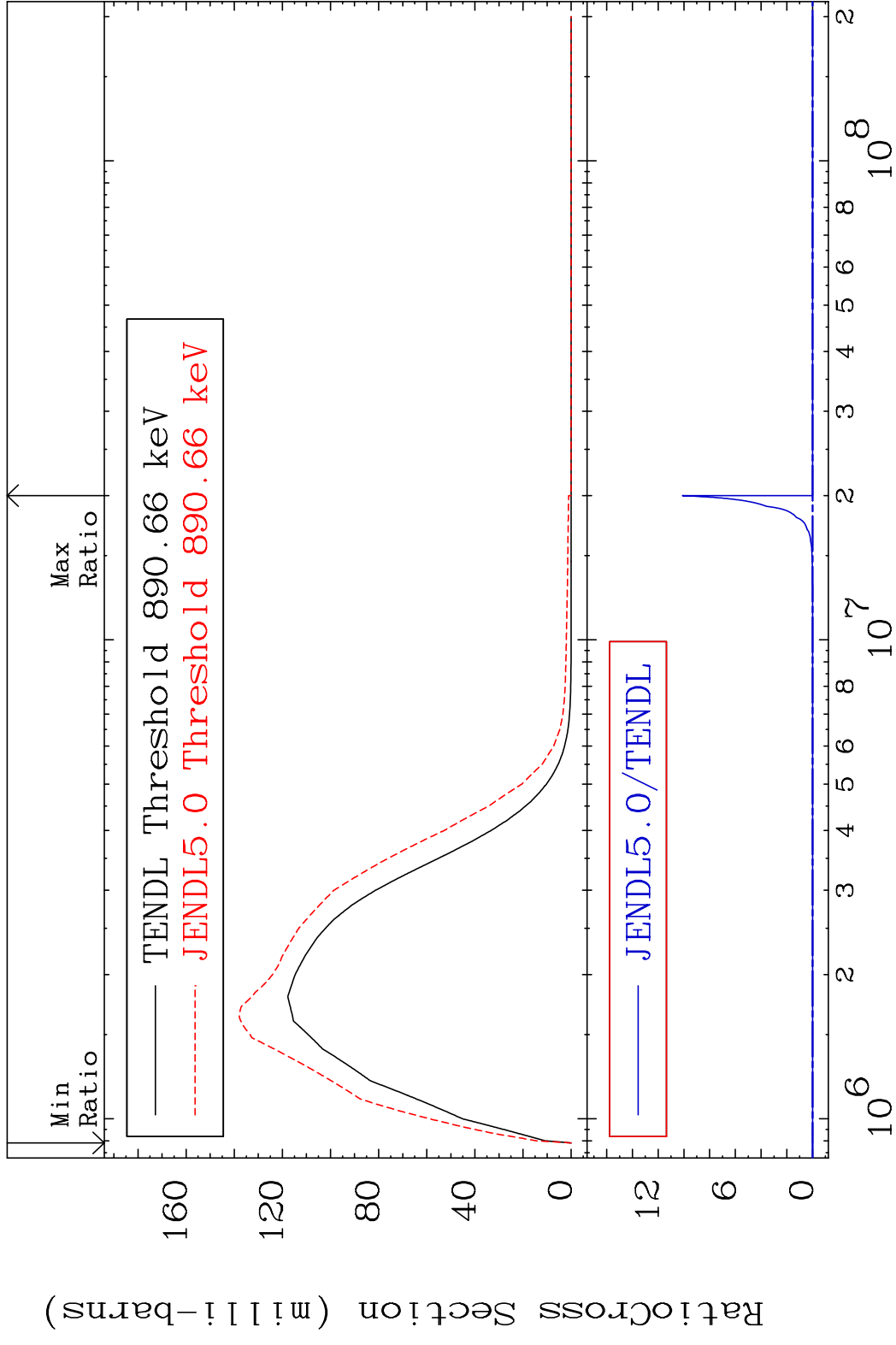
MAT 8322 MT= 55 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



MAT 8322 MT= 56 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %

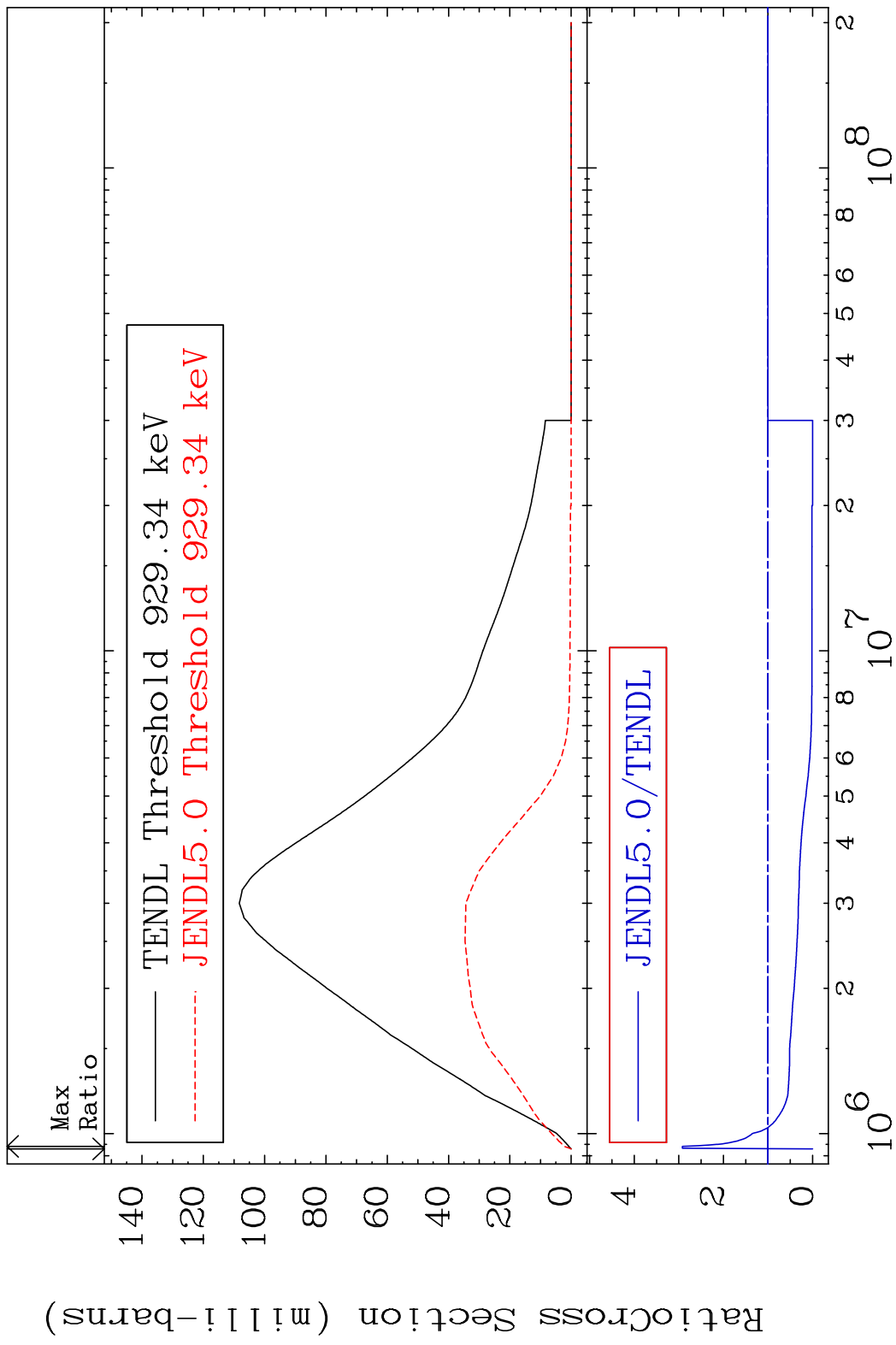


MAT 8322 MT= 57 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



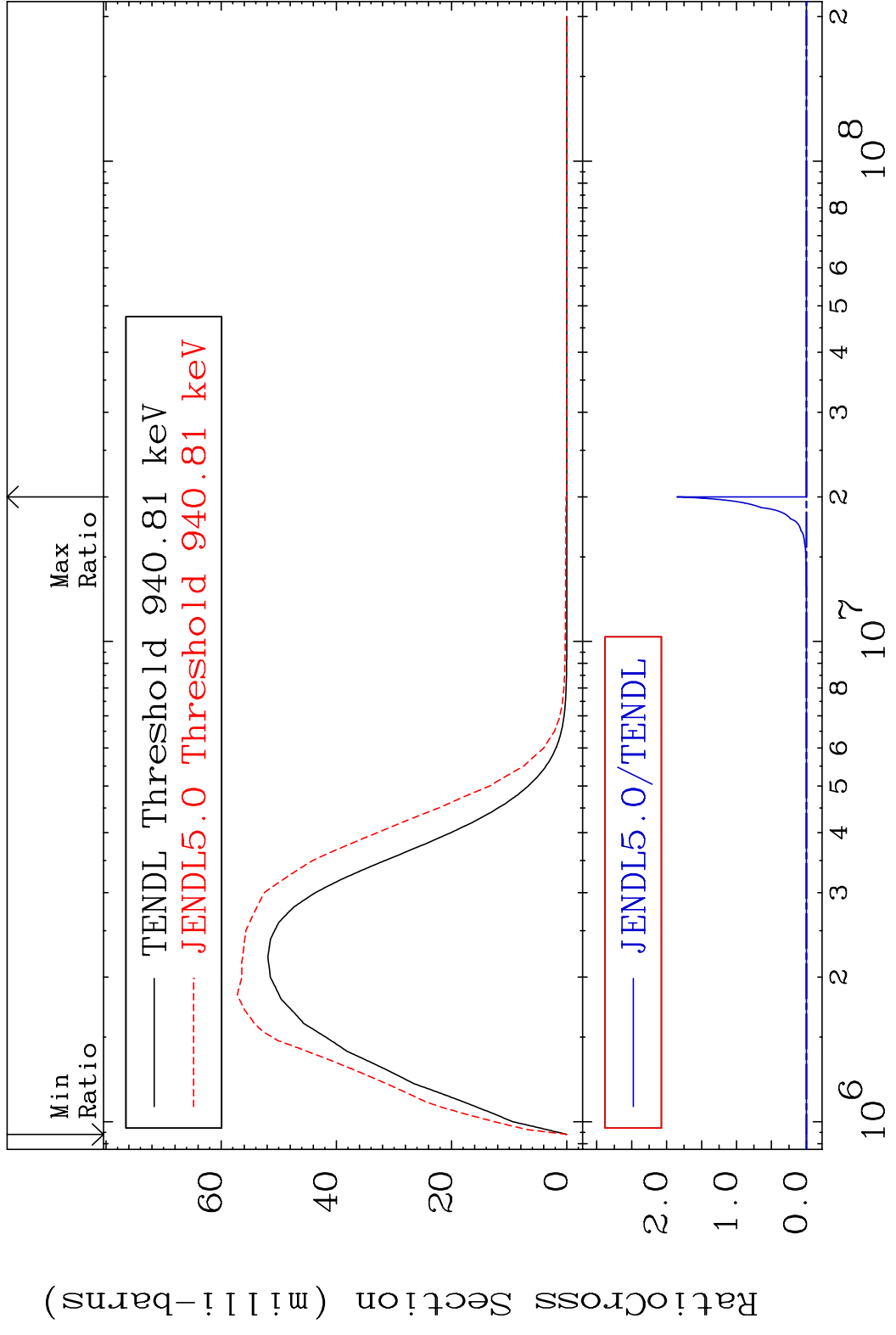
19 Incident Energy (eV) 83-Bi-208

MAT 8322 MT= 58 (n,n') Level 83-Bi-208
 Cross Section -100.0 To 192.0 %



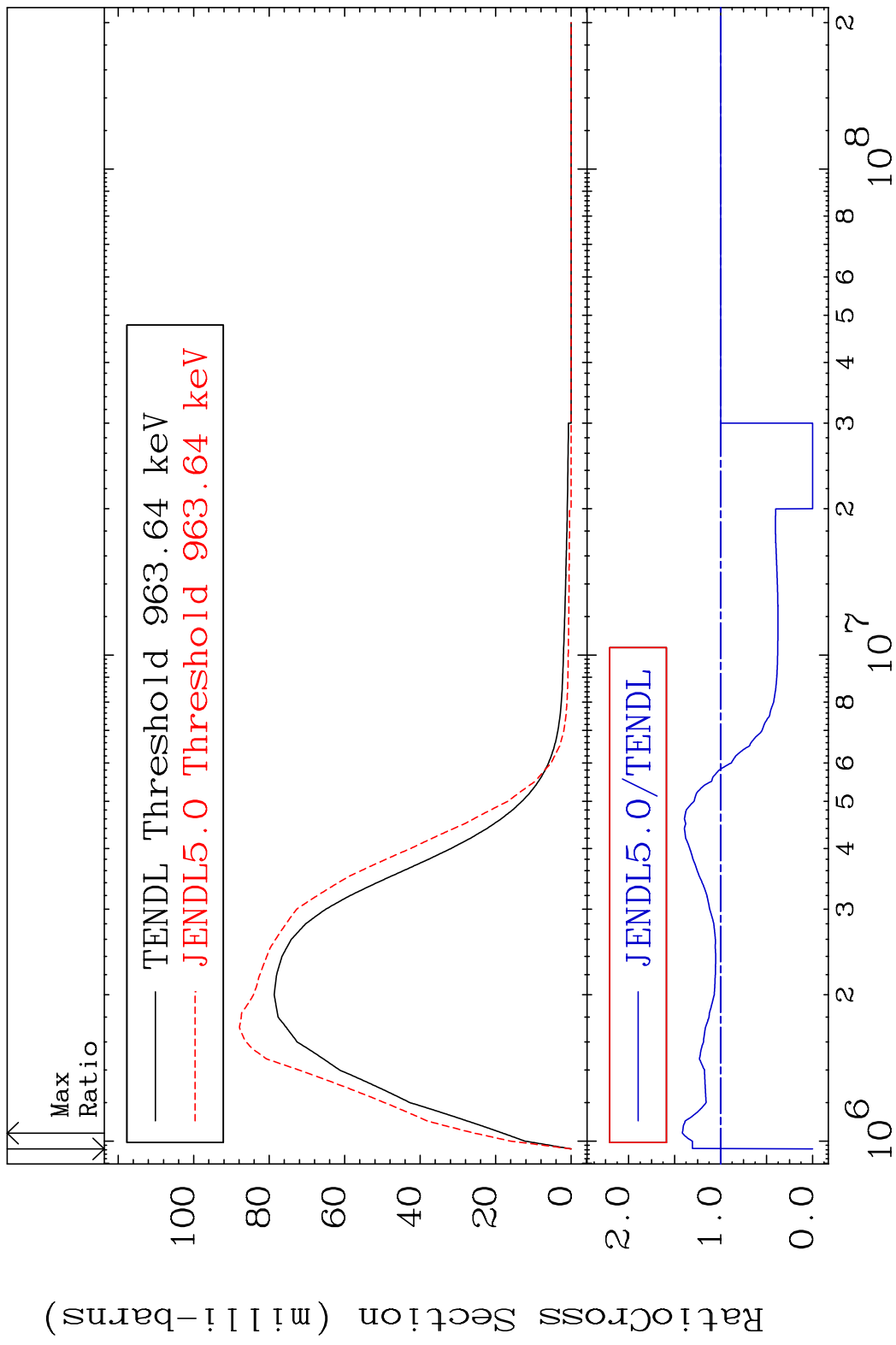
20 Incident Energy (eV) 83-Bi-208

MAT 8322 MT= 59 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %

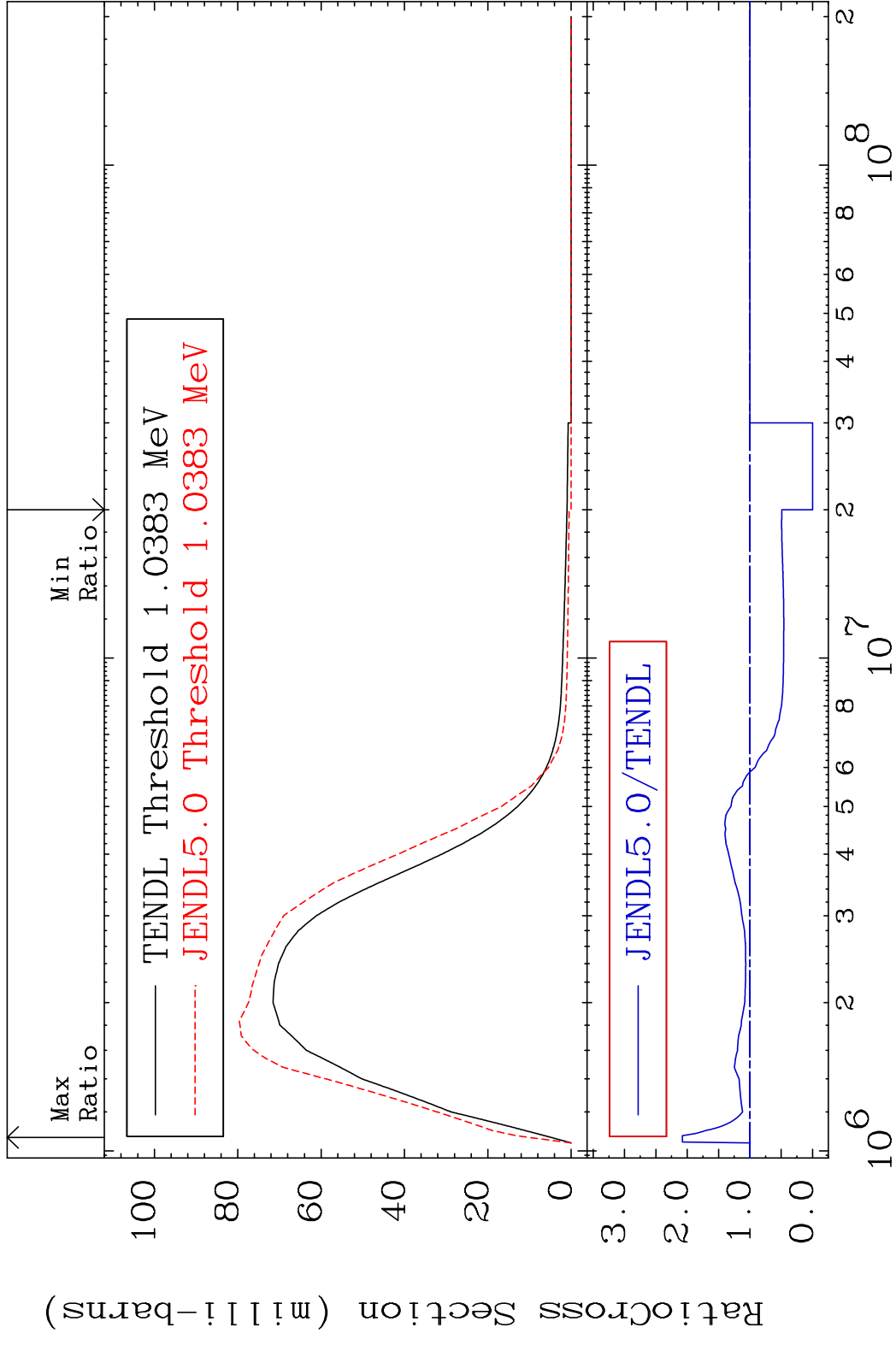


21 Incident Energy (eV) 83-Bi-208

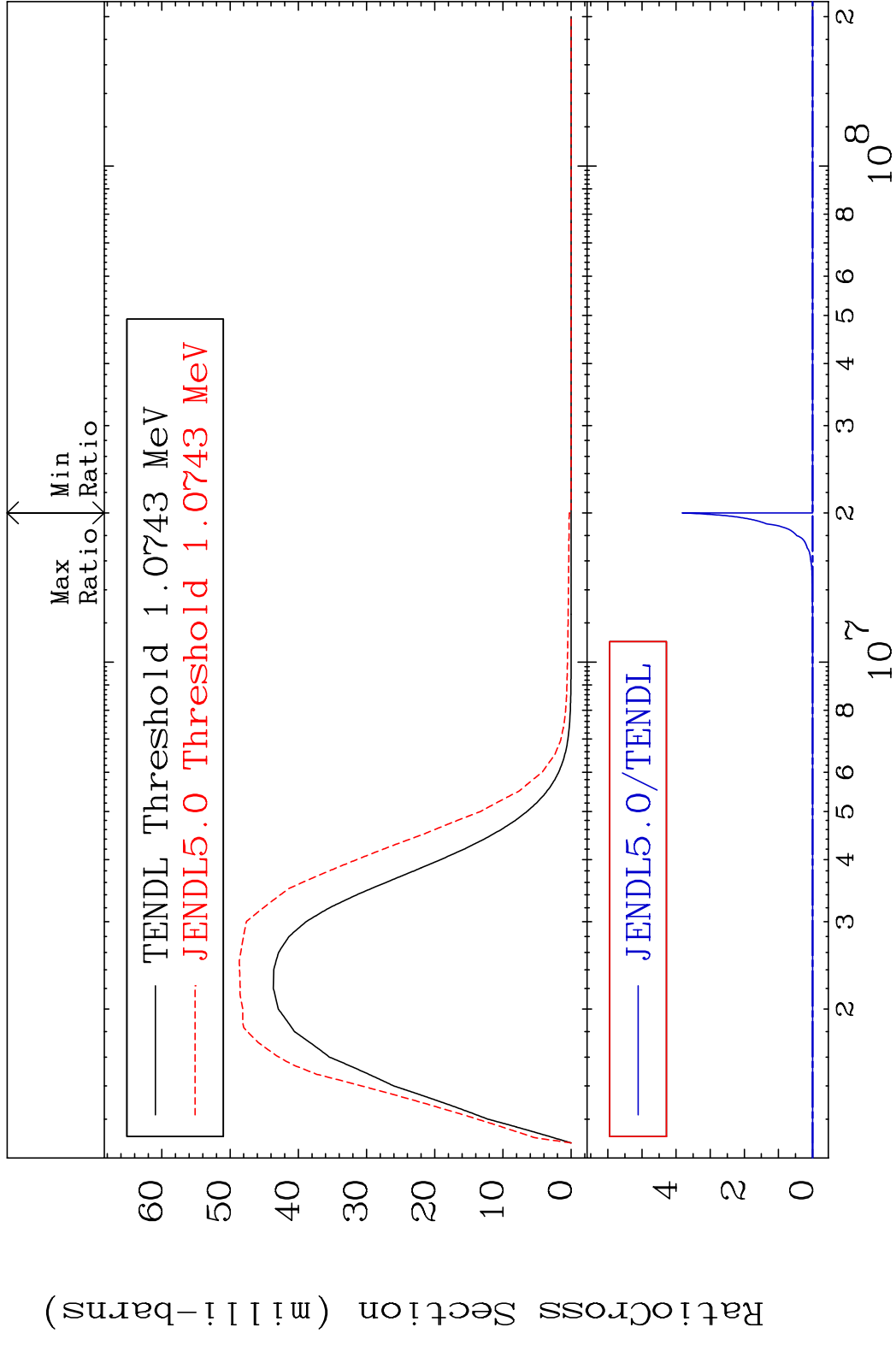
MAT 8322 MT= 60 (n,n') Level 83-Bi-208
 Cross Section -100.0 To 41.57 %



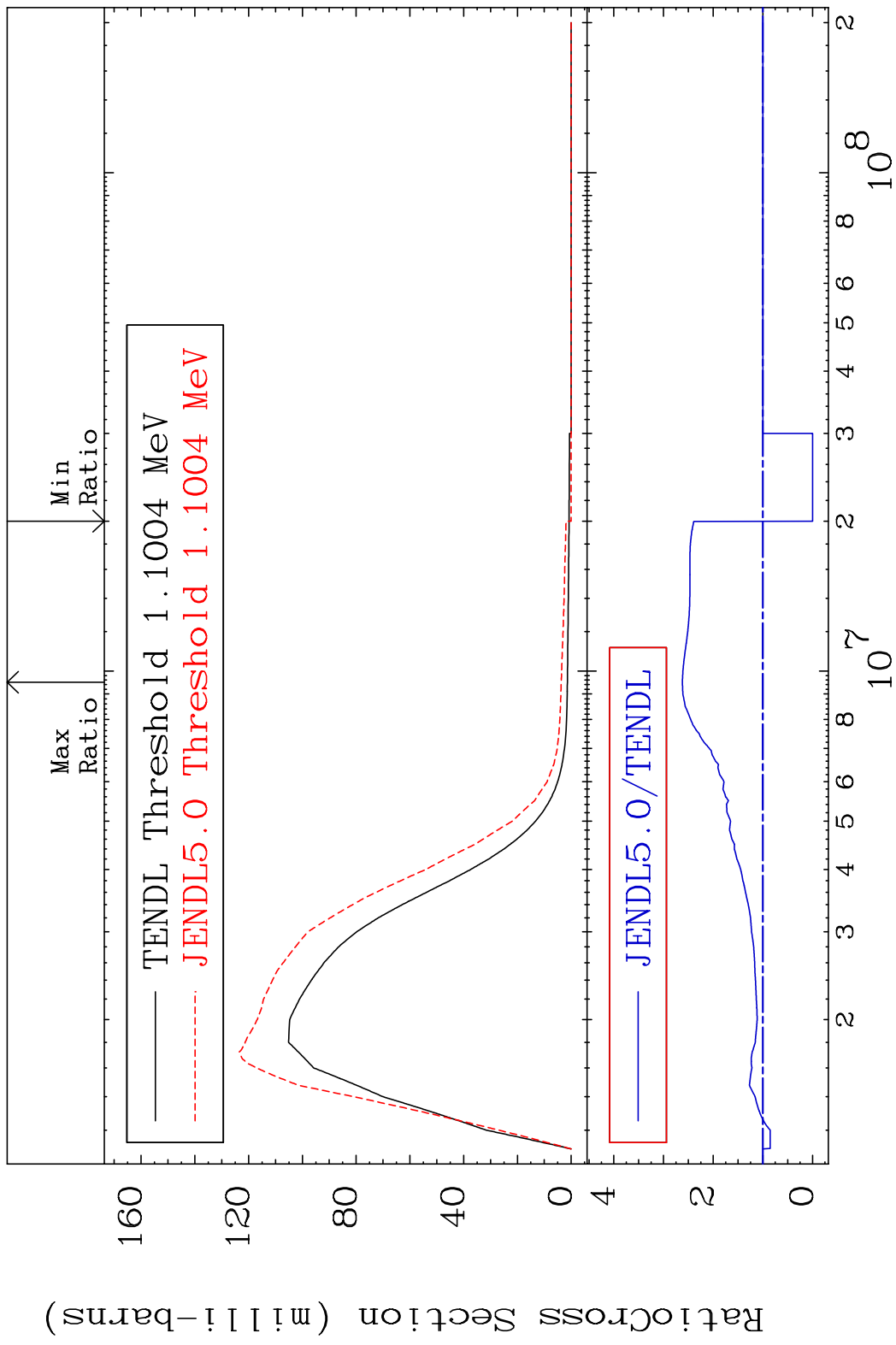
MAT 8322 MT= 61 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 107.7 %



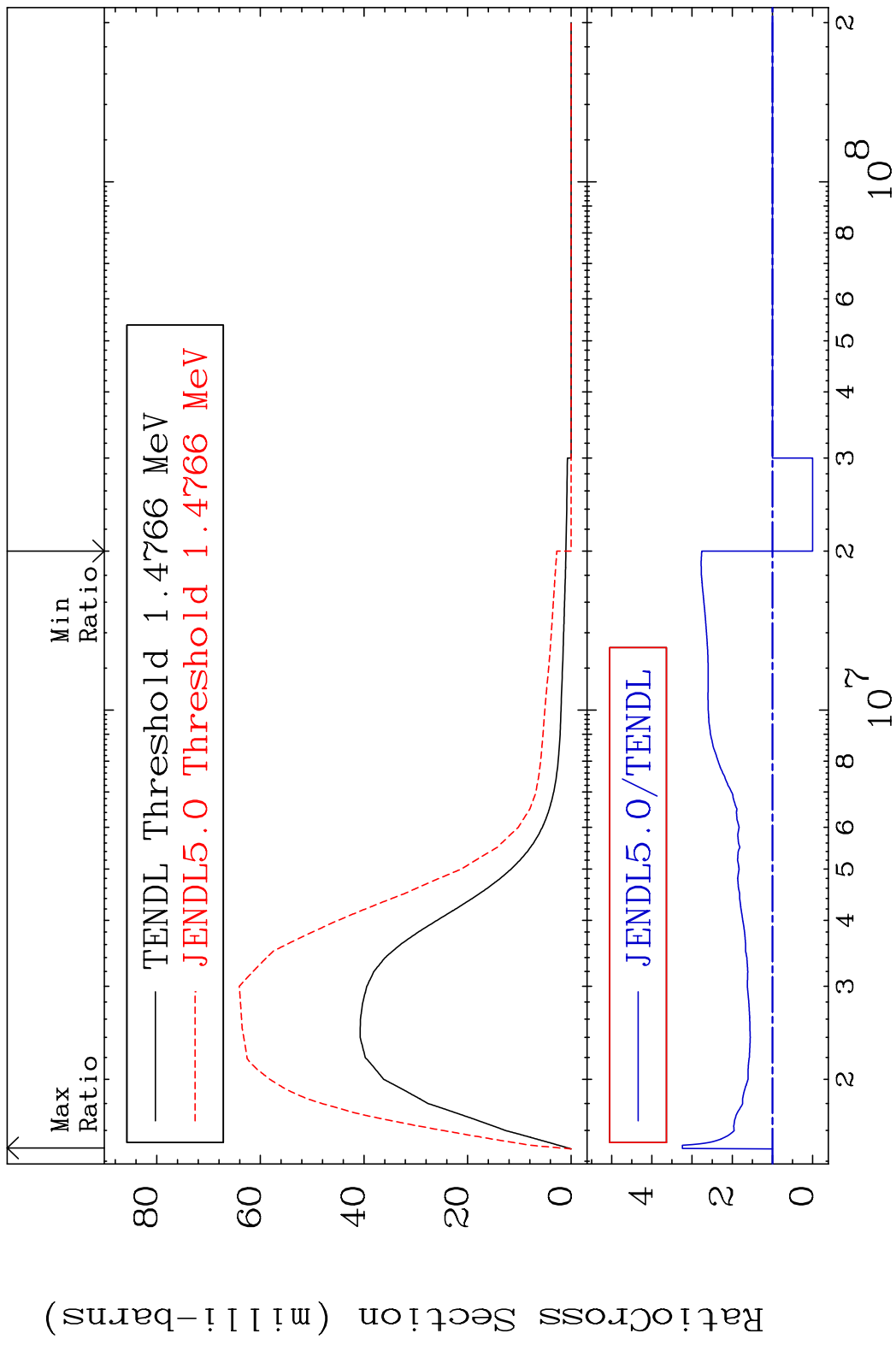
MAT 8322 MT= 62 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



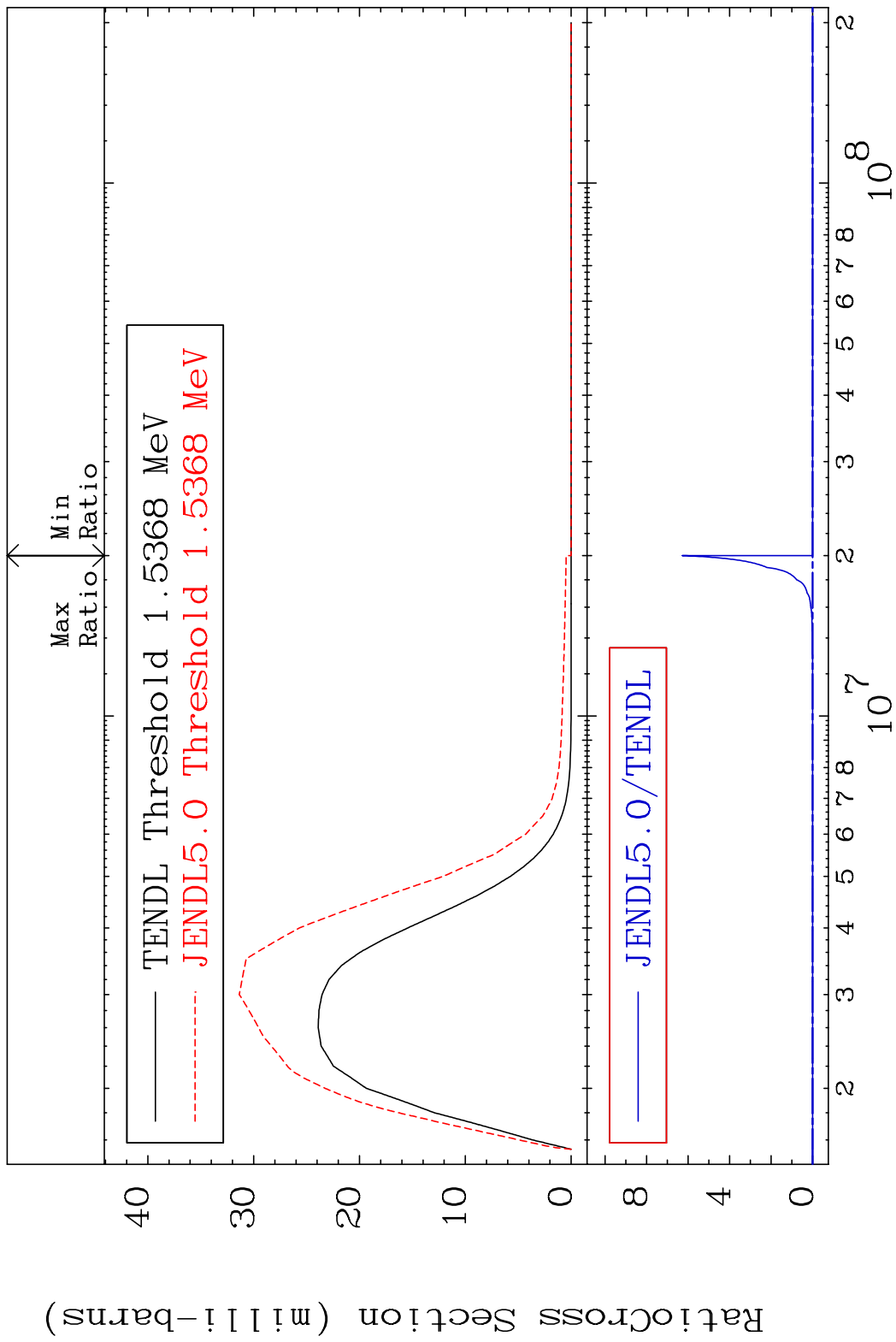
MAT 8322 MT= 63 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 162.1 %



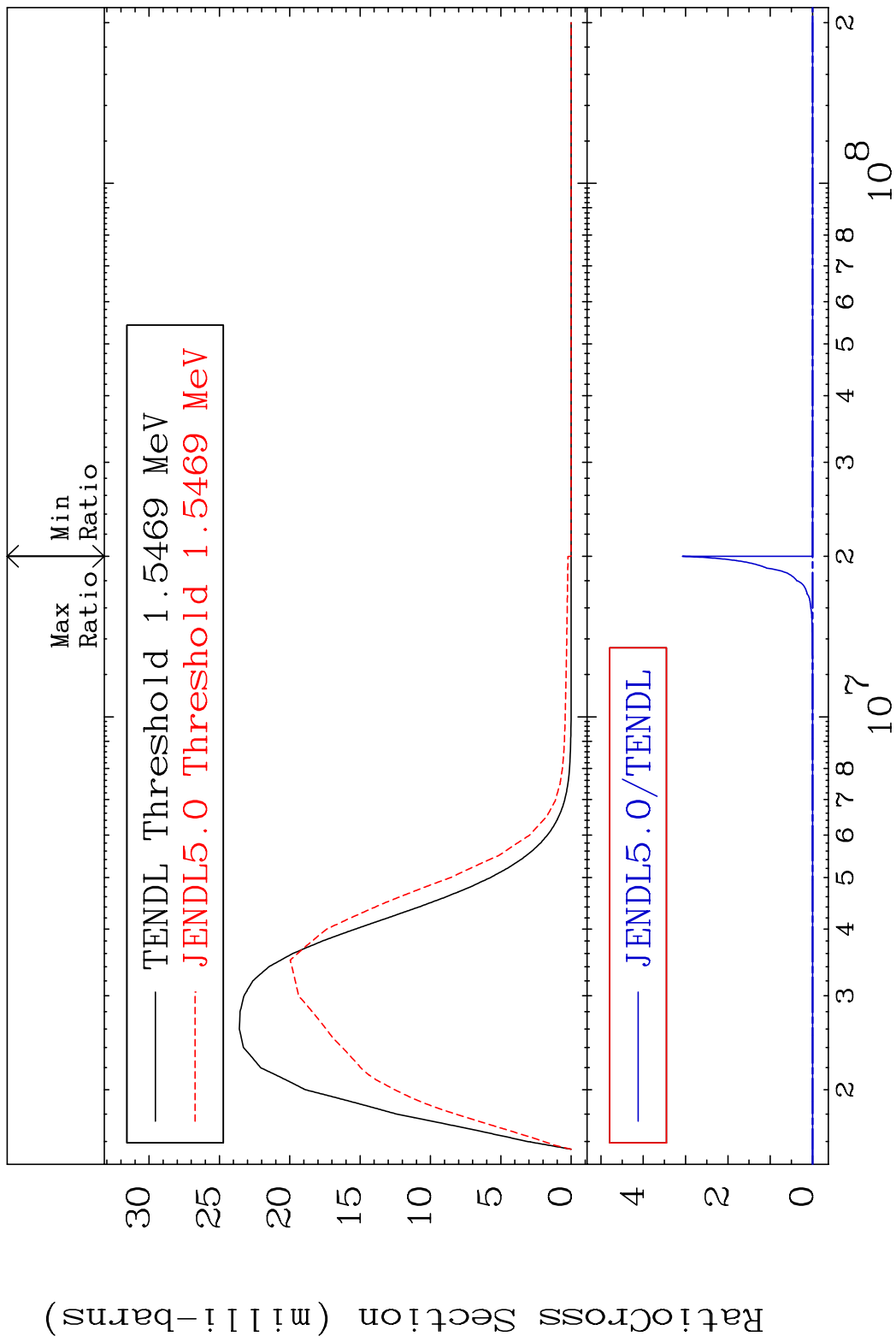
MAT 8322 MT= 64 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 224.2 %



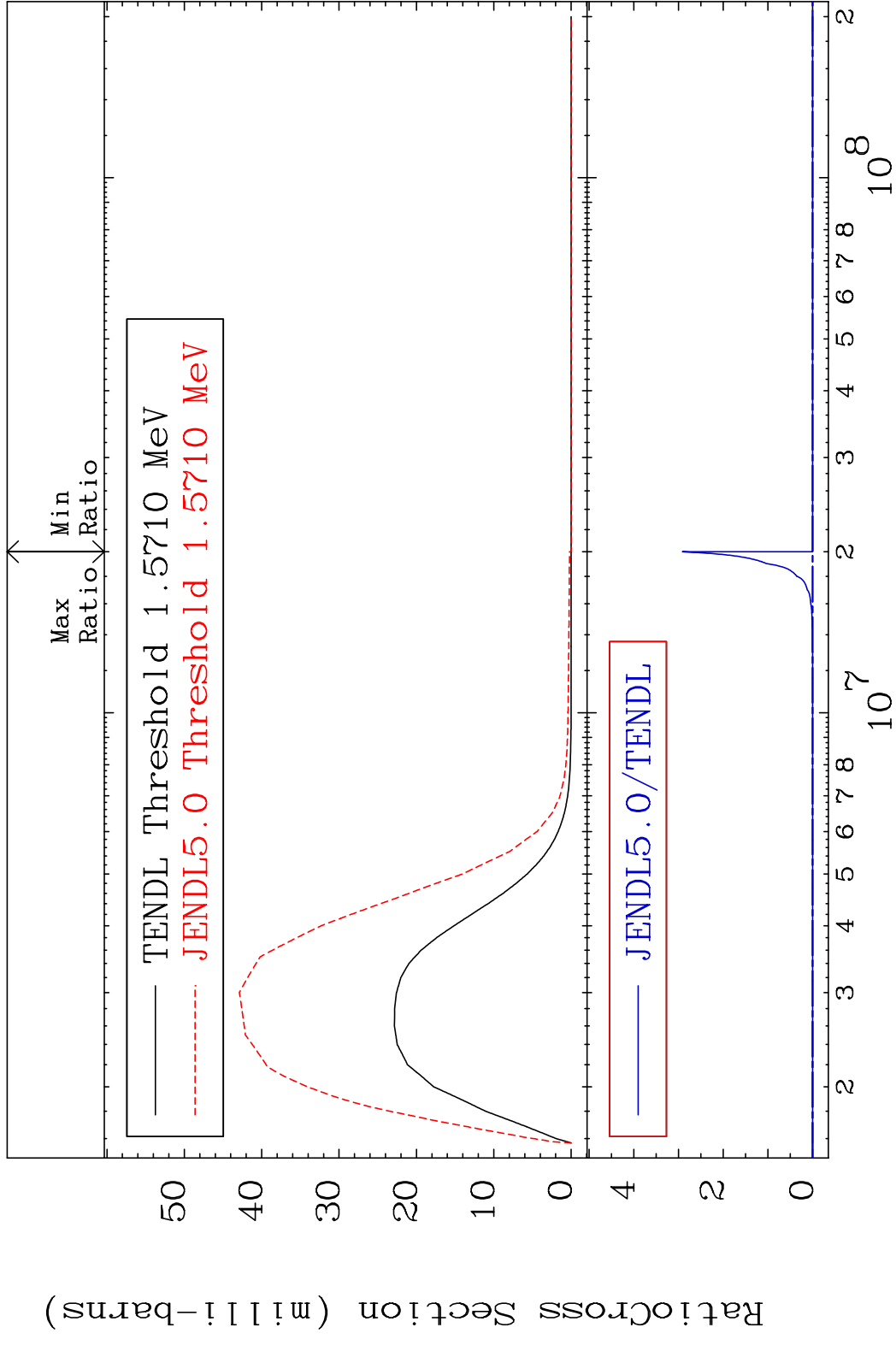
MAT 8322 MT= 65 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



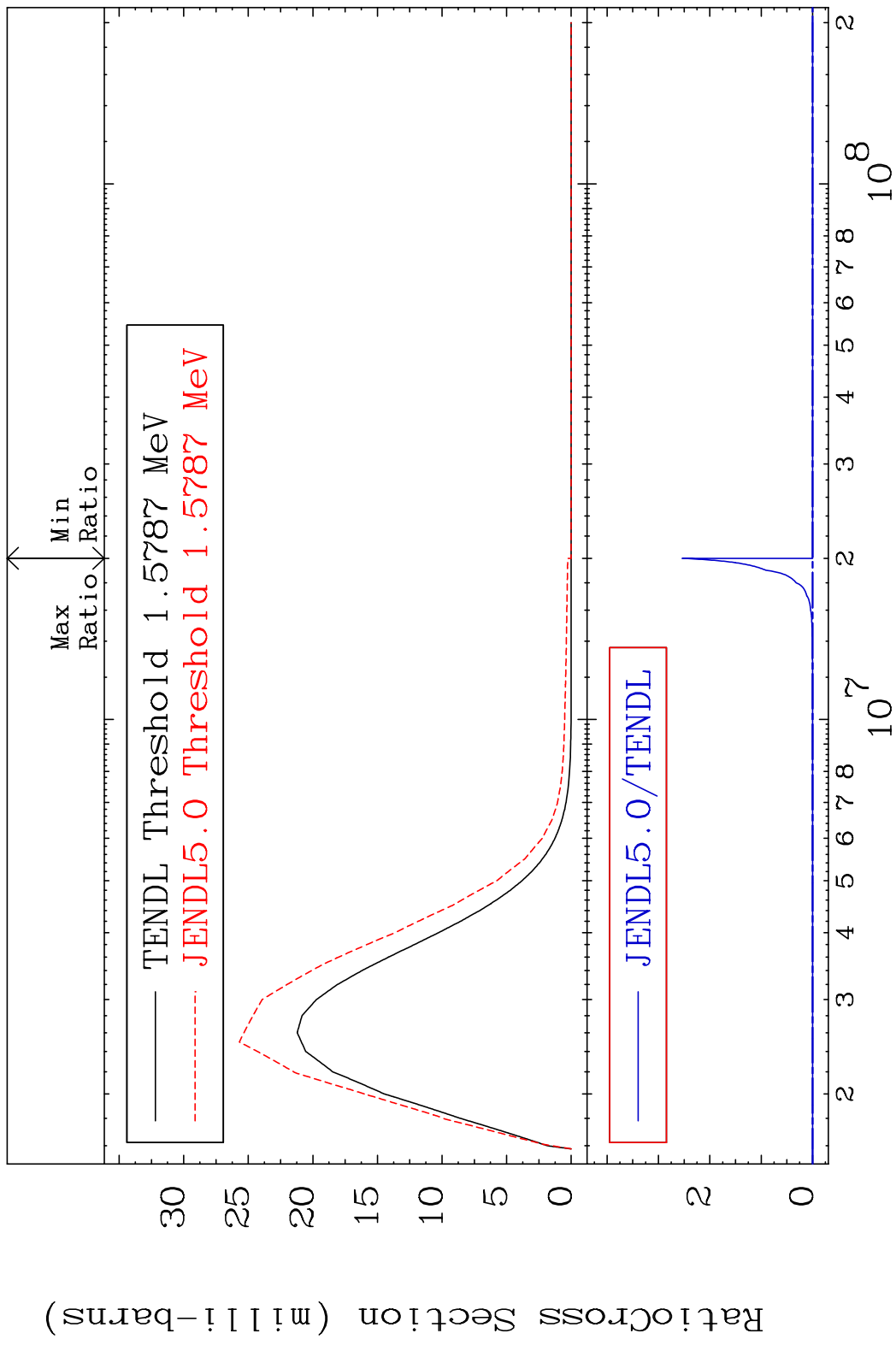
MAT 8322 MT= 66 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



MAT 8322 MT= 67 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %

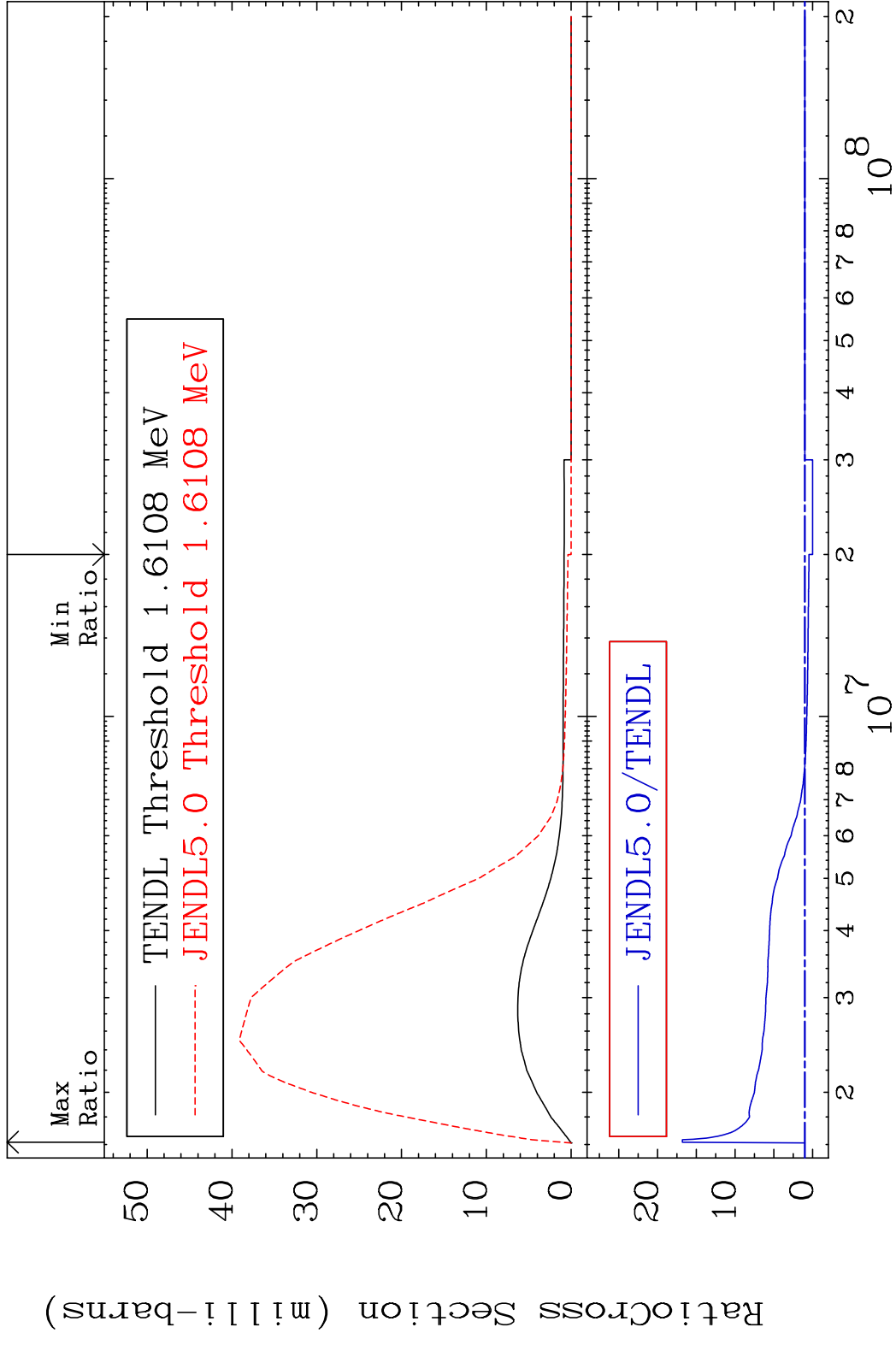


MAT 8322 MT= 68 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %

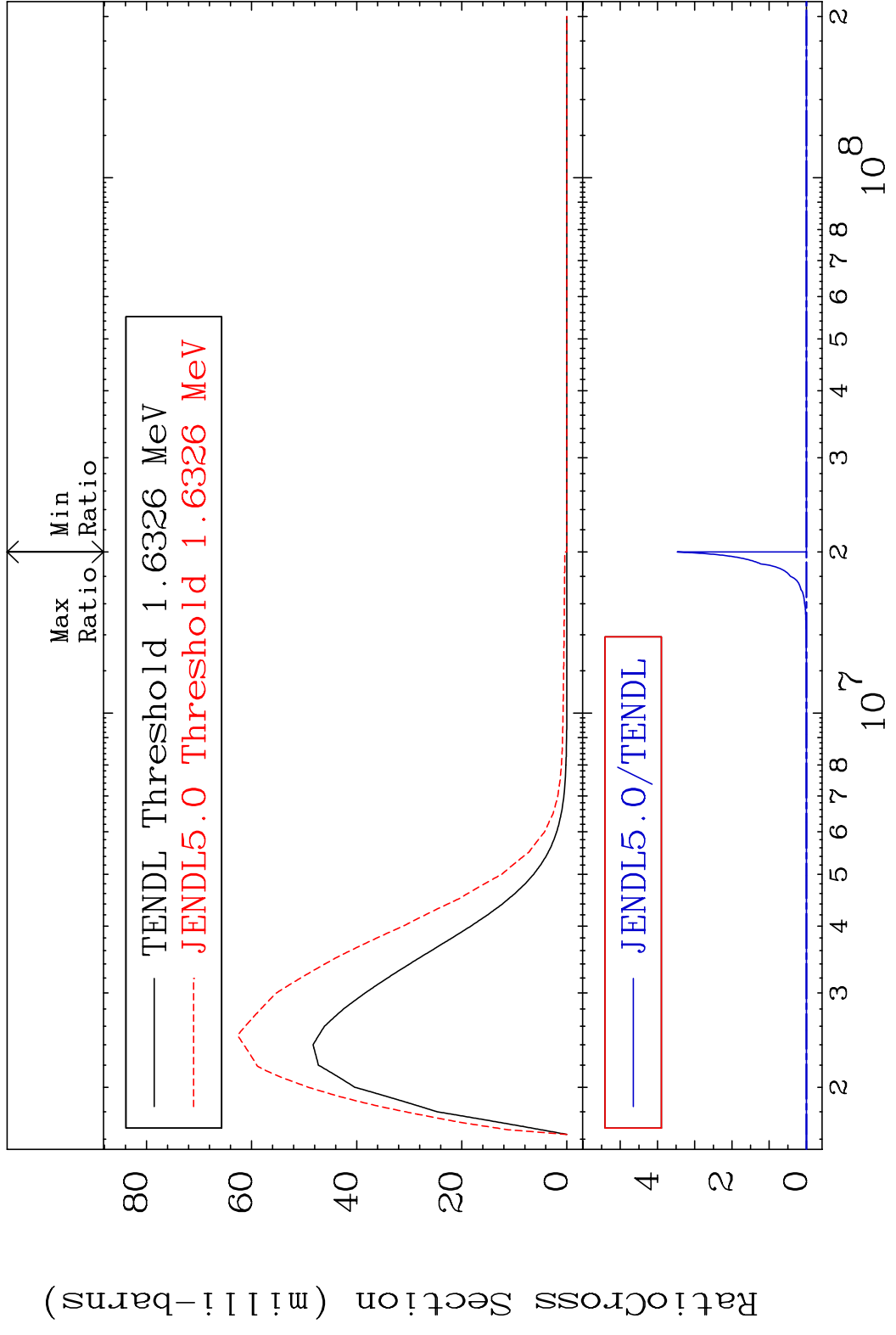


30 Incident Energy (eV) 83-Bi-208

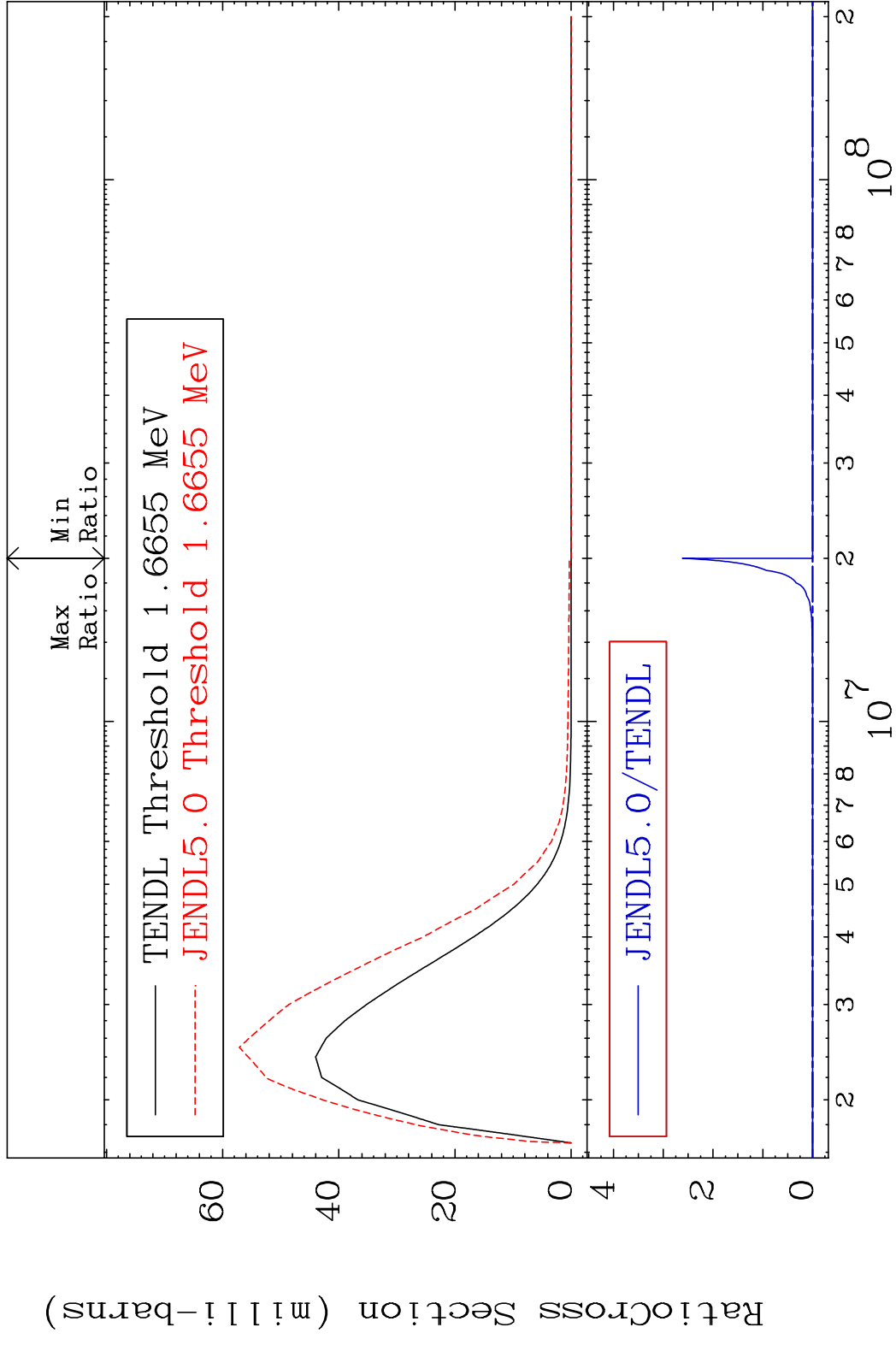
MAT 8322 MT= 69 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 1579. %



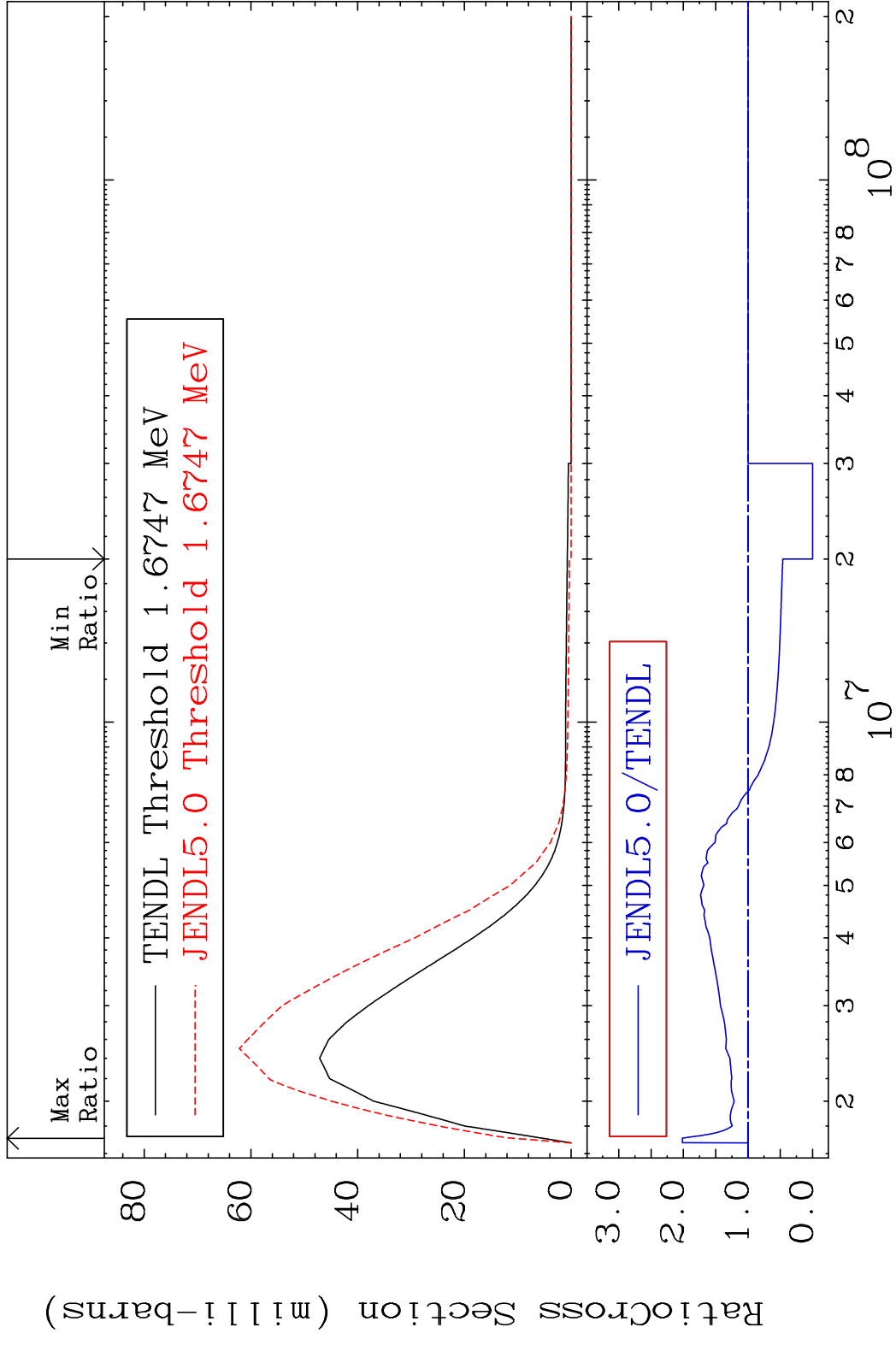
MAT 8322 MT= 70 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



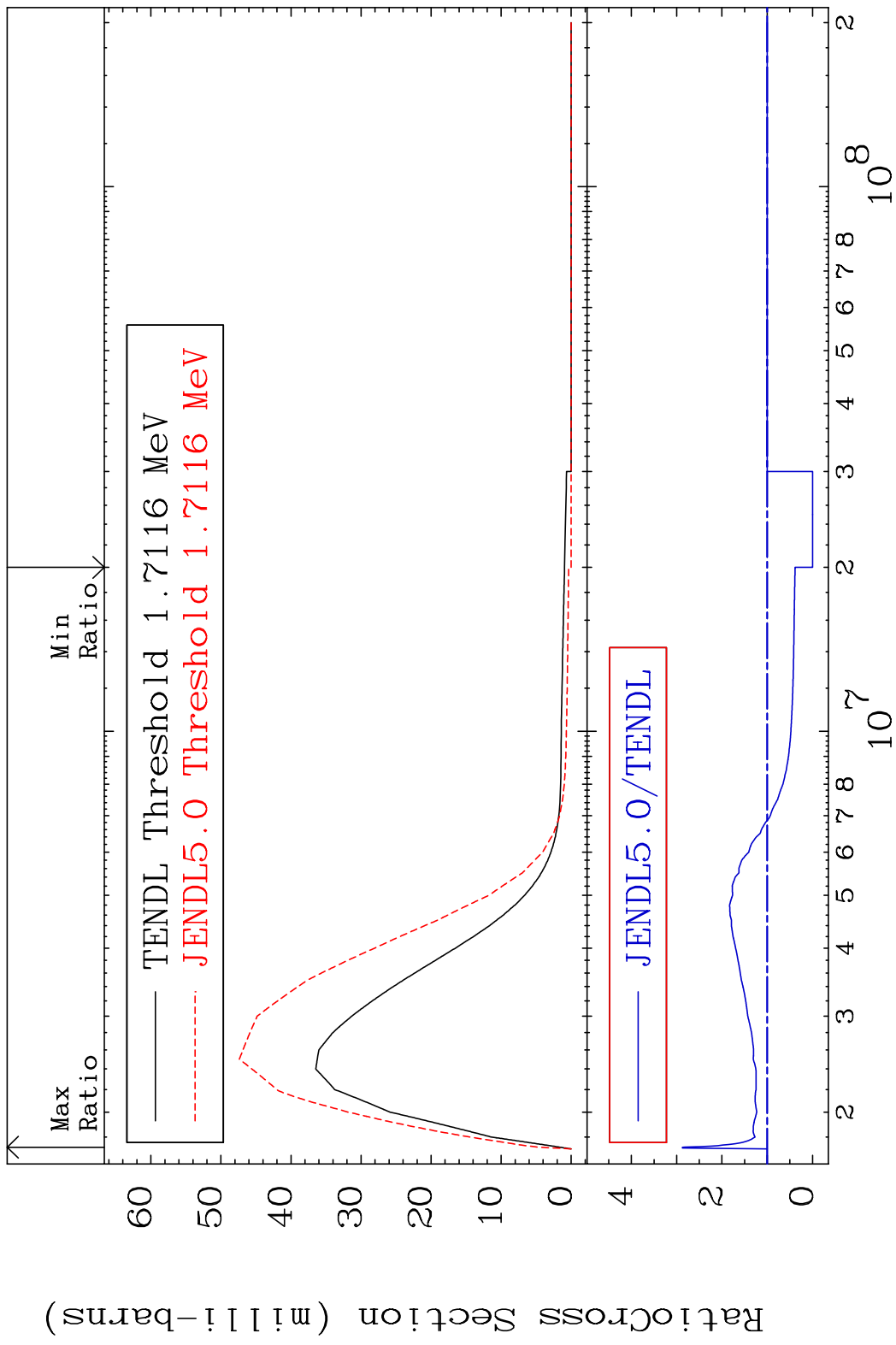
MAT 8322 MT= 71 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



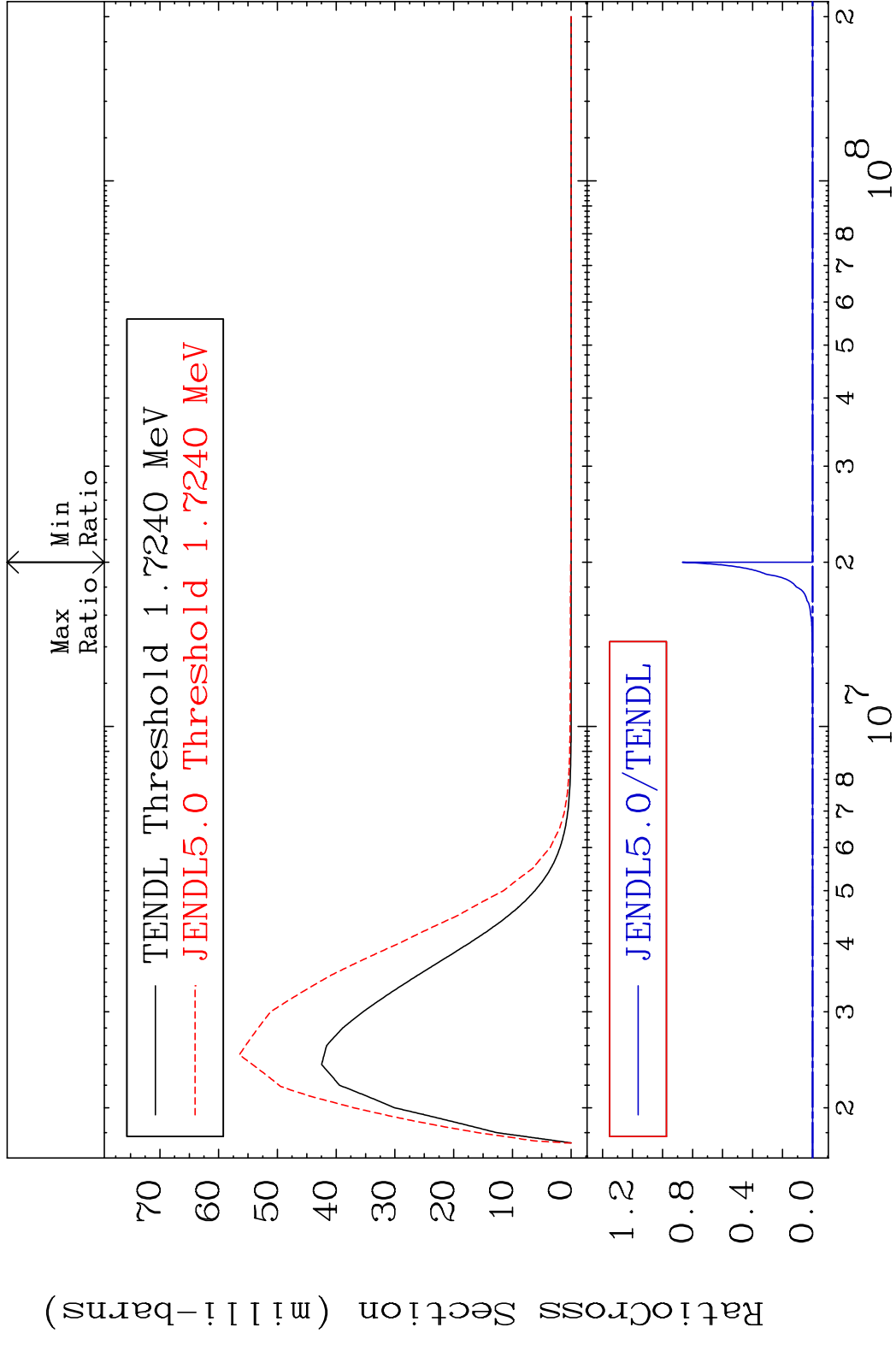
MAT 8322 MT= 72 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 101.6 %



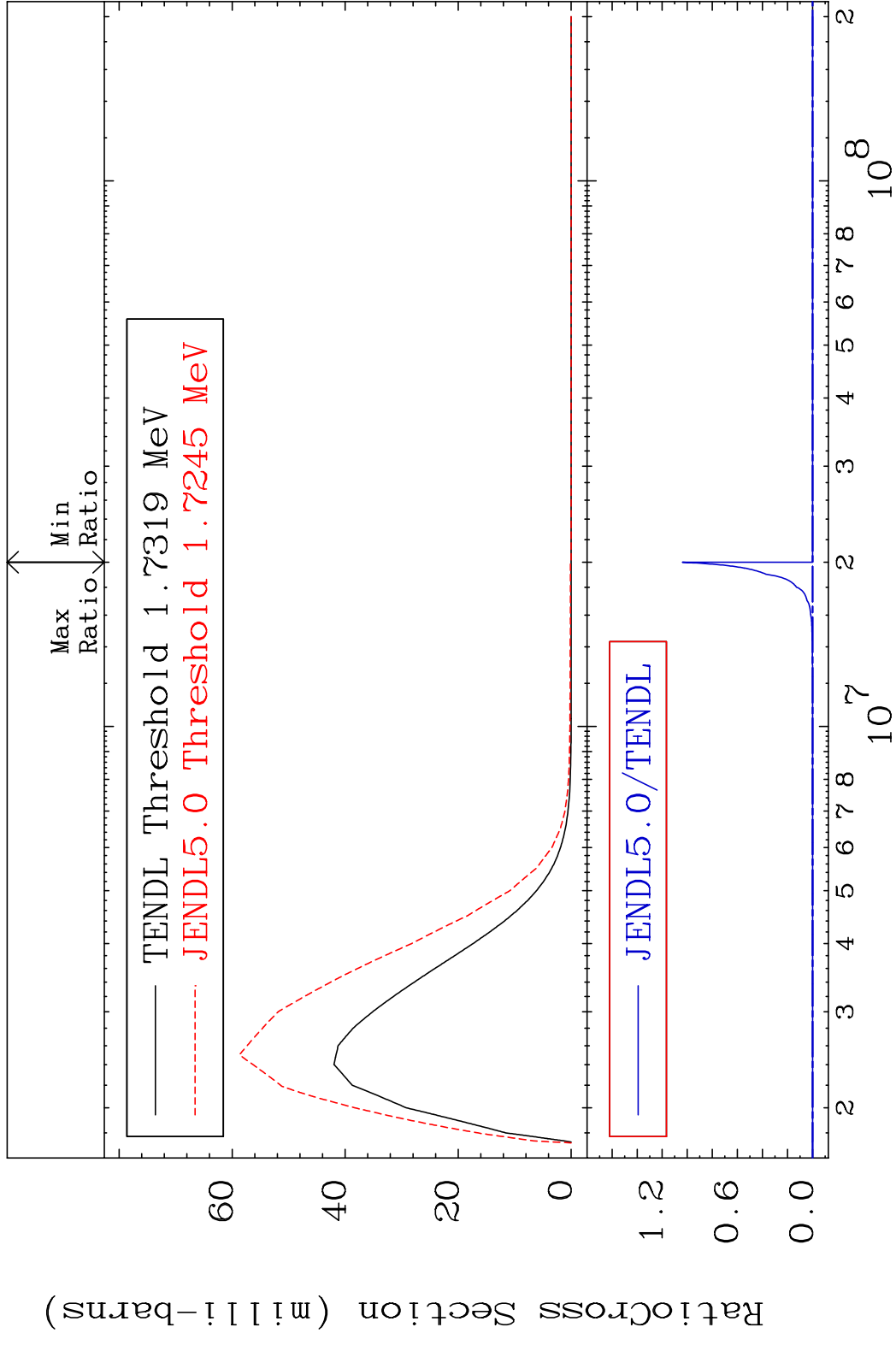
MAT 8322 MT= 73 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 187.4 %



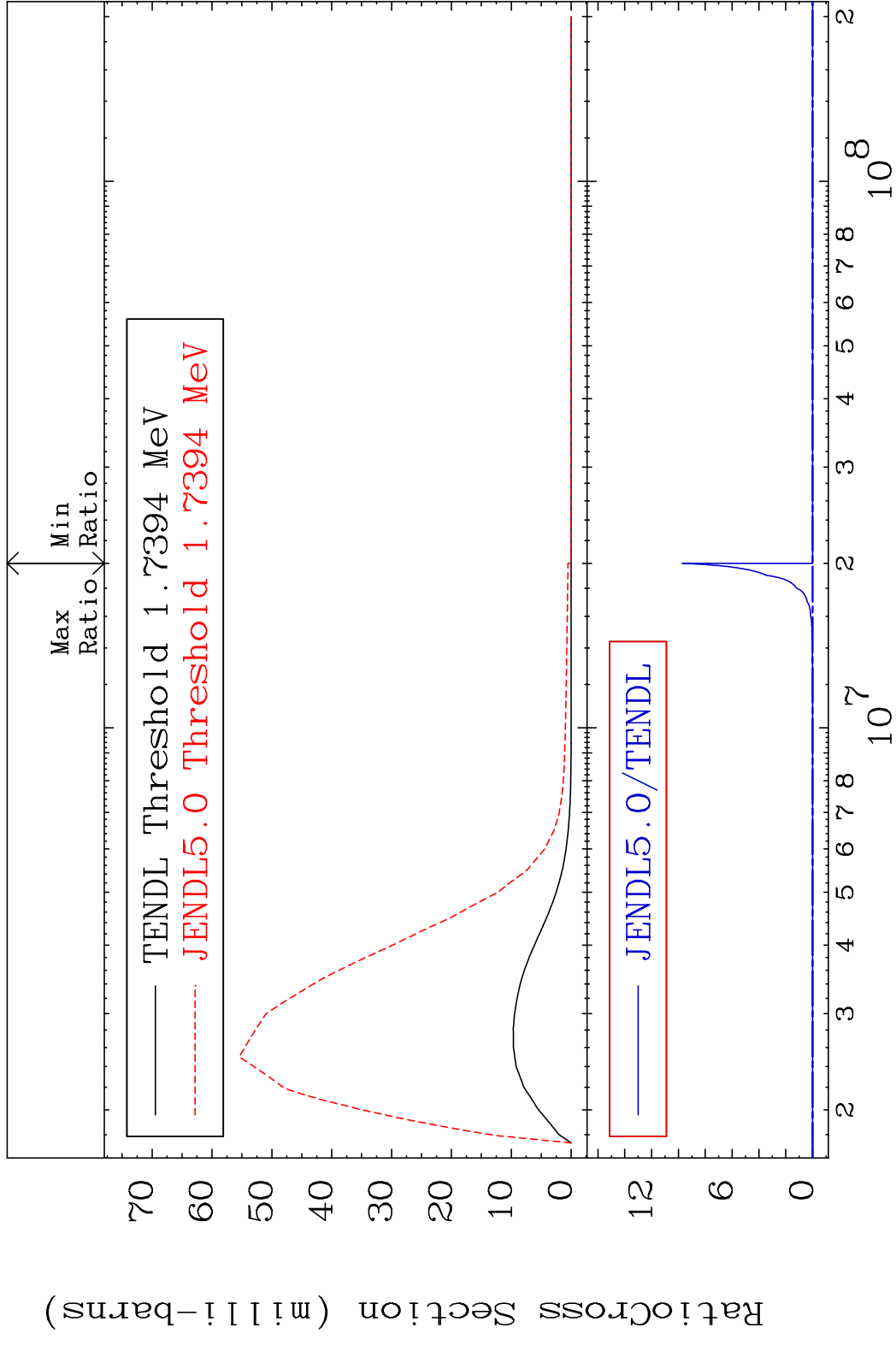
MAT 8322 MT= 74 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



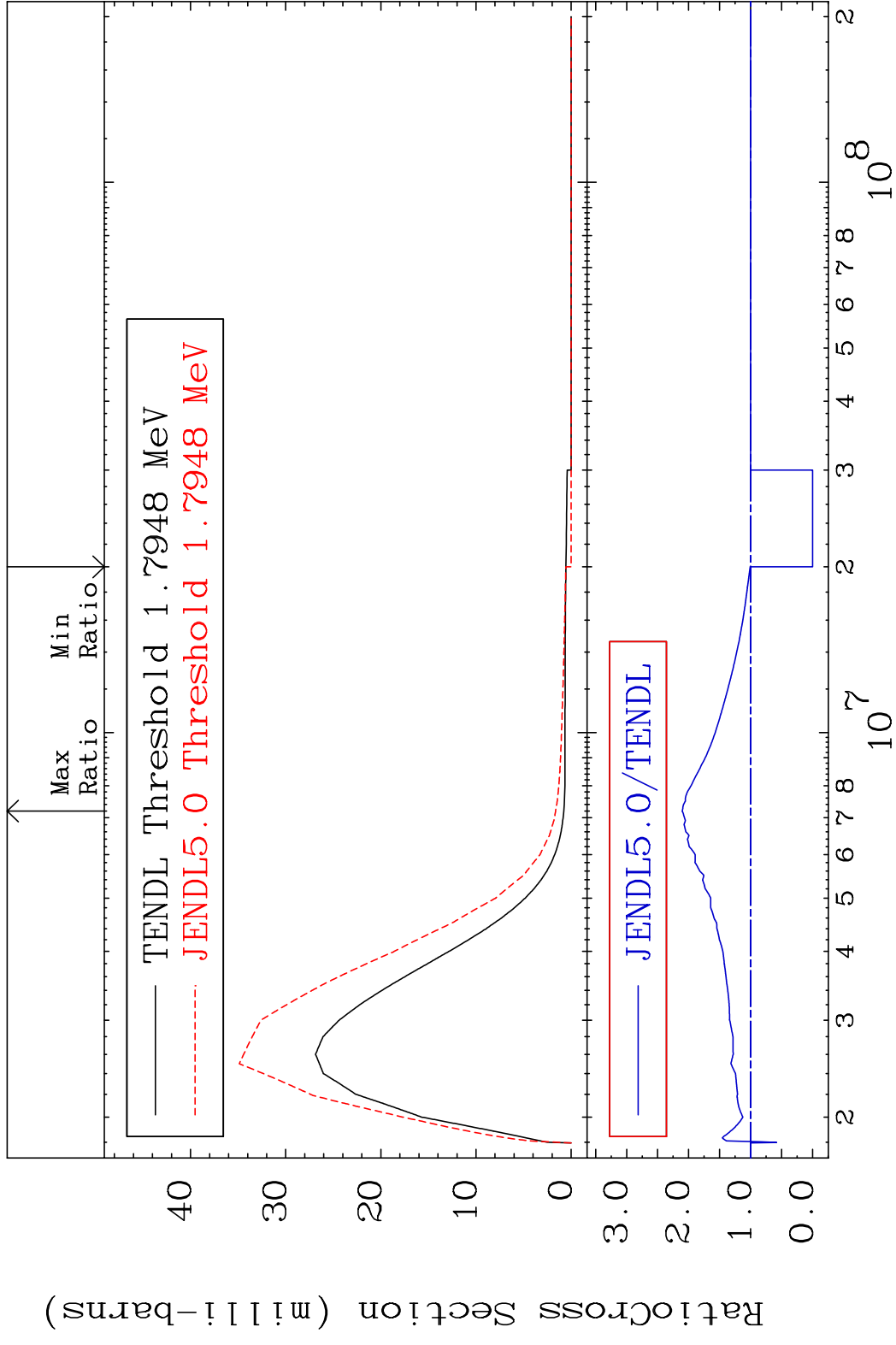
MAT 8322 MT= 75 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



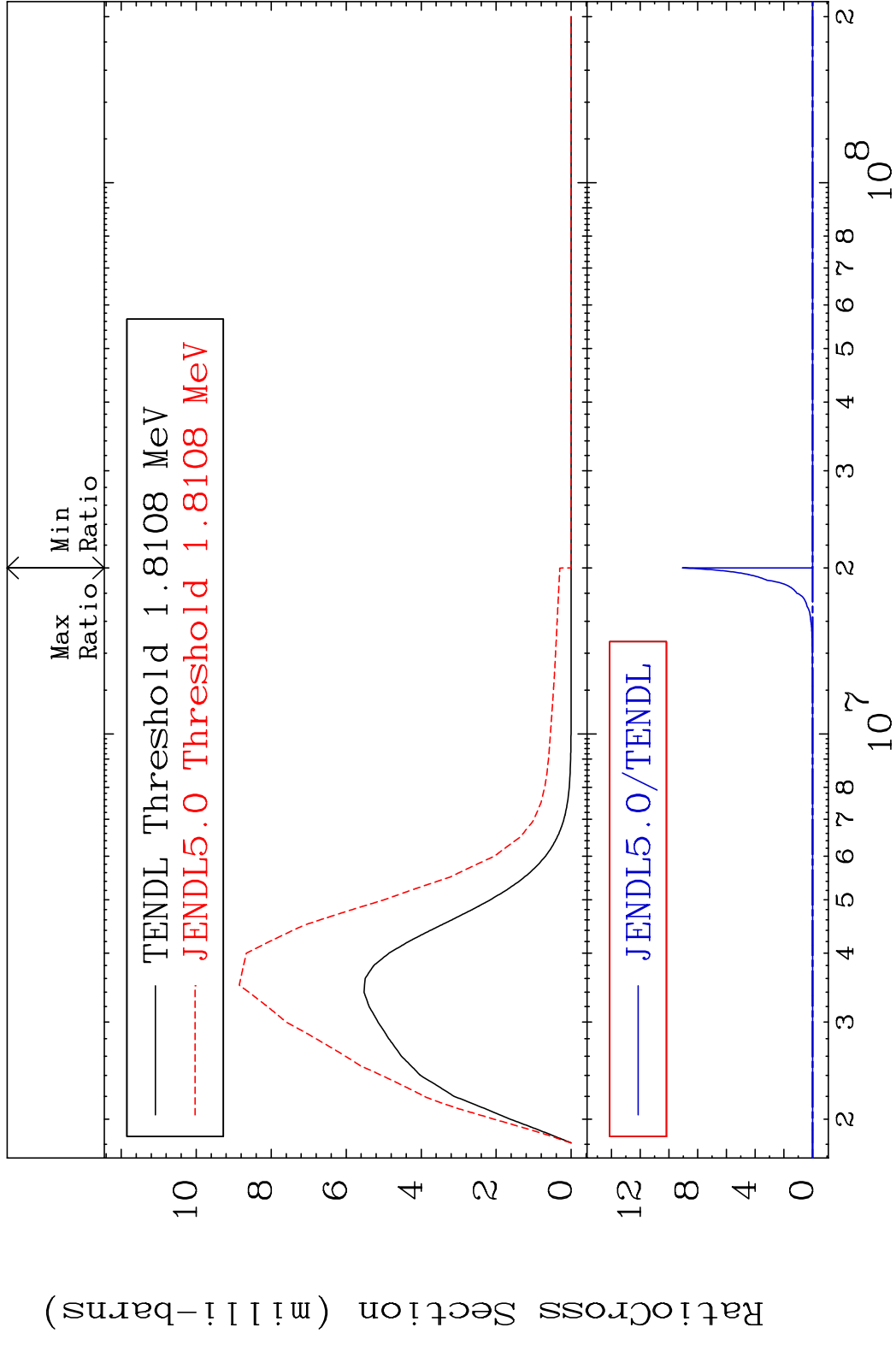
MAT 8322 MT= 76 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



MAT 8322 MT= 77 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 110.1 %

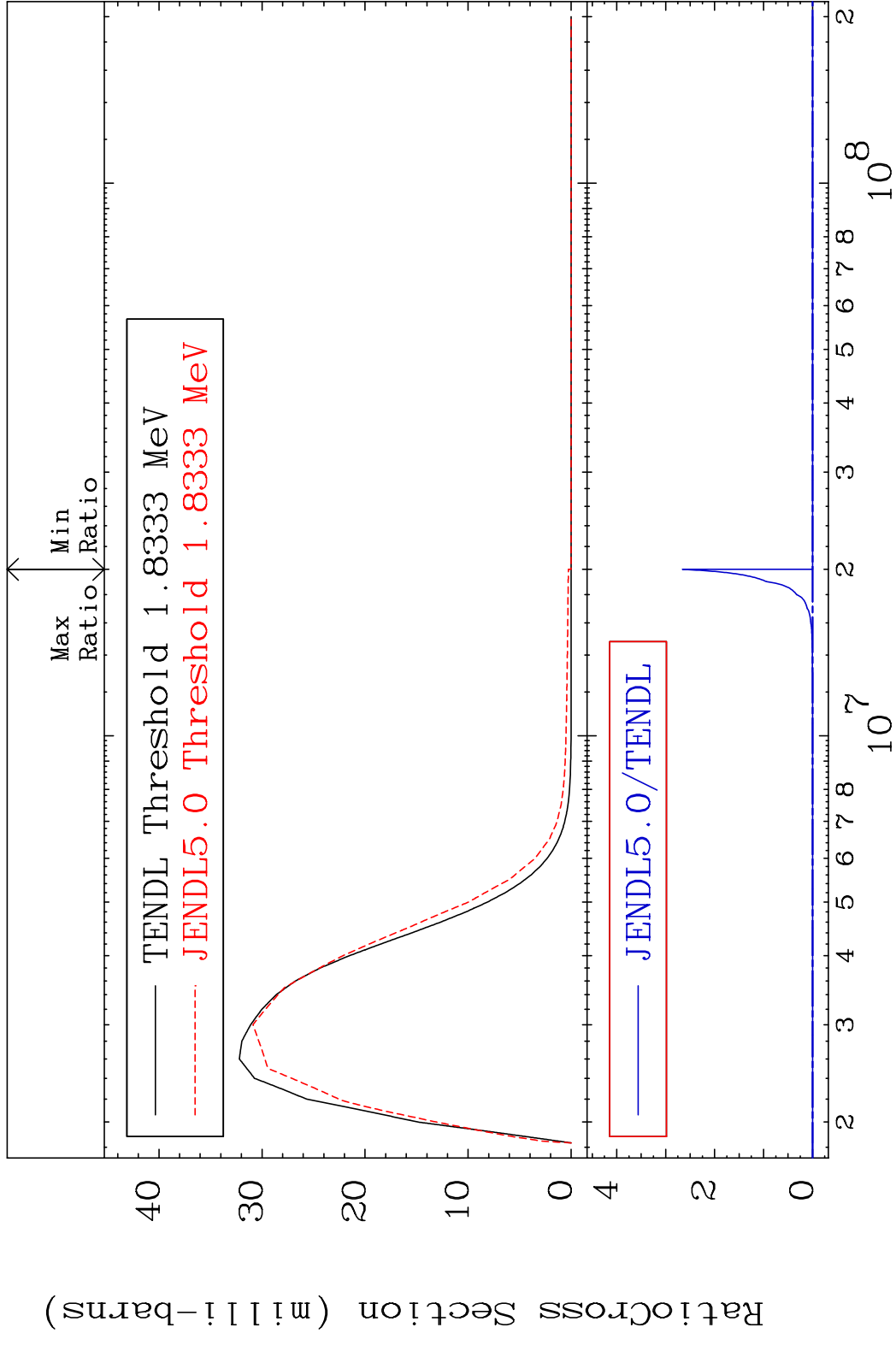


MAT 8322 MT= 78 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %

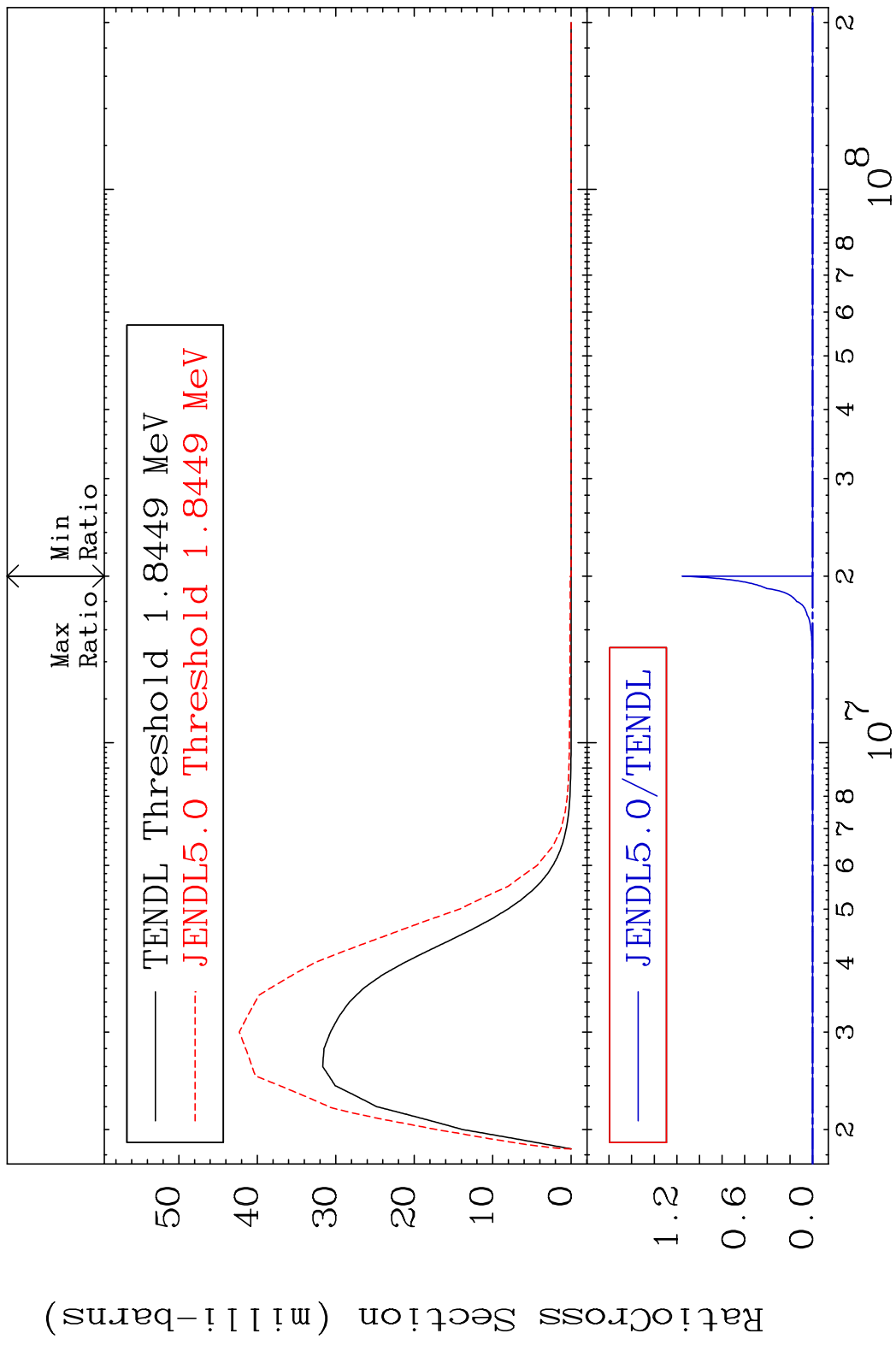


40 Incident Energy (eV) 83-Bi-208

MAT 8322 MT= 79 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



MAT 8322 MT= 80 (n, n') Level 83-Bi-208
 Cross Section -100.0 To 9999. %



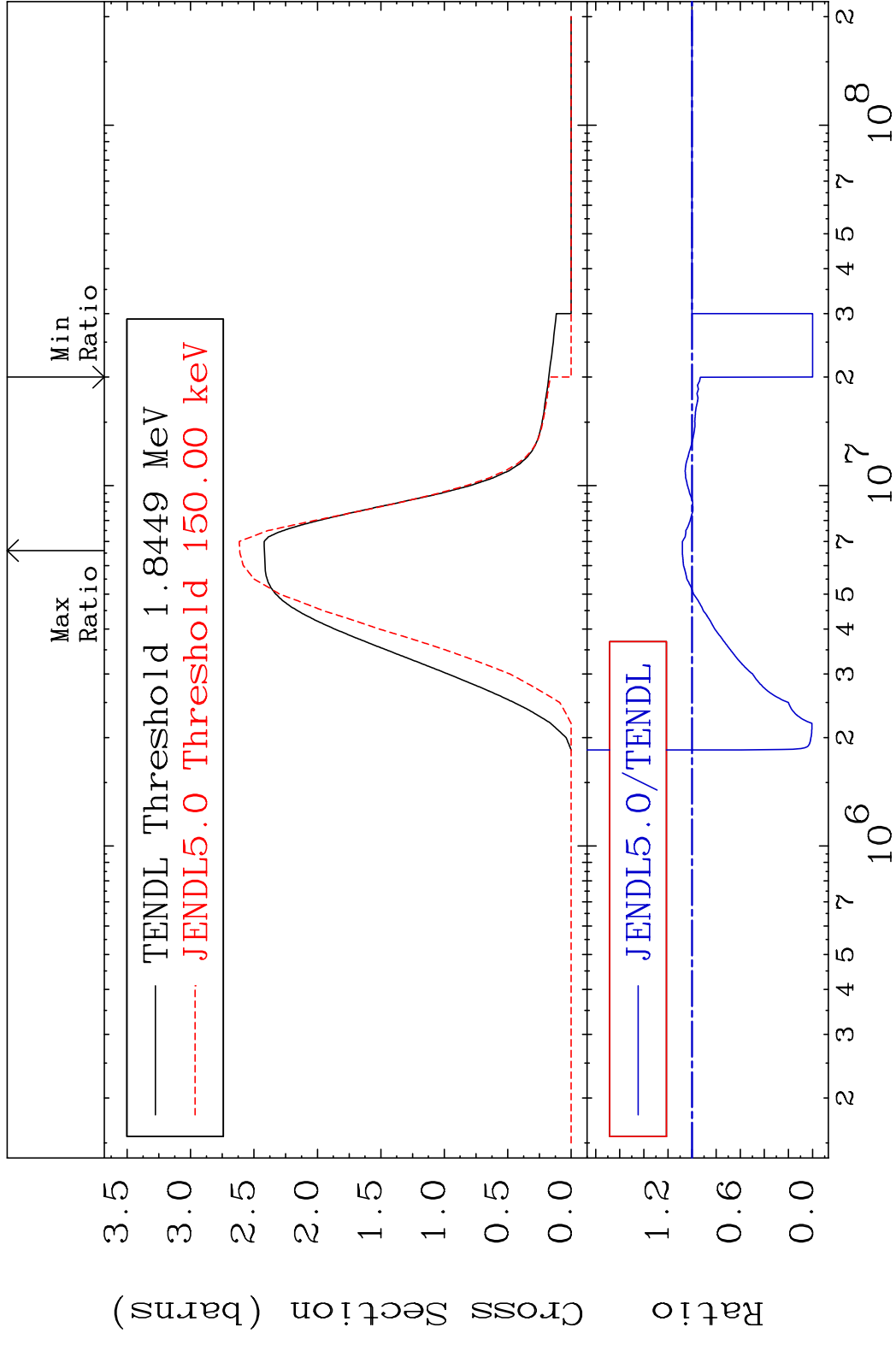
42 Incident Energy (eV) 83-Bi-208

MAT 8322

(n,n') Continuum

83-Bi-208

Cross Section -100.0 To 8.064 %

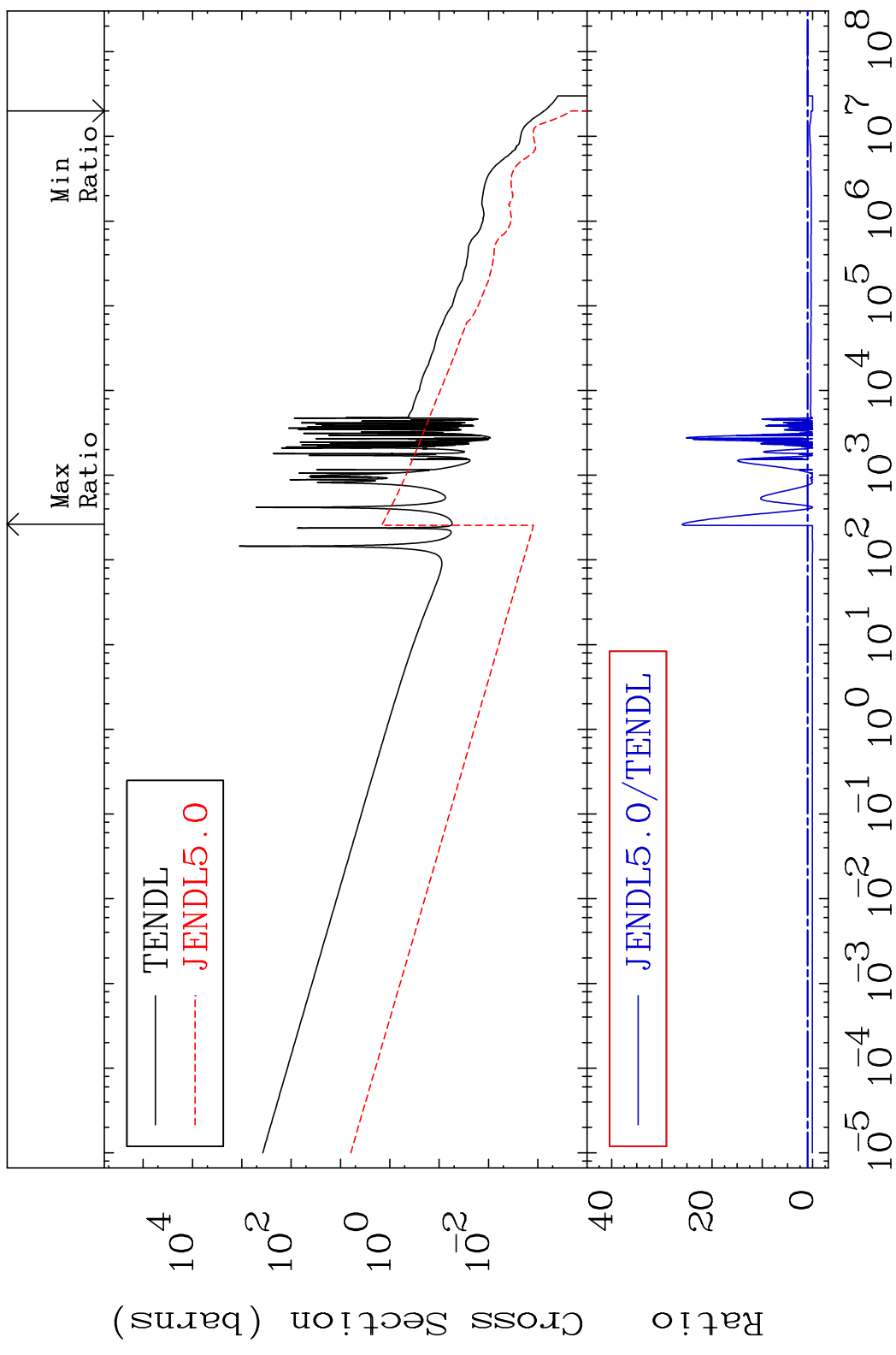


MAT 8322

(n, γ)

83-Bi-208

Cross Section -100.0 To 2492. %



44

Incident Energy (eV)

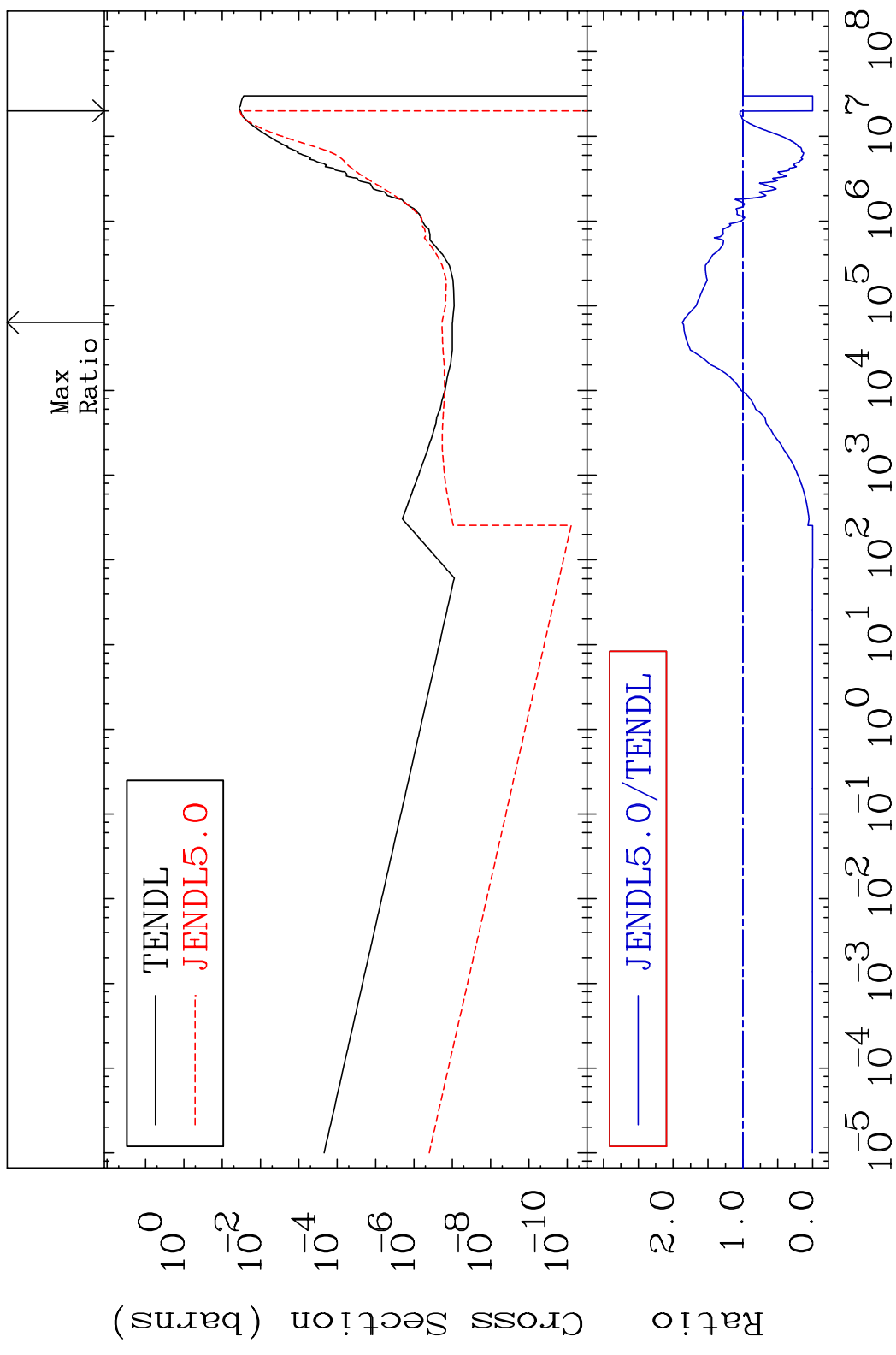
83-Bi-208

MAT 8322

(n, p)

83-Bi-208

Cross Section -100.0 To 86.76 %

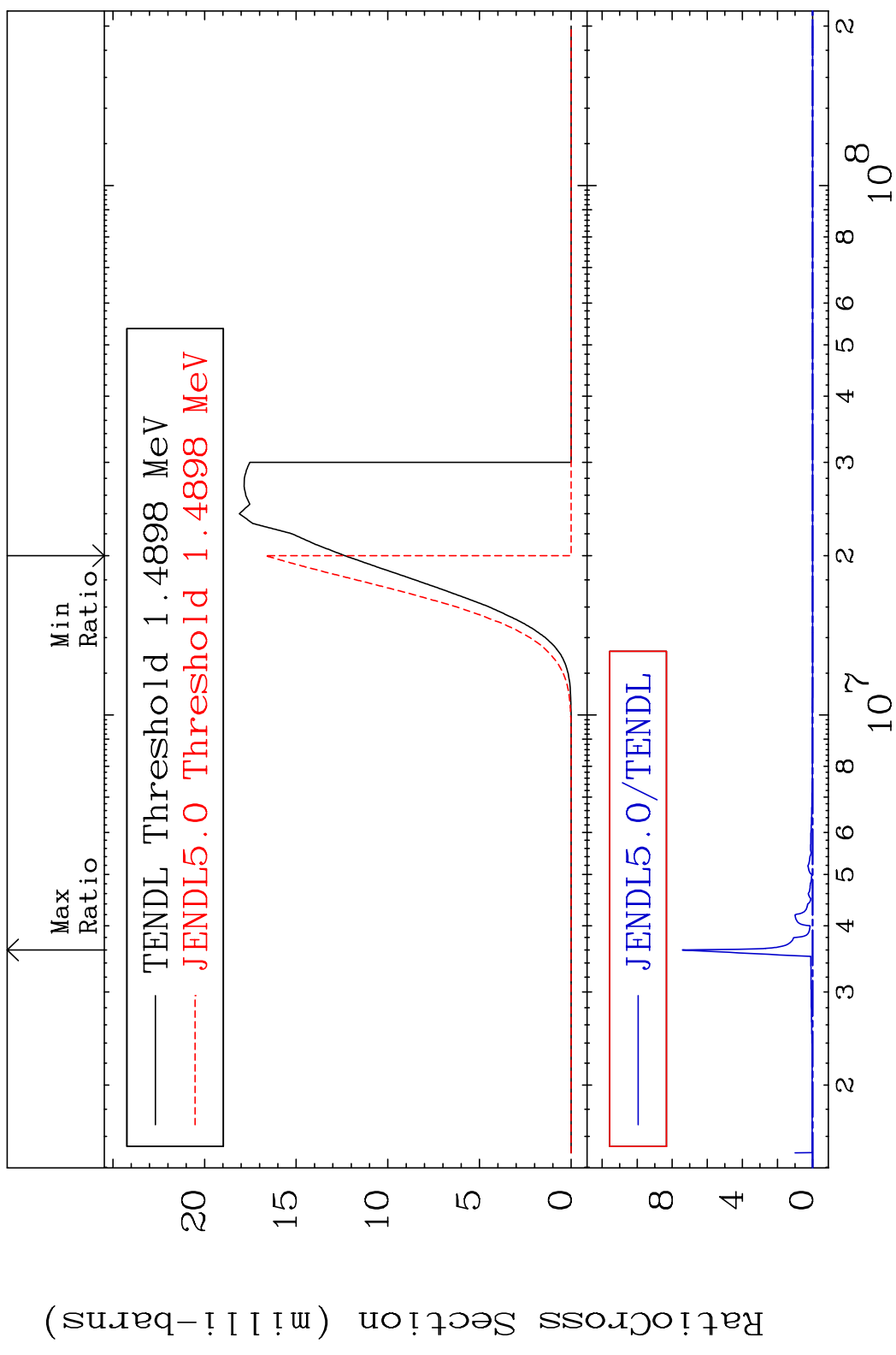


MAT 8322

(n, d)

83-Bi-208

Cross Section -100.0 To 9999. %



46

Incident Energy (eV)

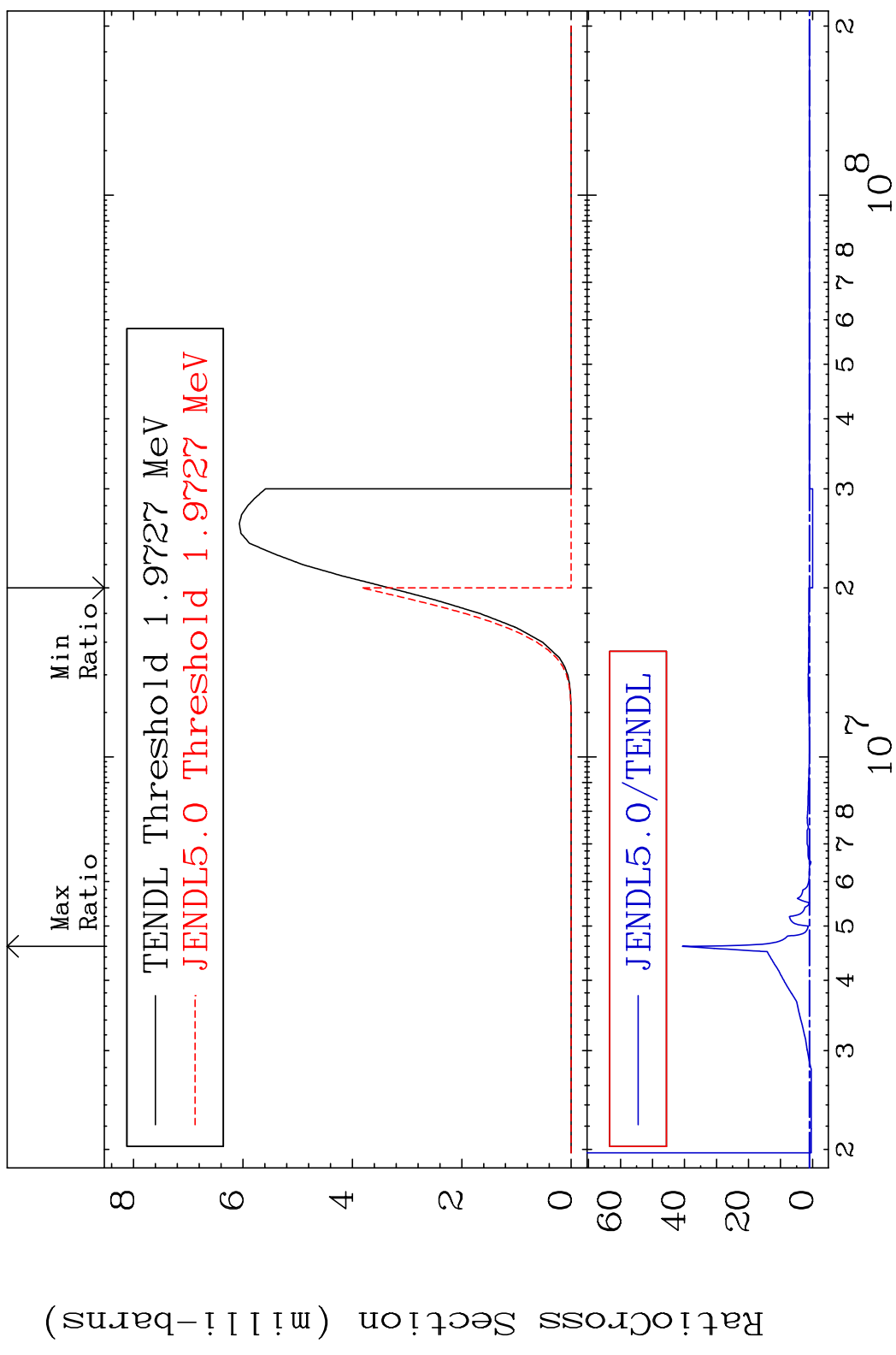
83-Bi-208

MAT 8322

(n, t)

83-Bi-208

Cross Section -100.0 To 3968. %

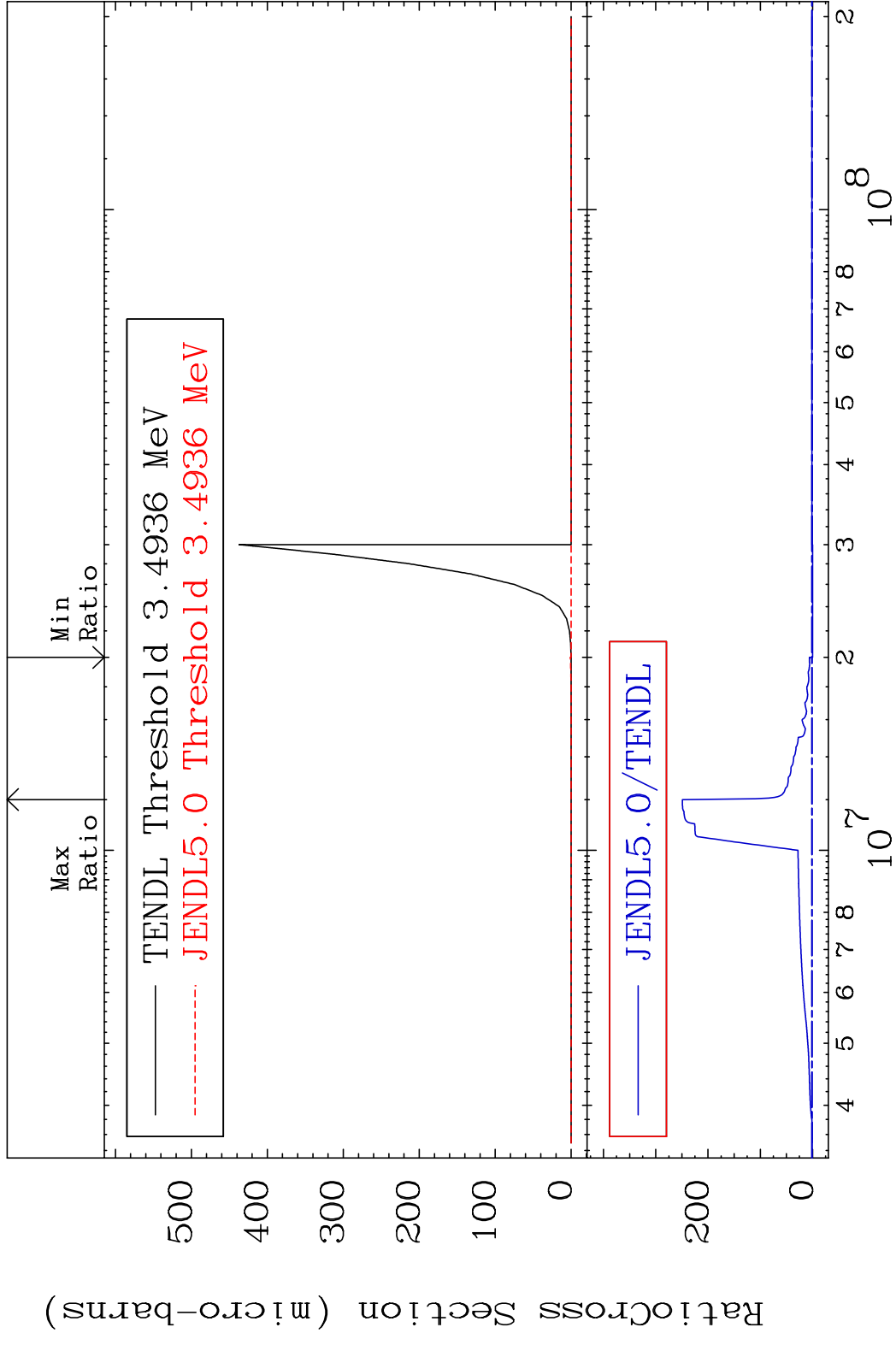


MAT 8322

(n, He-3)

83-Bi-208

Cross Section -100.0 To 9999. %



48

Incident Energy (eV)

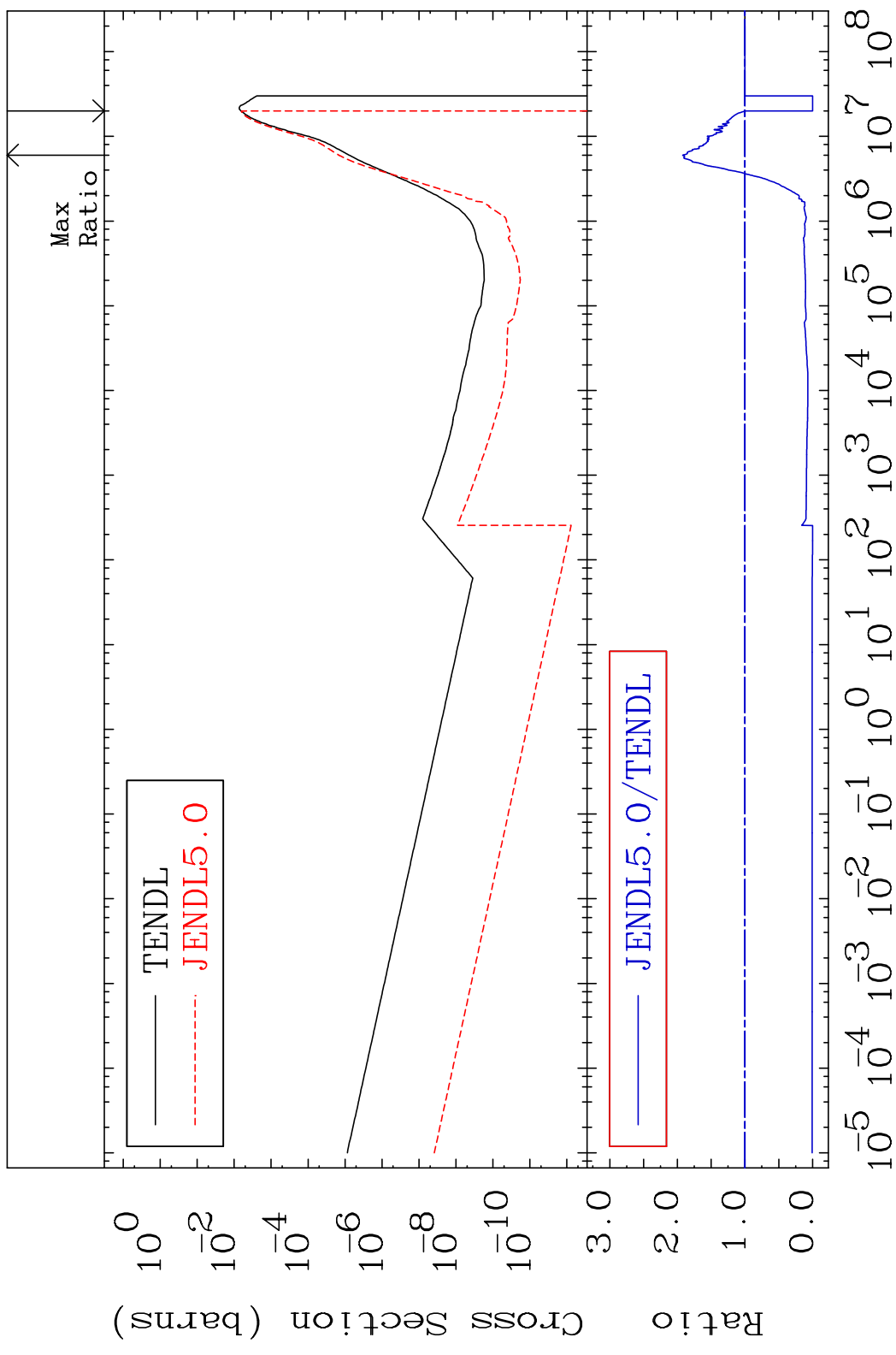
83-Bi-208

MAT 8322

(n, α)

83-Bi-208

Cross Section -100.0 To 92.62 %



49

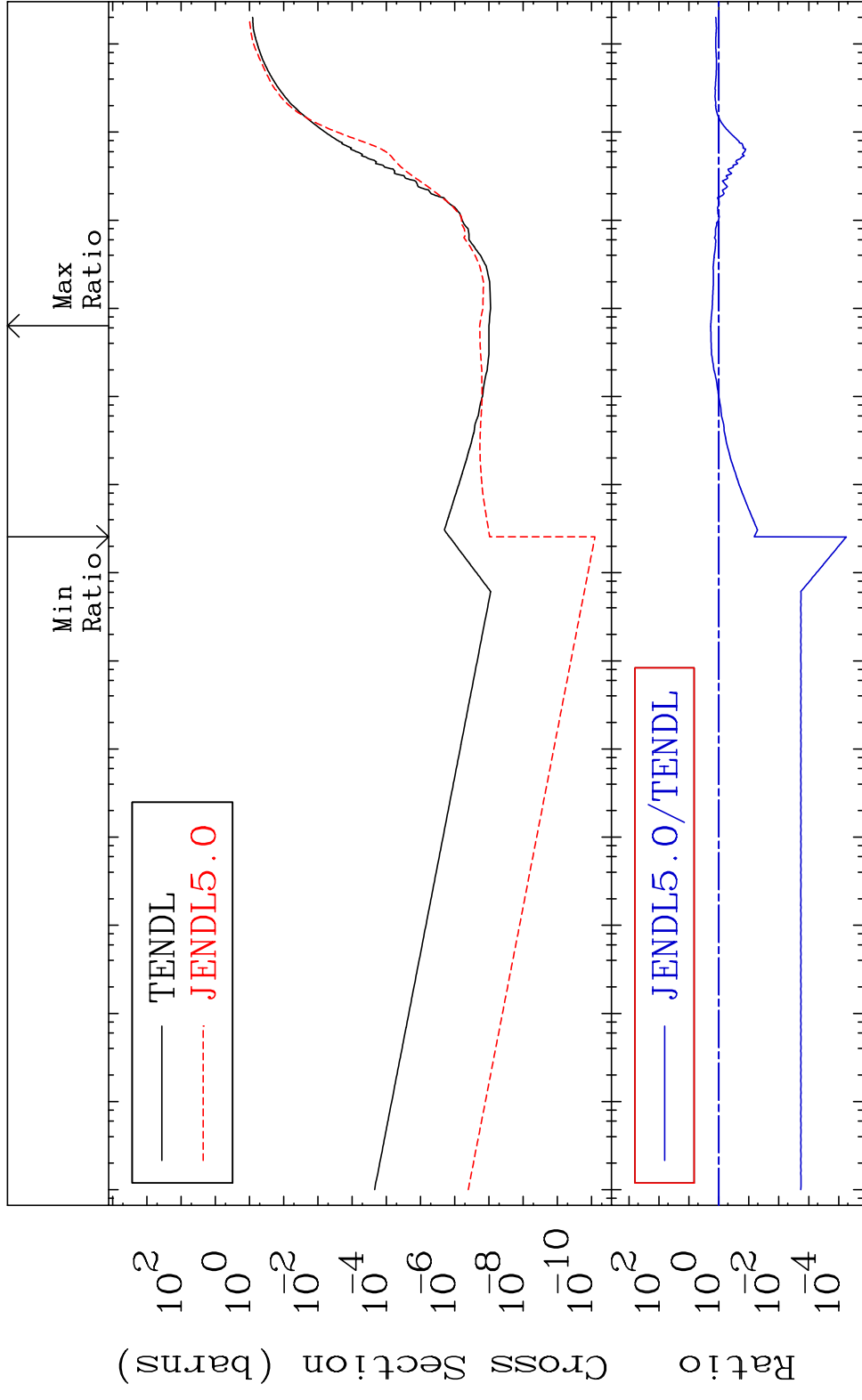
Incident Energy (eV)

83-Bi-208

MAT 8322

Hydrogen Production
Cross Section -99.99 To 86.76 %

83-Bi-208

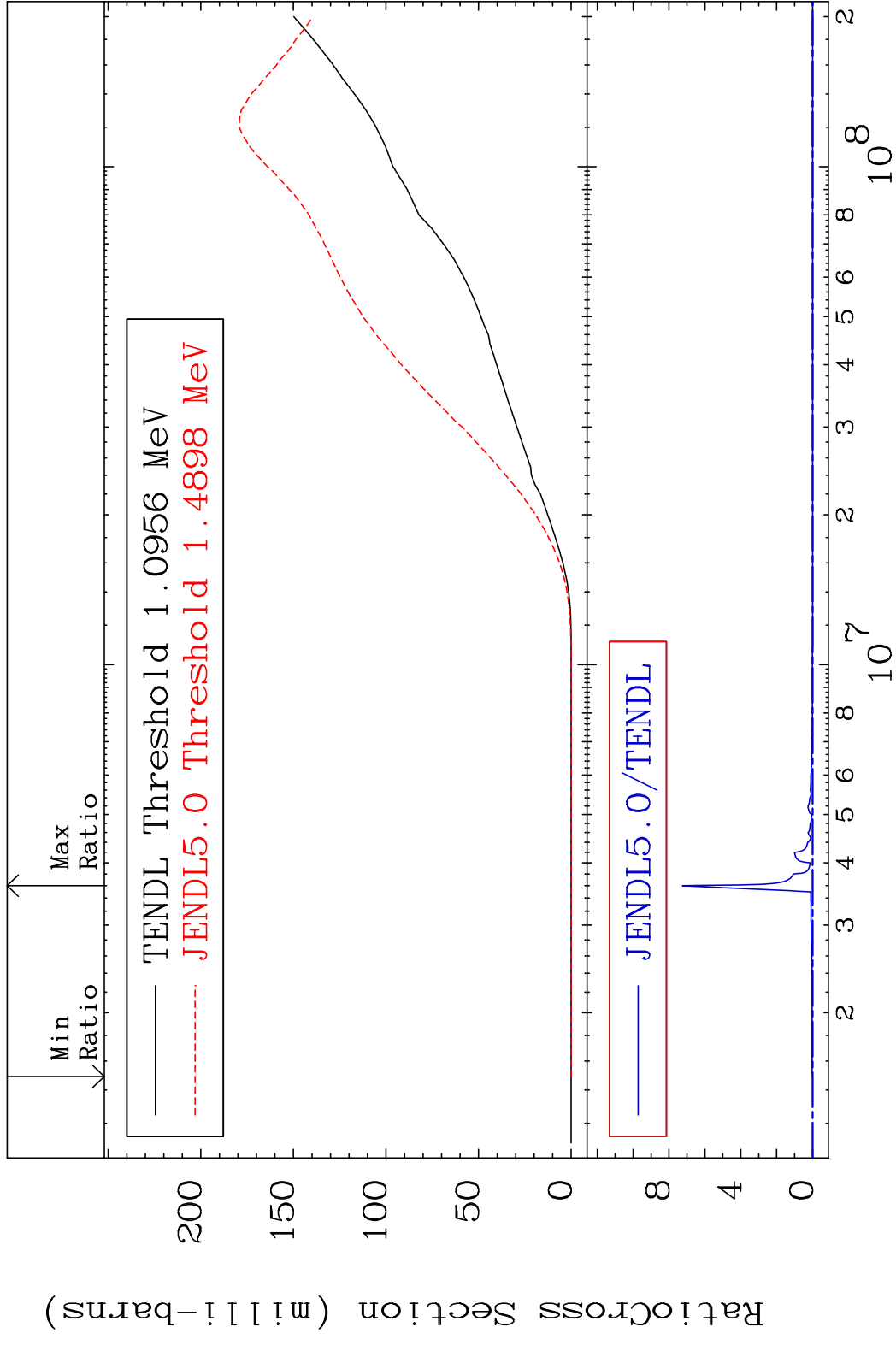


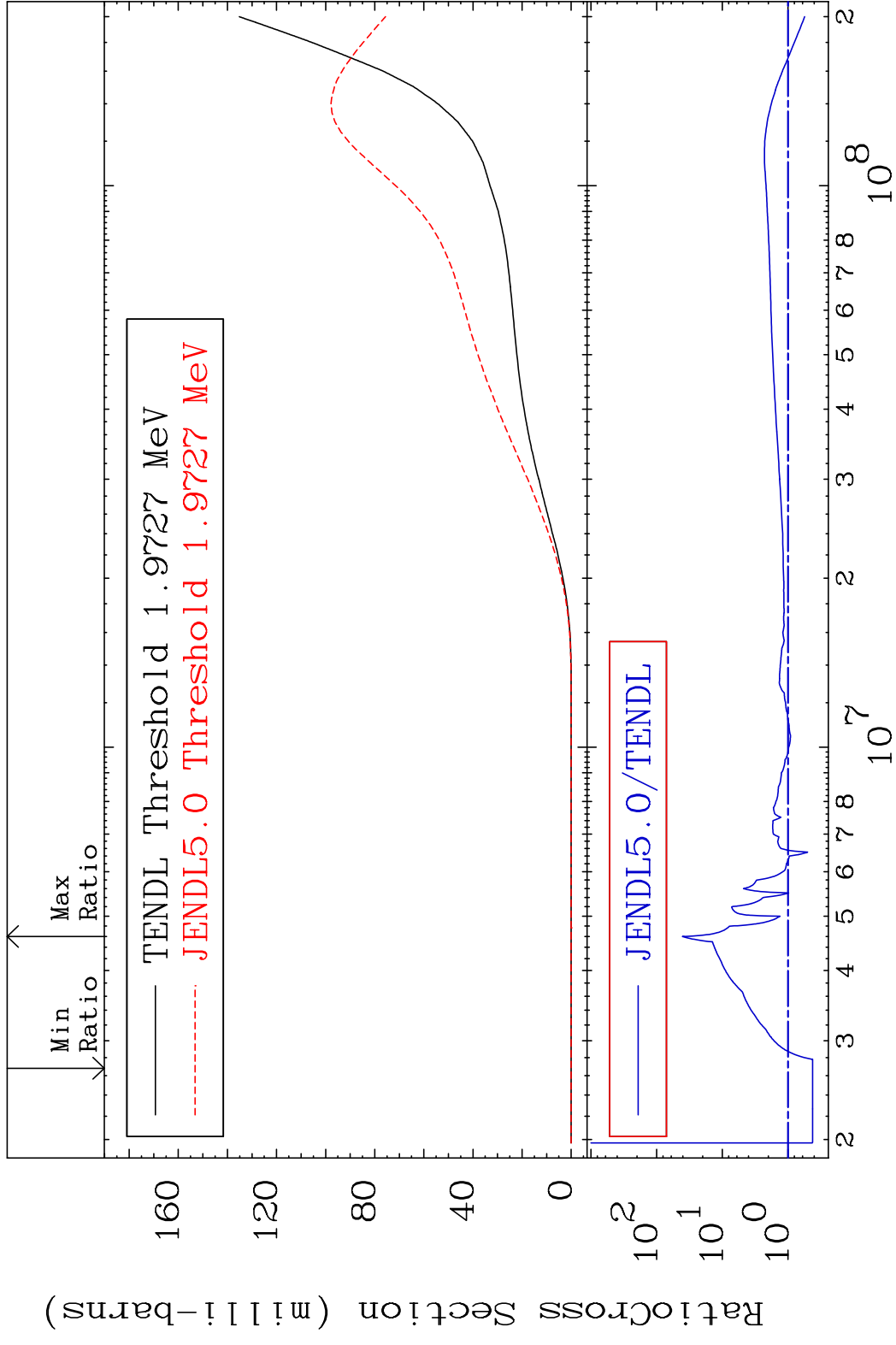
10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

50

Incident Energy (eV)

83-Bi-208



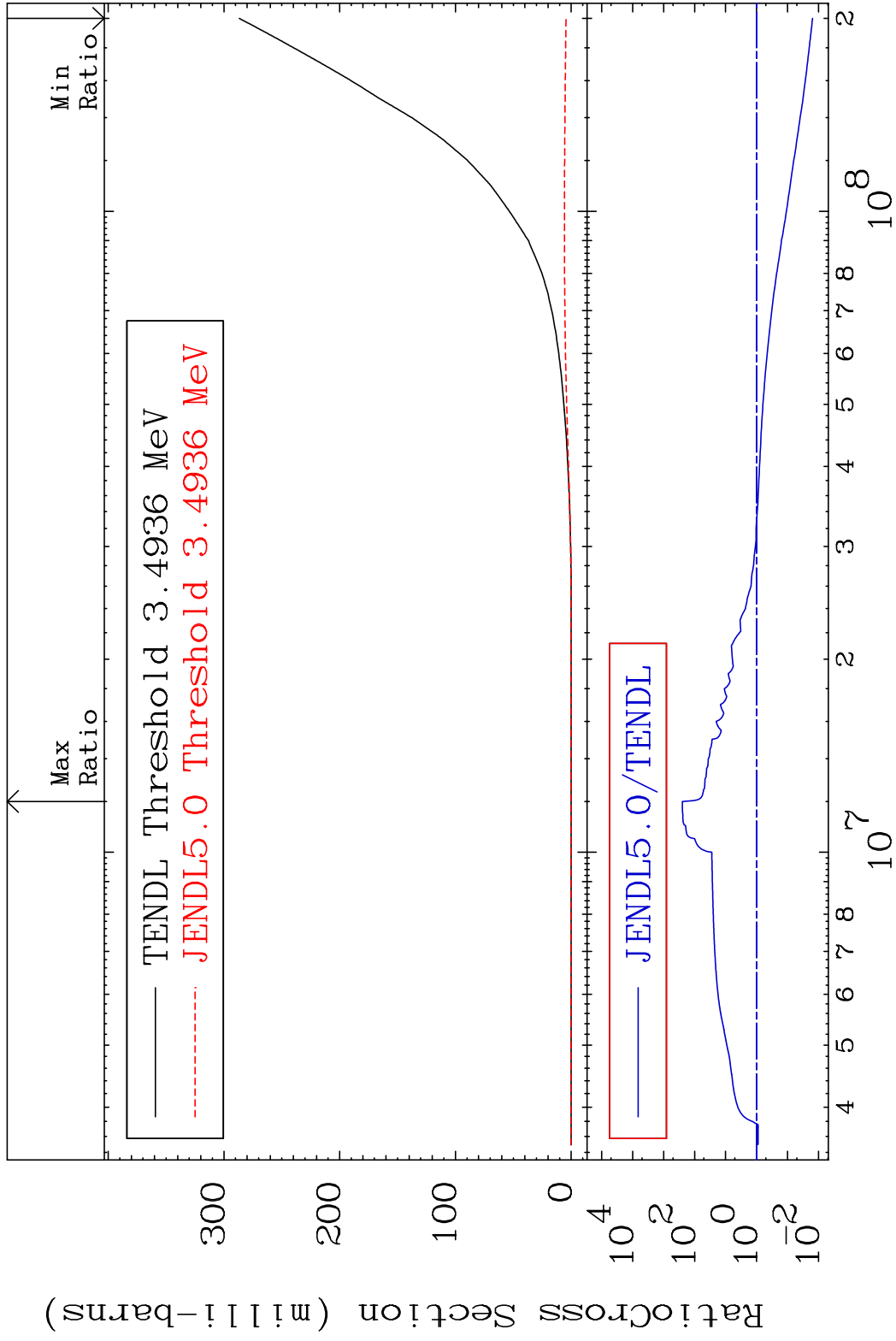


MAT 8322

He-3 Production

83-Bi-208

Cross Section -98.44 To 9999. %



53

Incident Energy (eV)

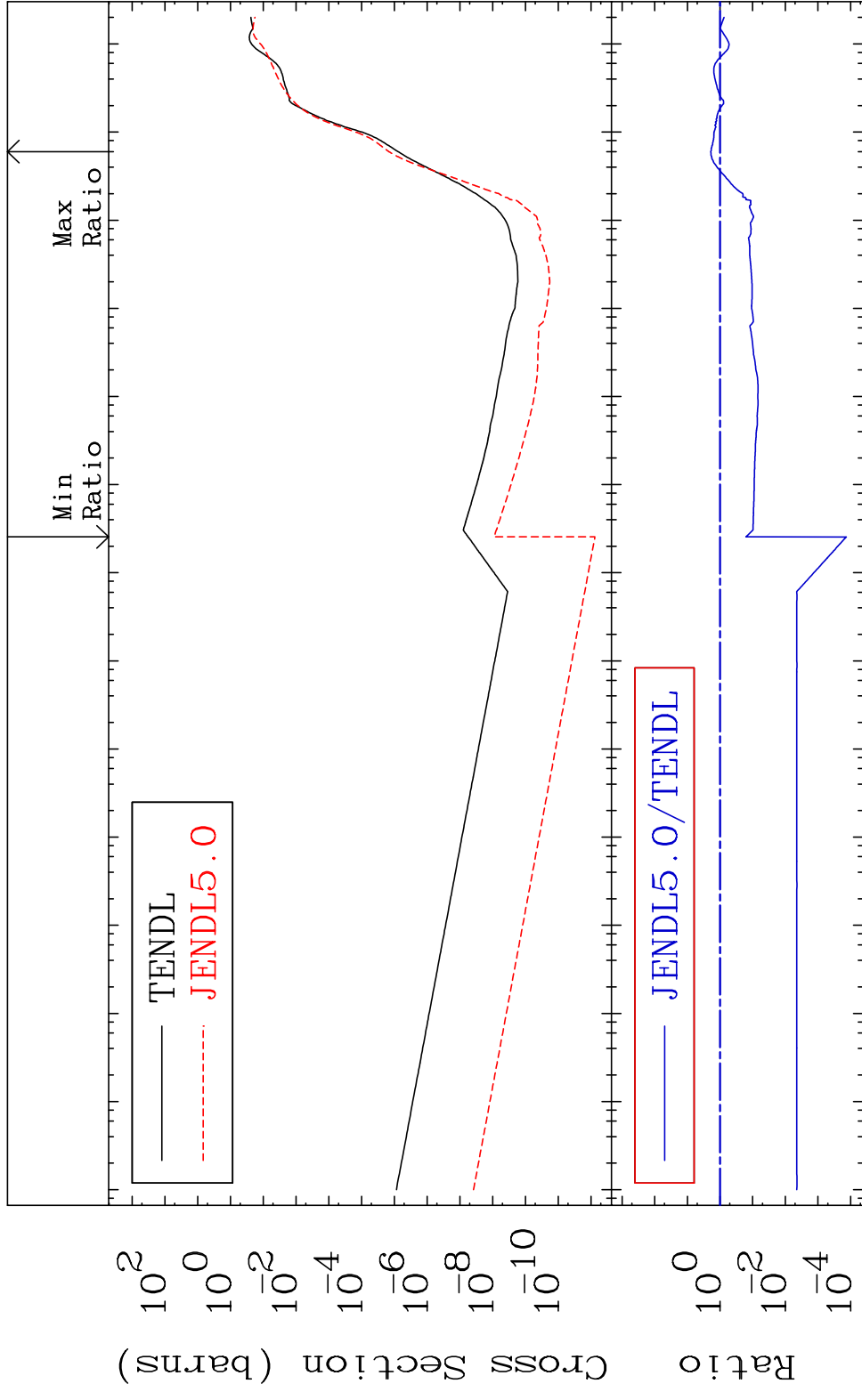
83-Bi-208

MAT 8322

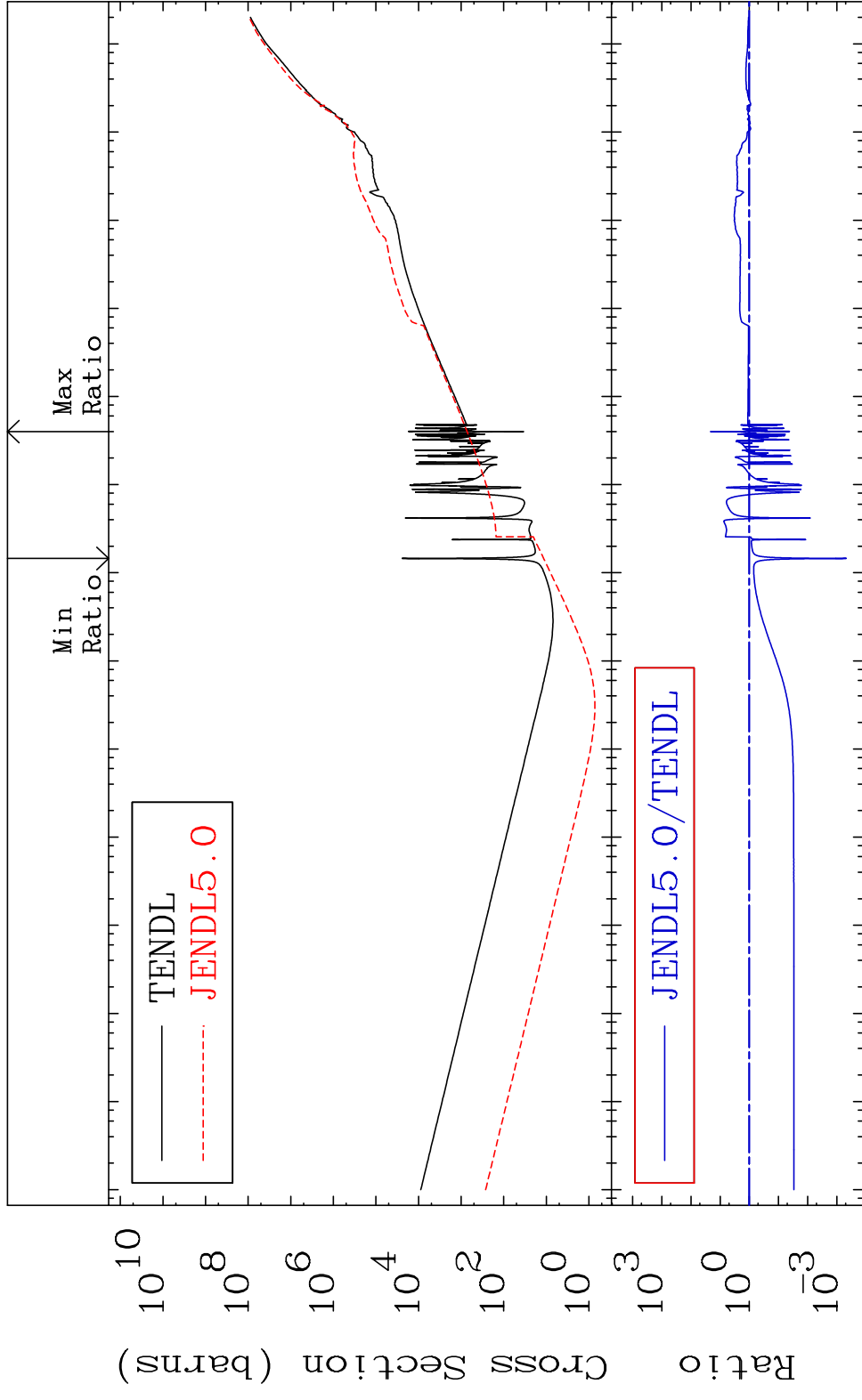
He-4 Production

83-Bi-208

Cross Section -99.99 To 92.62 %



MAT 8322 Kerma total (eV-barns) 83-Bi-208
 Cross Section -99.95 To 2008. %

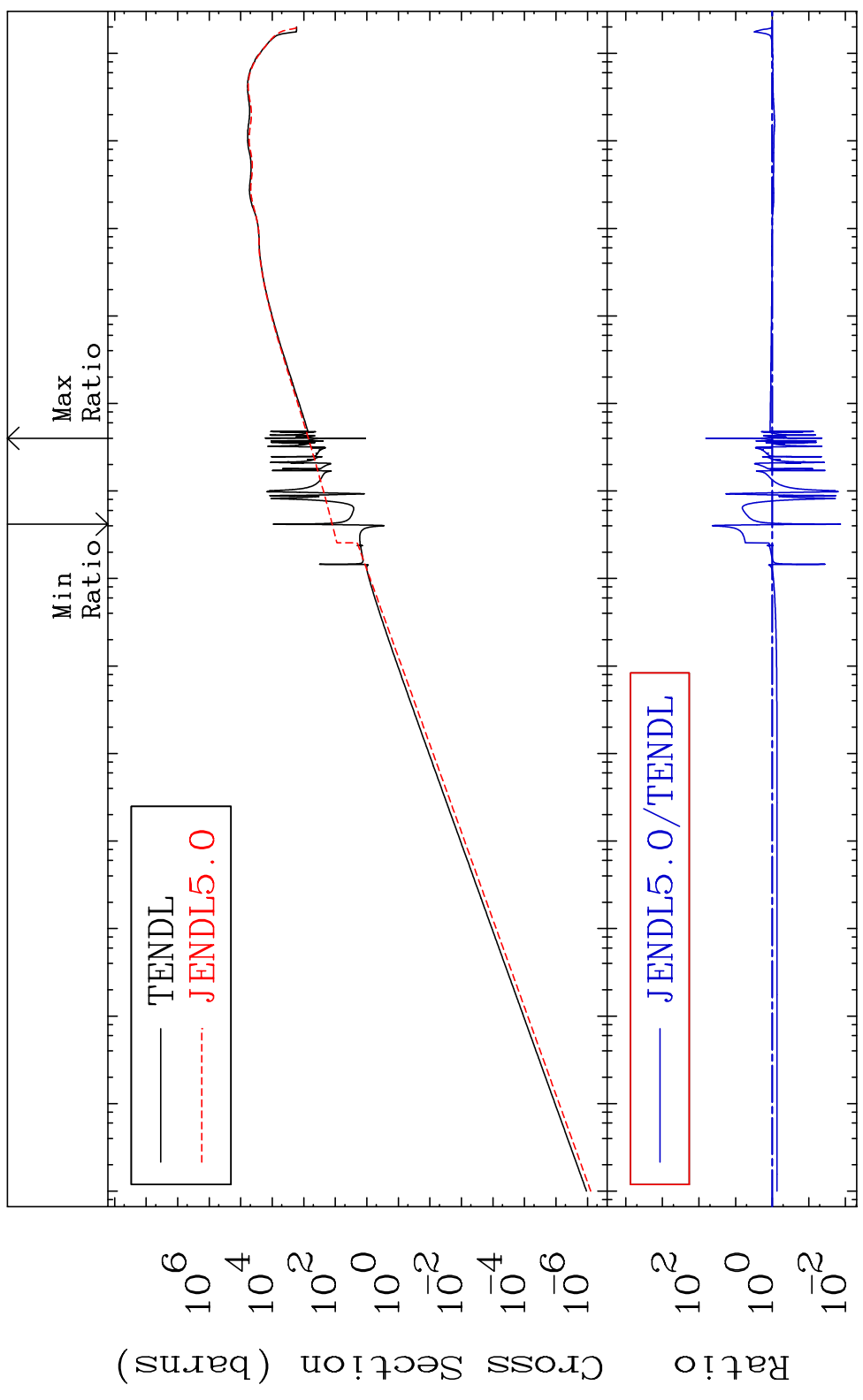


Ratio
 10¹⁰
 10⁸
 10⁶
 10⁴
 10²
 10⁰
 10⁻³
 10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸
 Incident Energy (eV) 83-Bi-208

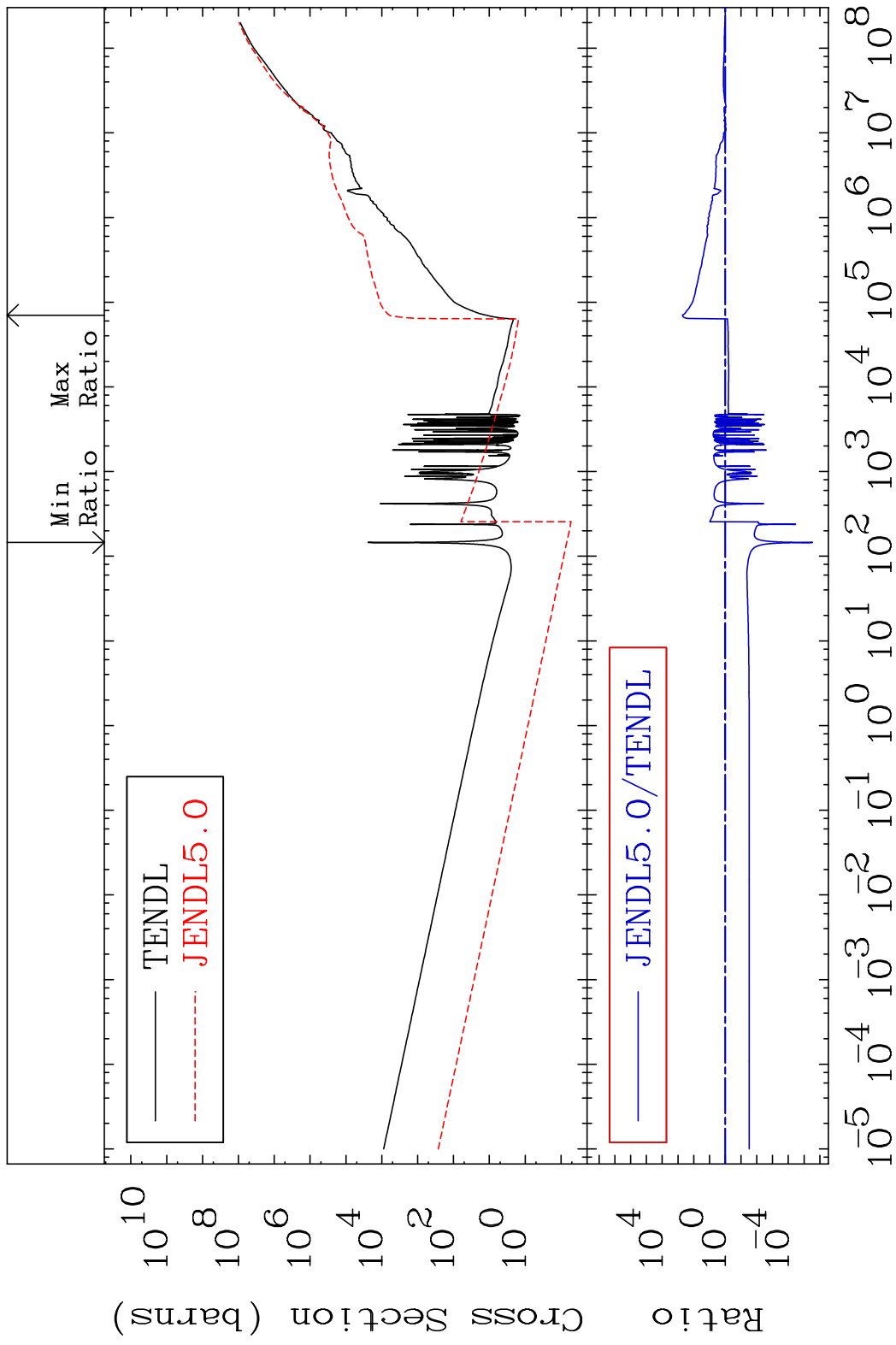
MAT 8322

Kerma elastic Cross Section -98.64 To 6461. %

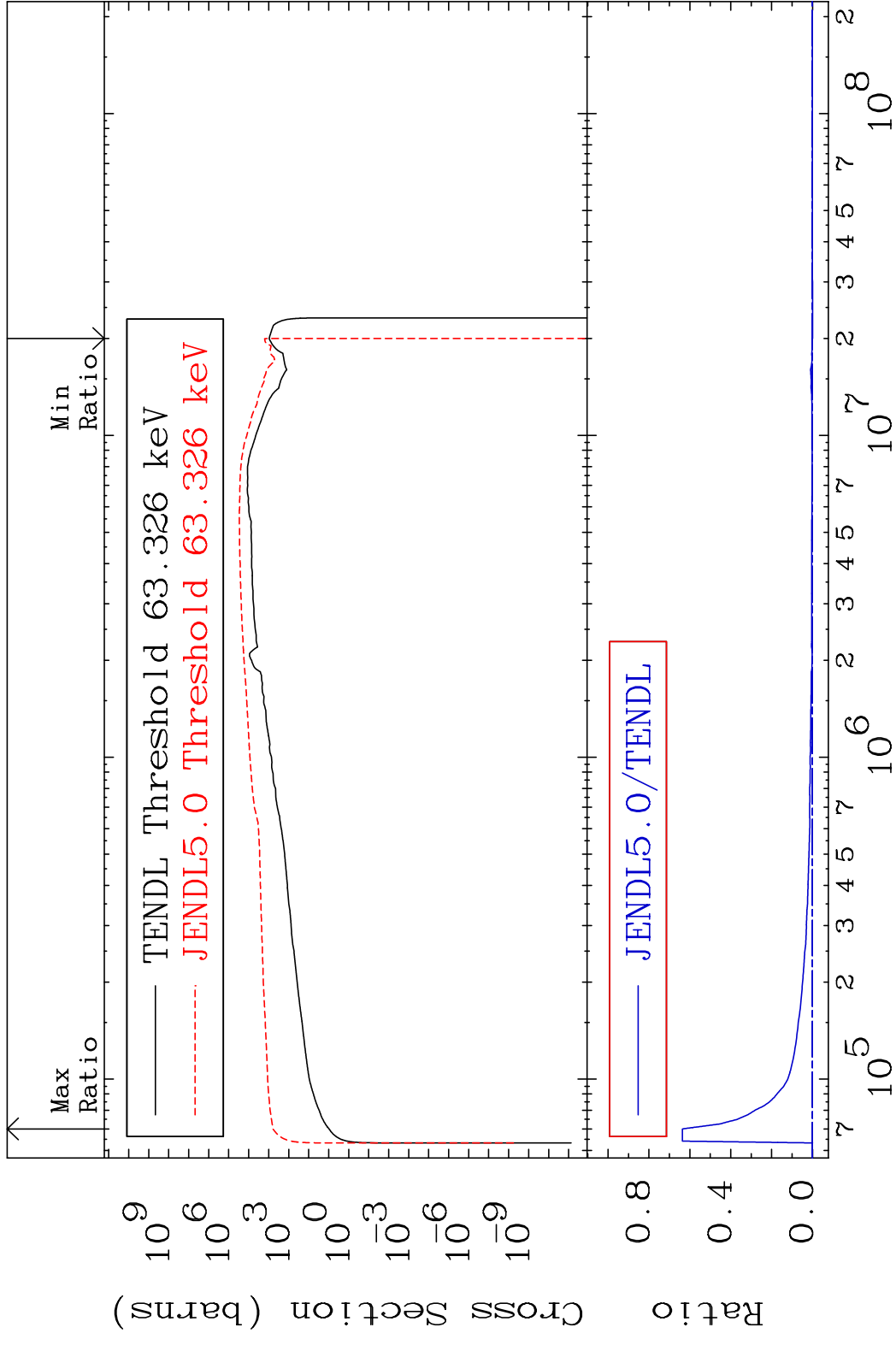
83-Bi-208



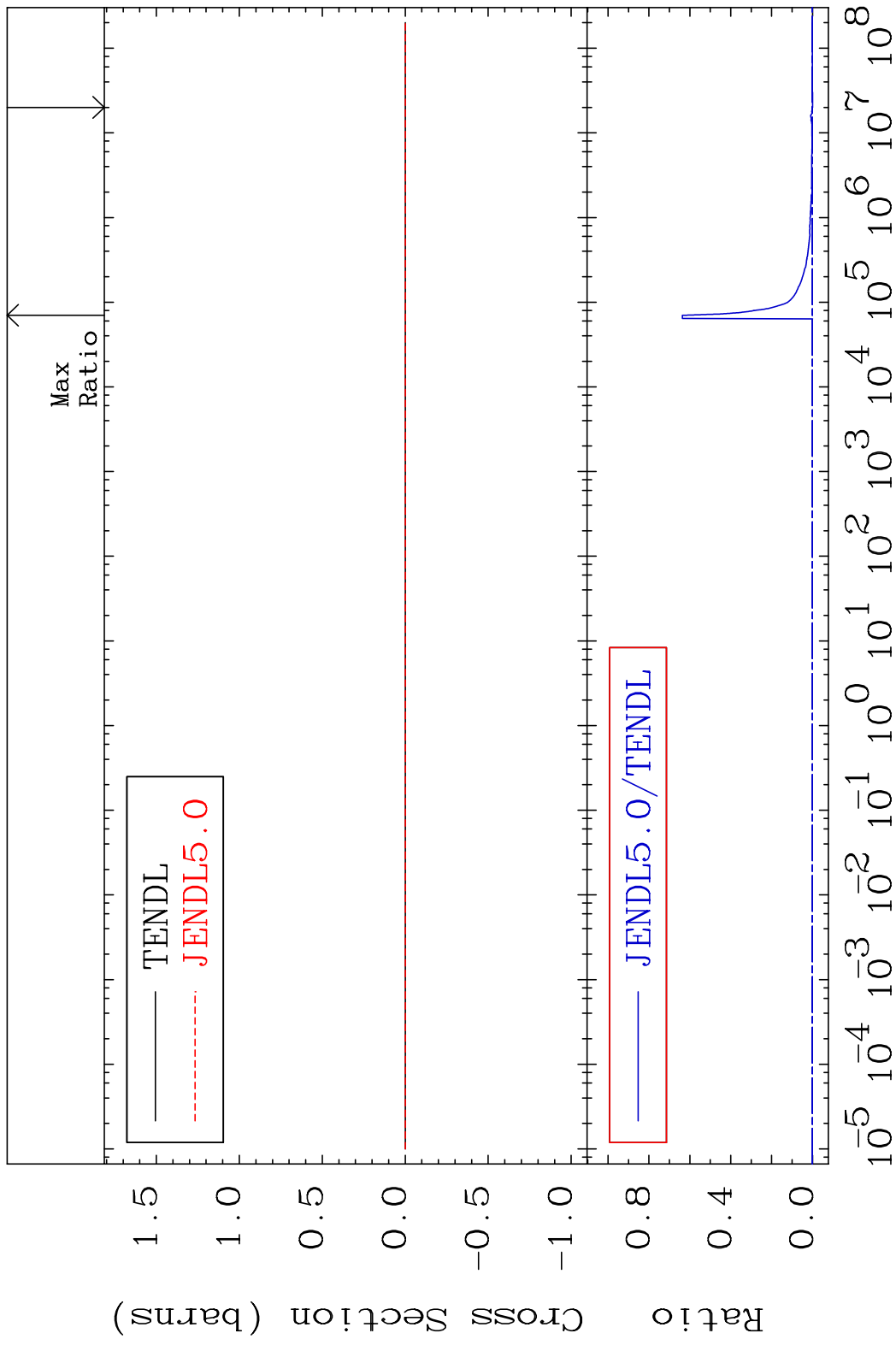
MAT 8322 Kerma non-elastic (all but mt2) 83-Bi-208
 Cross Section -100.0 To 9999. %



MAT 8322 Kerma inelastic (mt51-91) 83-Bi-208
 Cross Section -100.0 To 9999. %

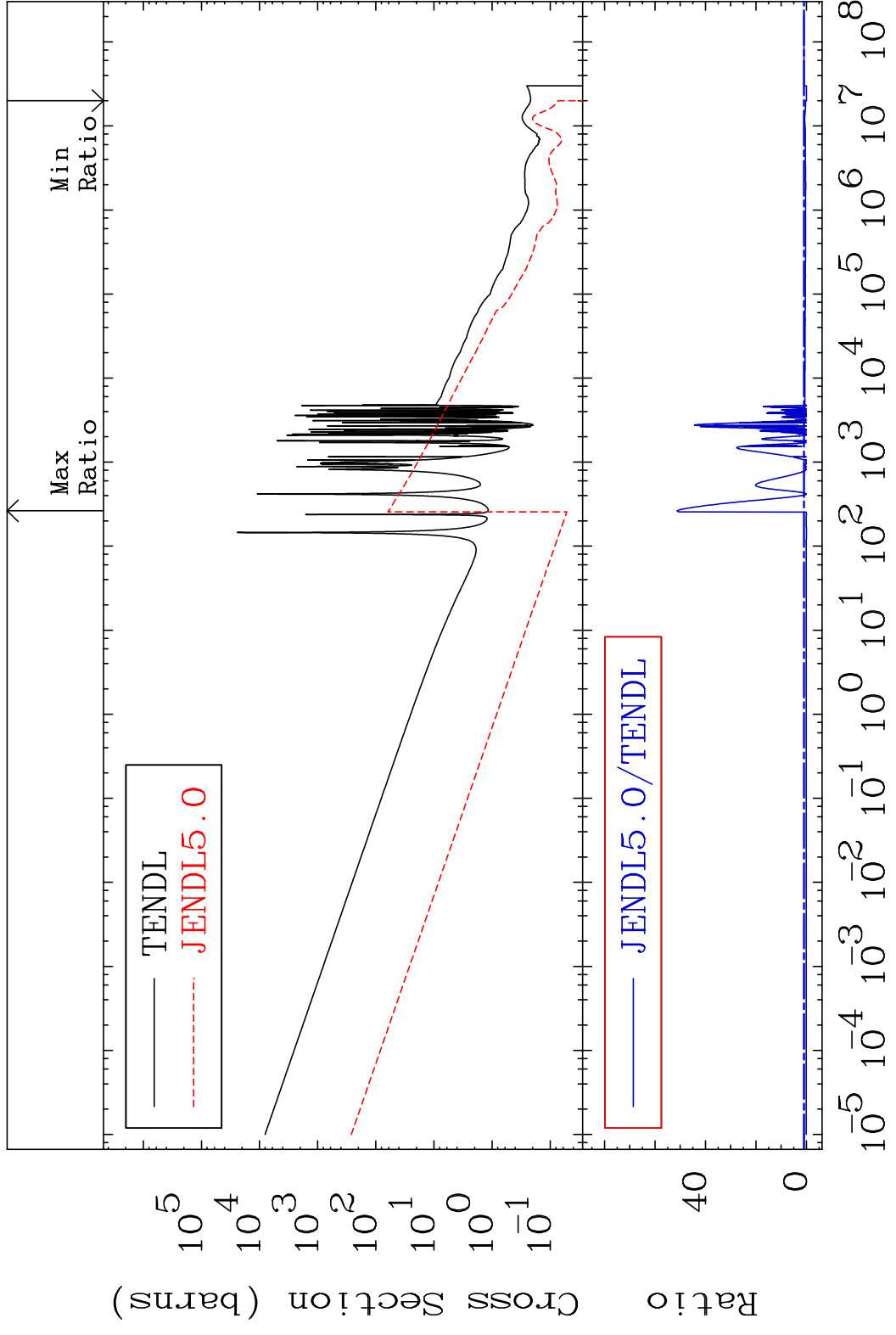


MAT 8322 Kerma fission (mt18 or mt19-20-21-38) β 3-Bi-208
 Cross Section -100.0 To 9999. %



MAT 8322

Kerma capture (mt102) 83-Bi-208
Cross Section -100.0 To 5021. %

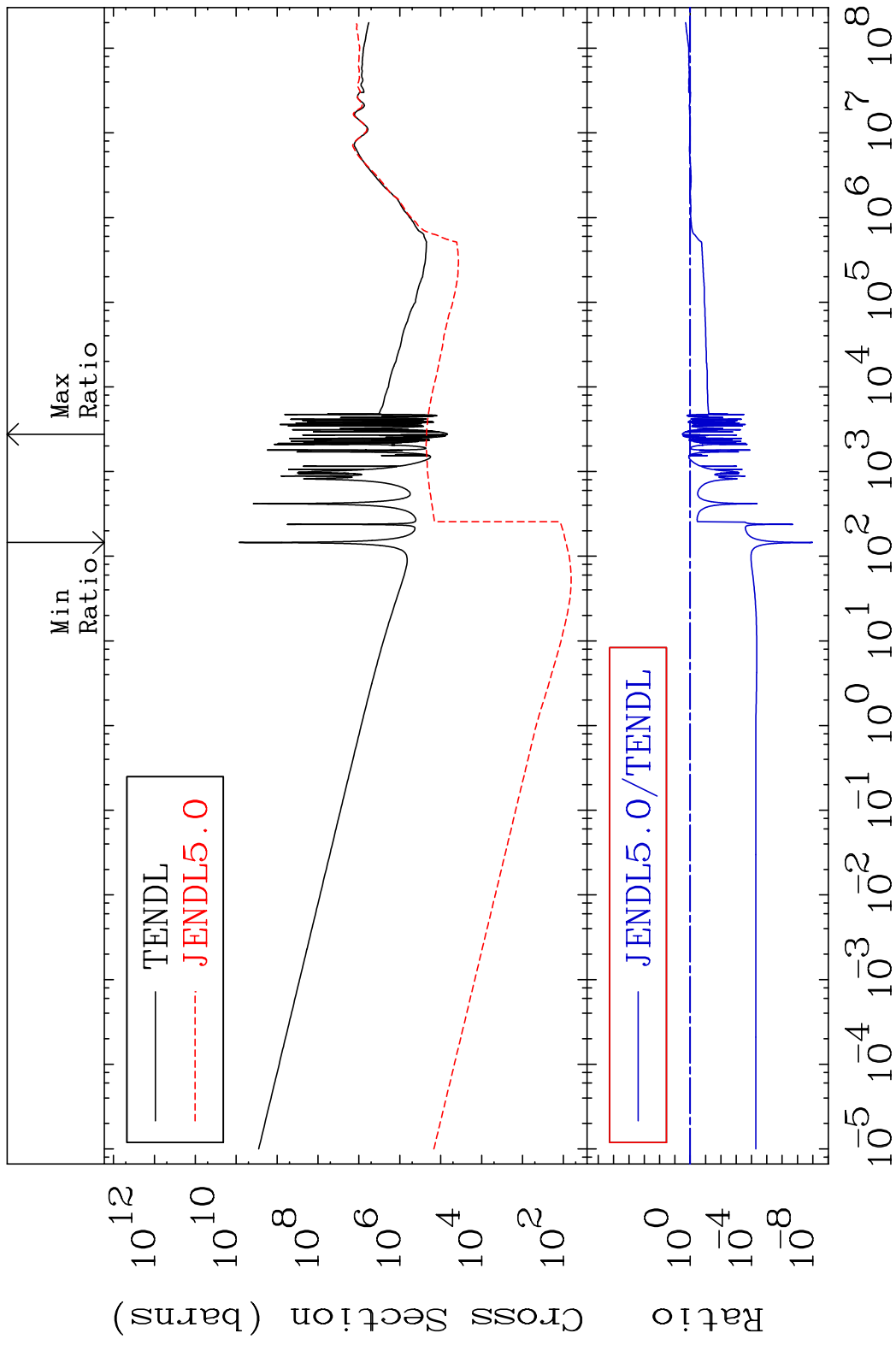


60

Incident Energy (eV)

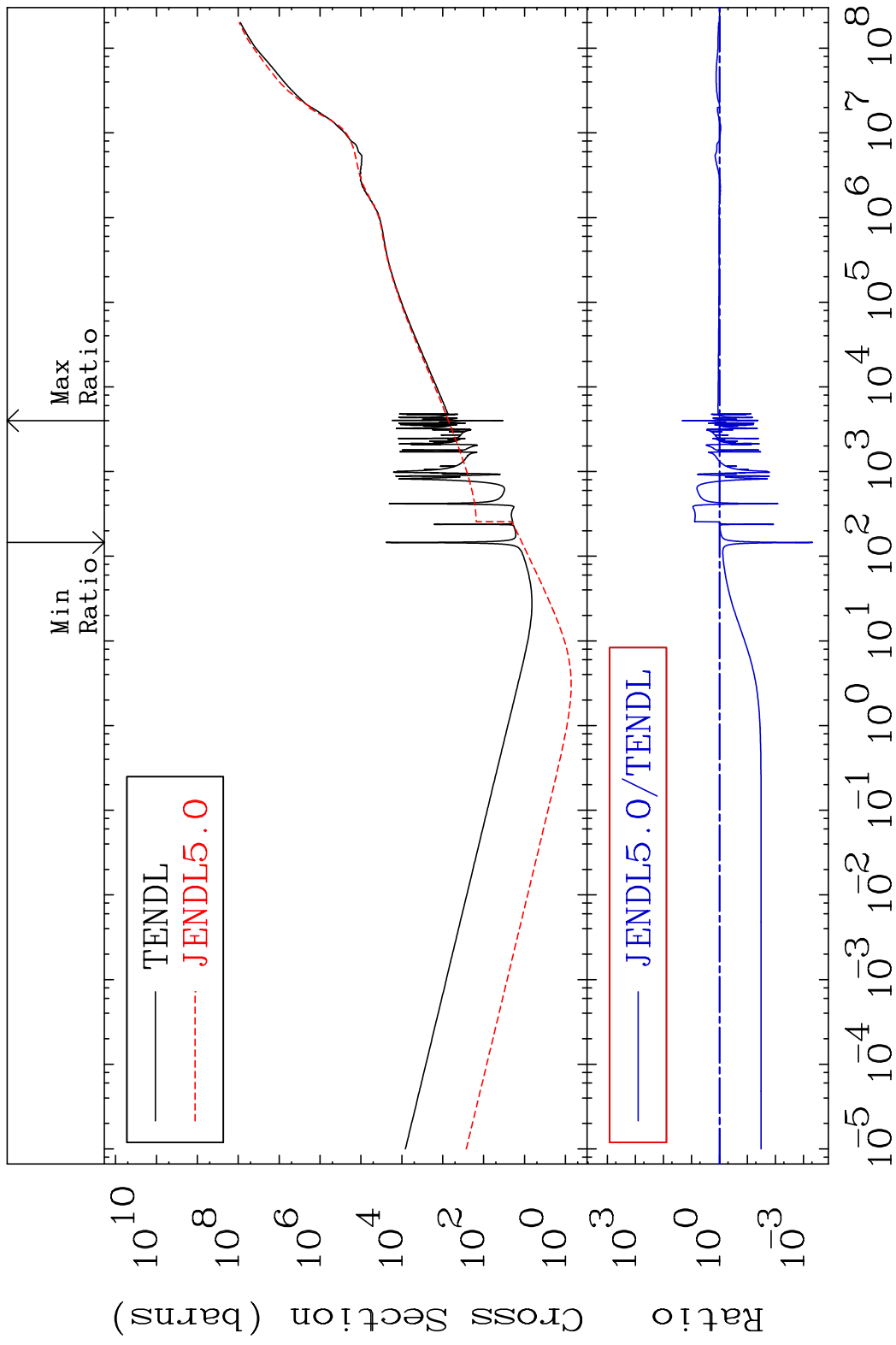
83-Bi-208

MAT 8322 Total photon (eV-barns) 83-Bi-208
 Cross Section -100.0 To 226.1 %

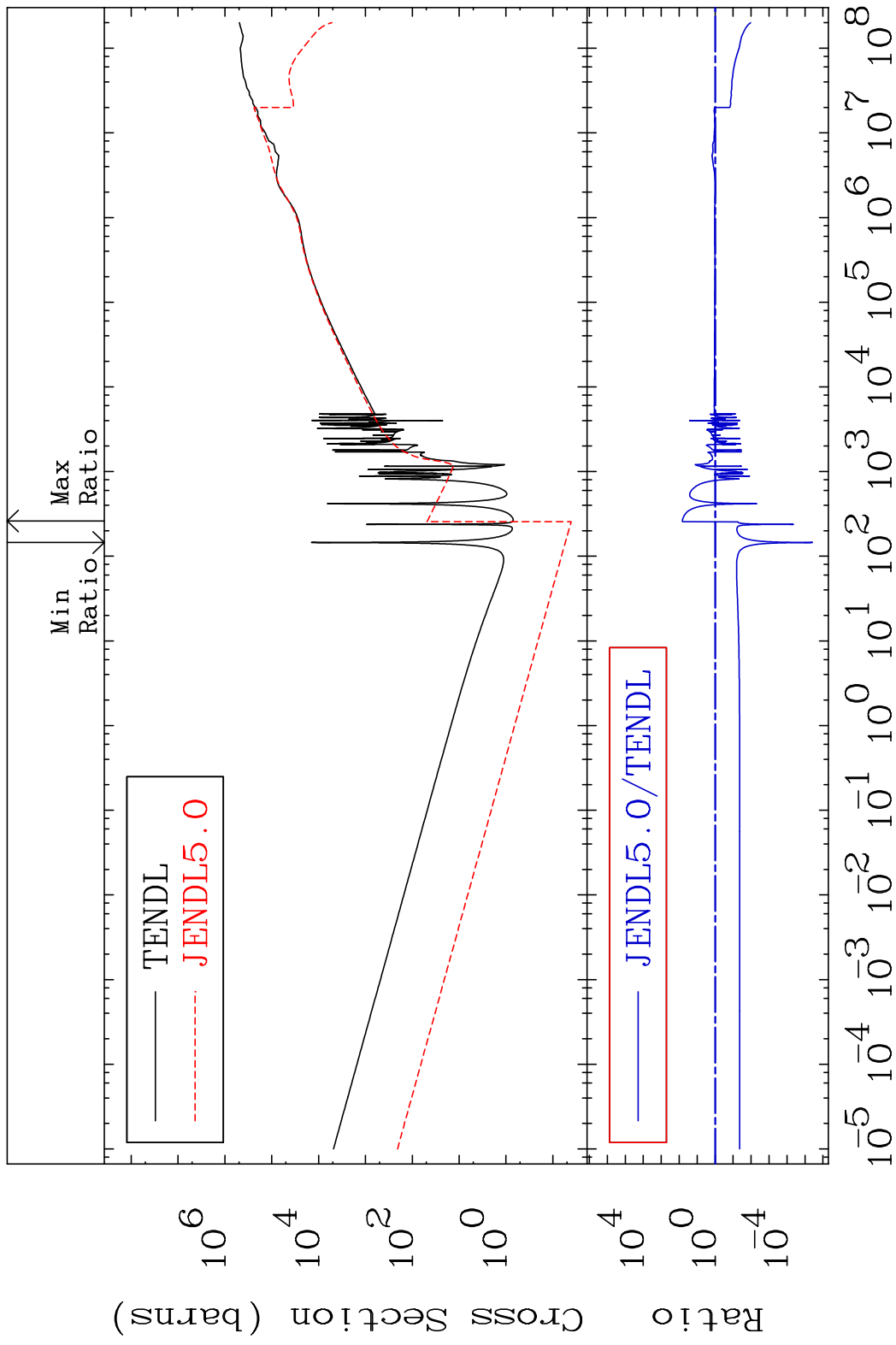


61 Incident Energy (eV) 83-Bi-208

MAT 8322 Total kinematic kerma (high limit) 83-Bi-208
 Cross Section -99.95 To 2016. %



MAT 8322 Dpa total (eV-barns) 83-Bi-208
Cross Section -100.0 To 6564. %



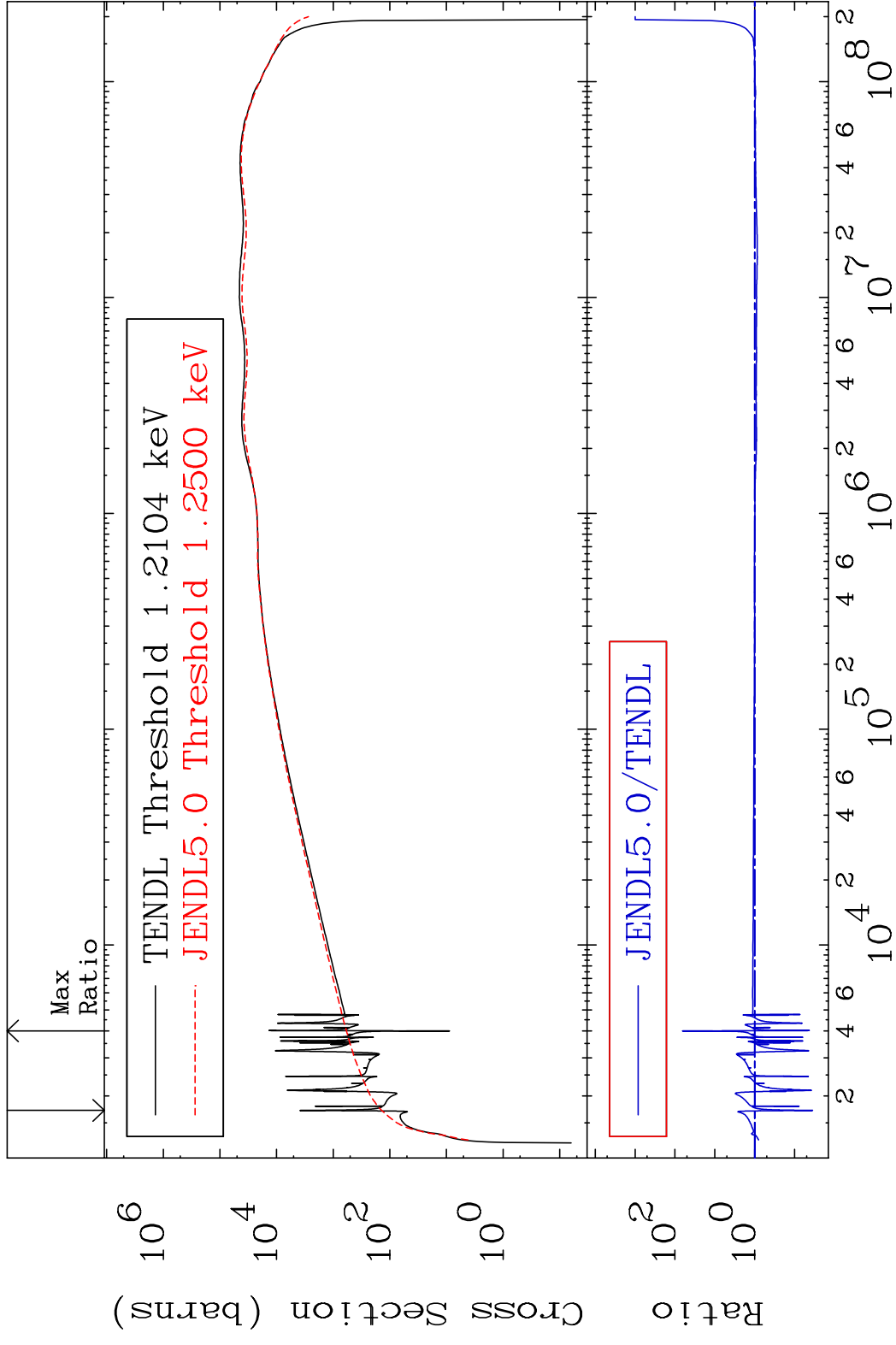
63 Incident Energy (eV) 83-Bi-208

MAT 8322

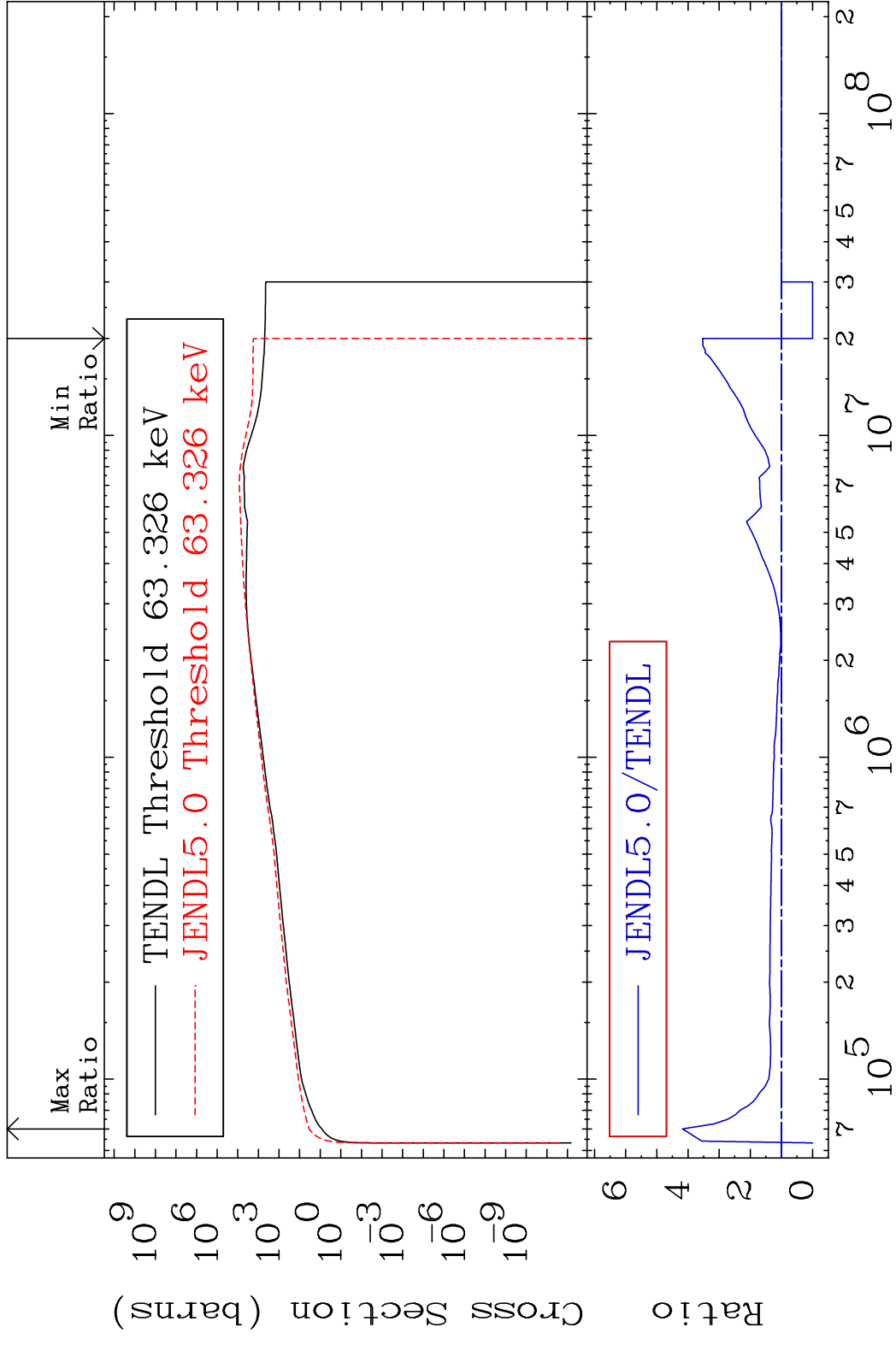
Dpa elastic (mt2)

83-Bi-208

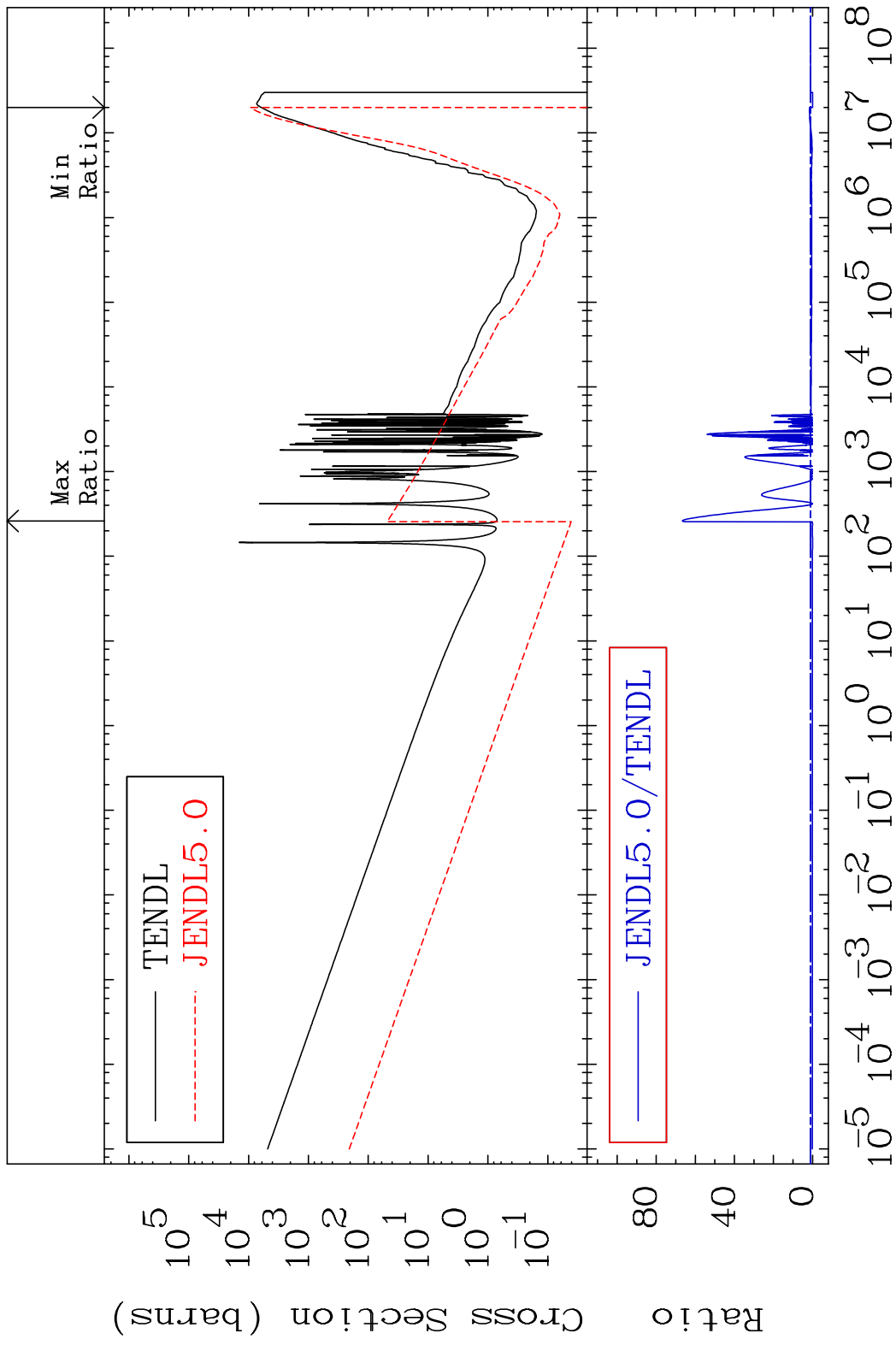
Cross Section -96.44 To 6430. %



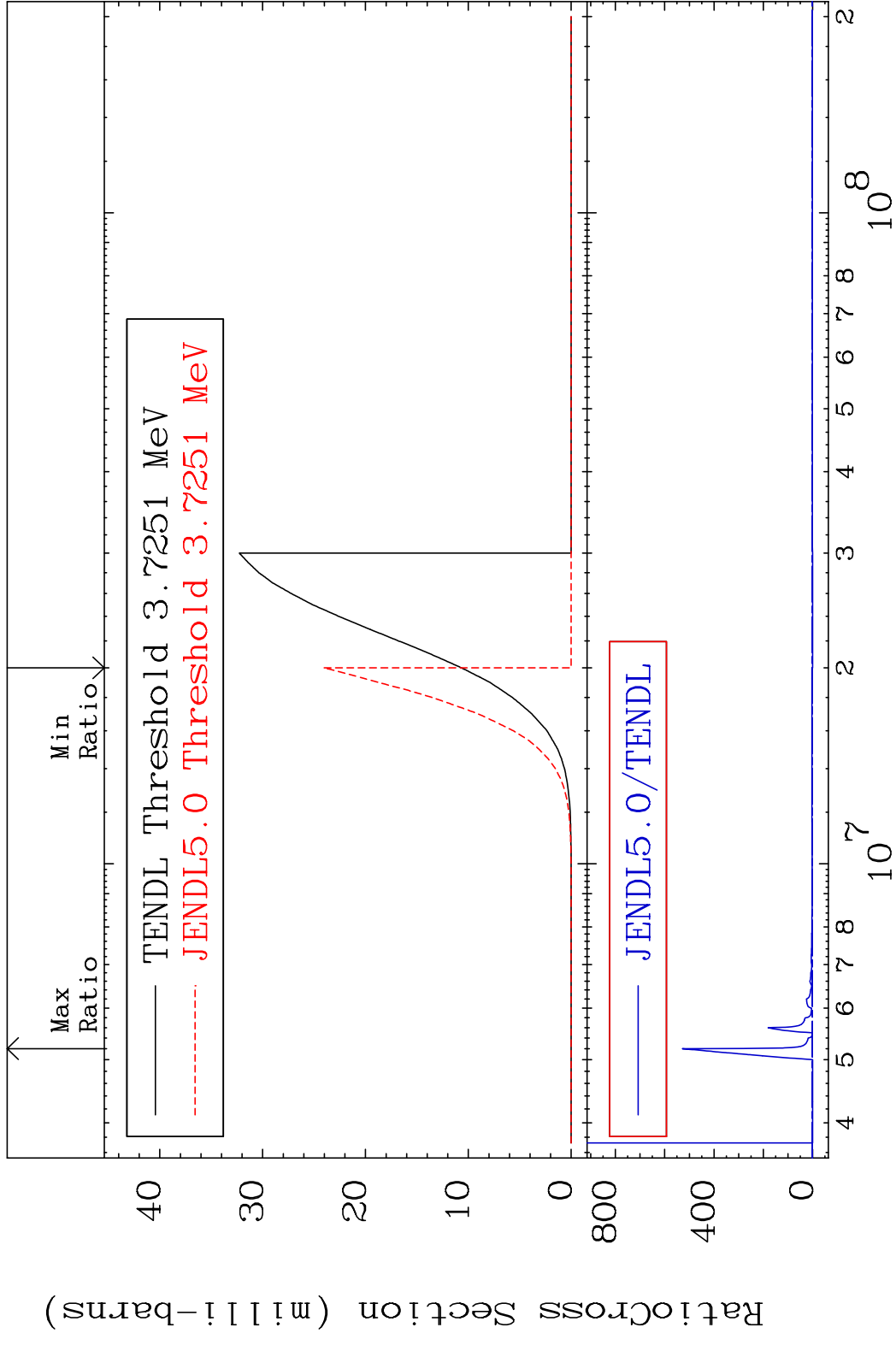
MAT 8322 Dpa inelastic (mt51-91) 83-Bi-208
 Cross Section -100.0 To 318.1 %

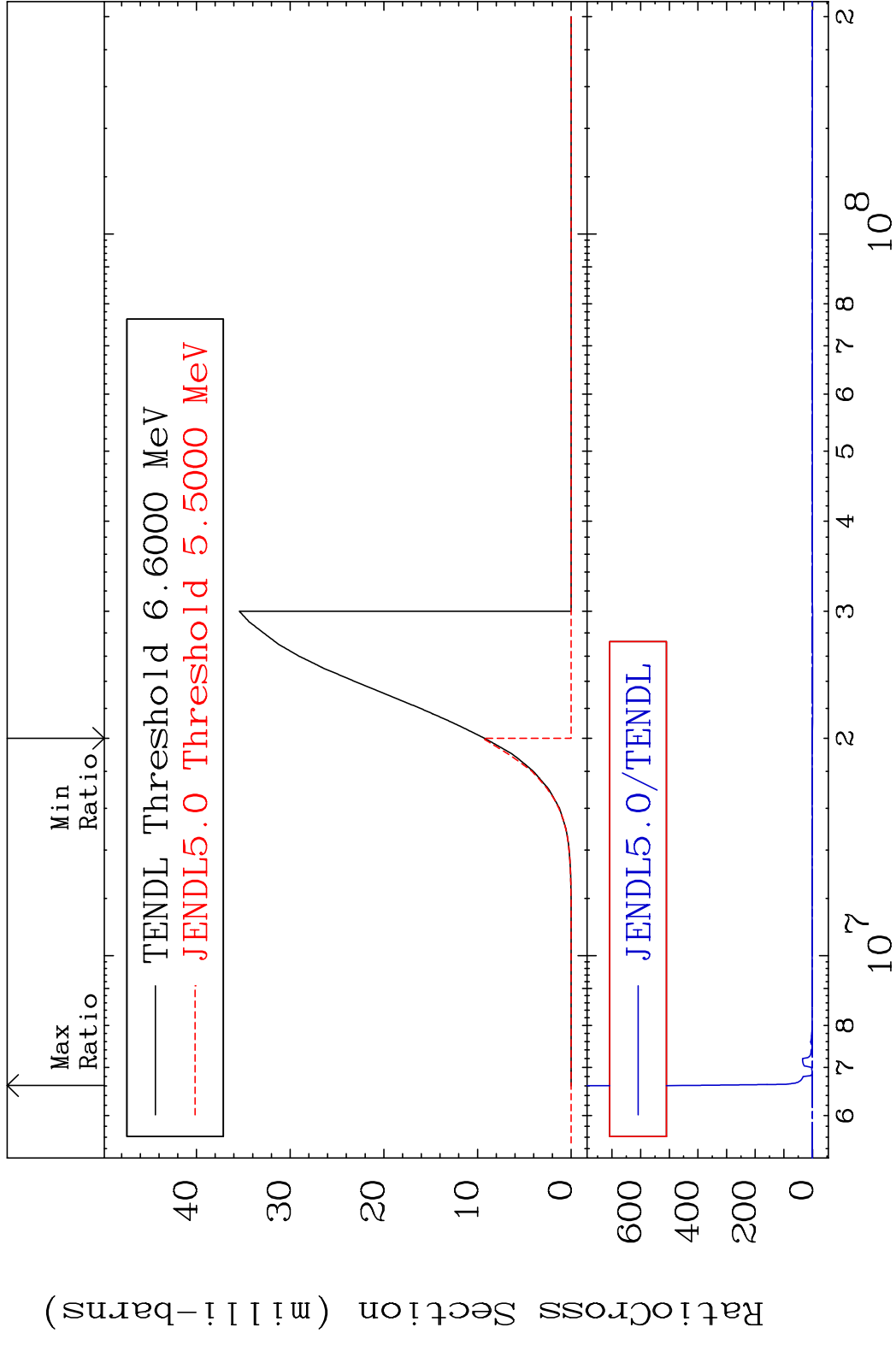


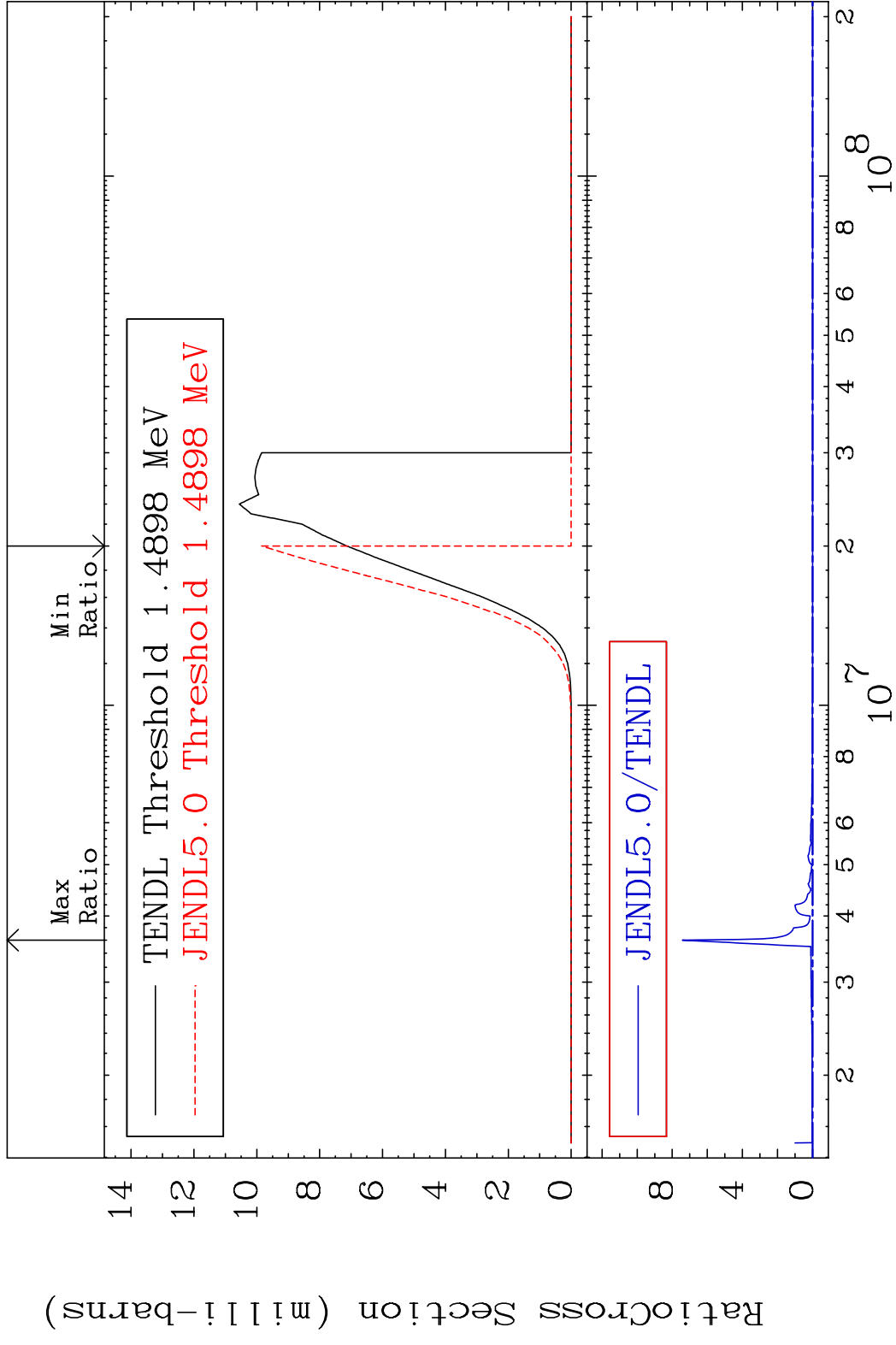
MAT 8322 Dpa disappearance (mt102 -120) 83-Bi-208
 Cross Section -100.0 To 6564. %

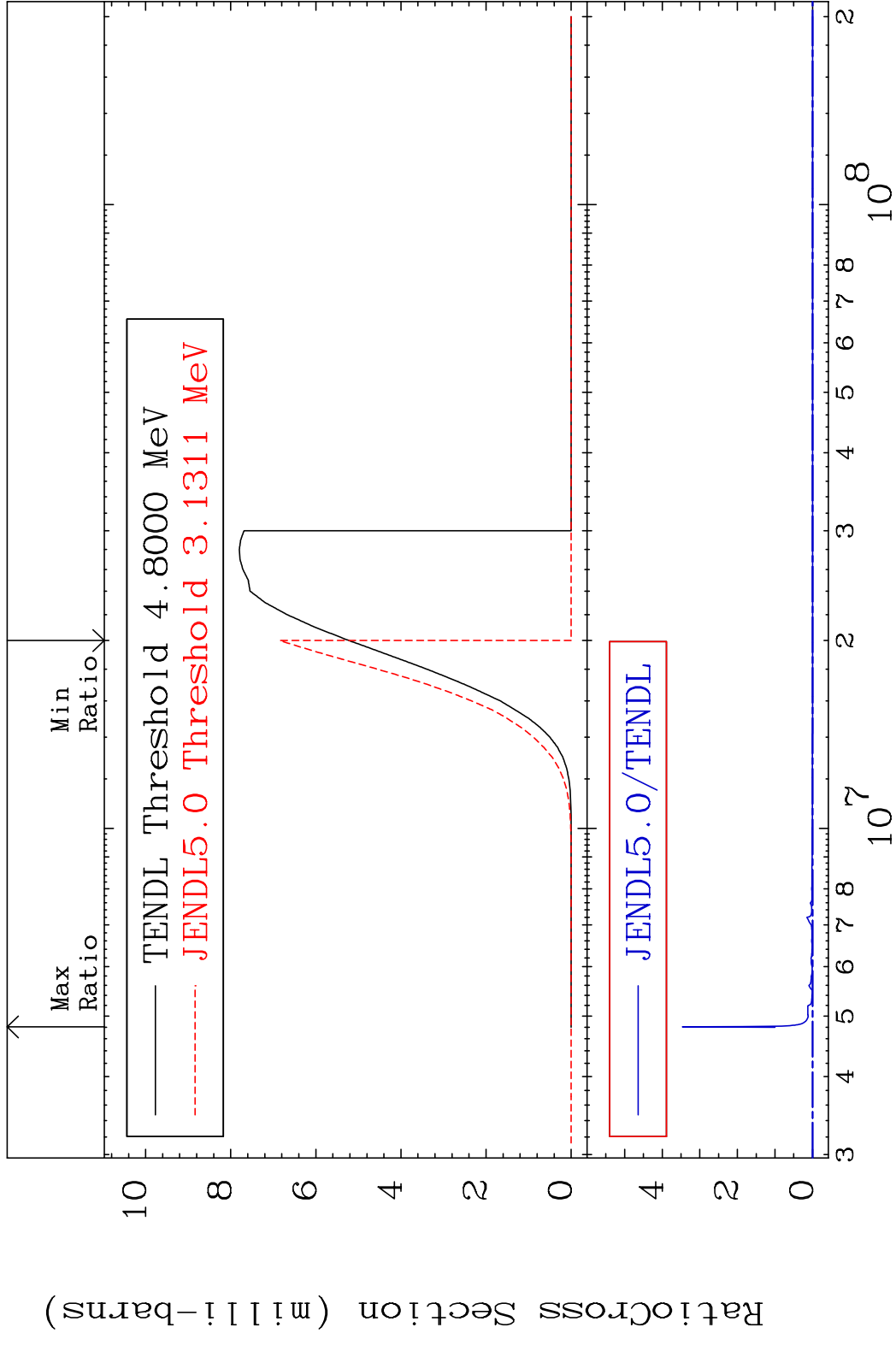


66 Incident Energy (eV) 83-Bi-208

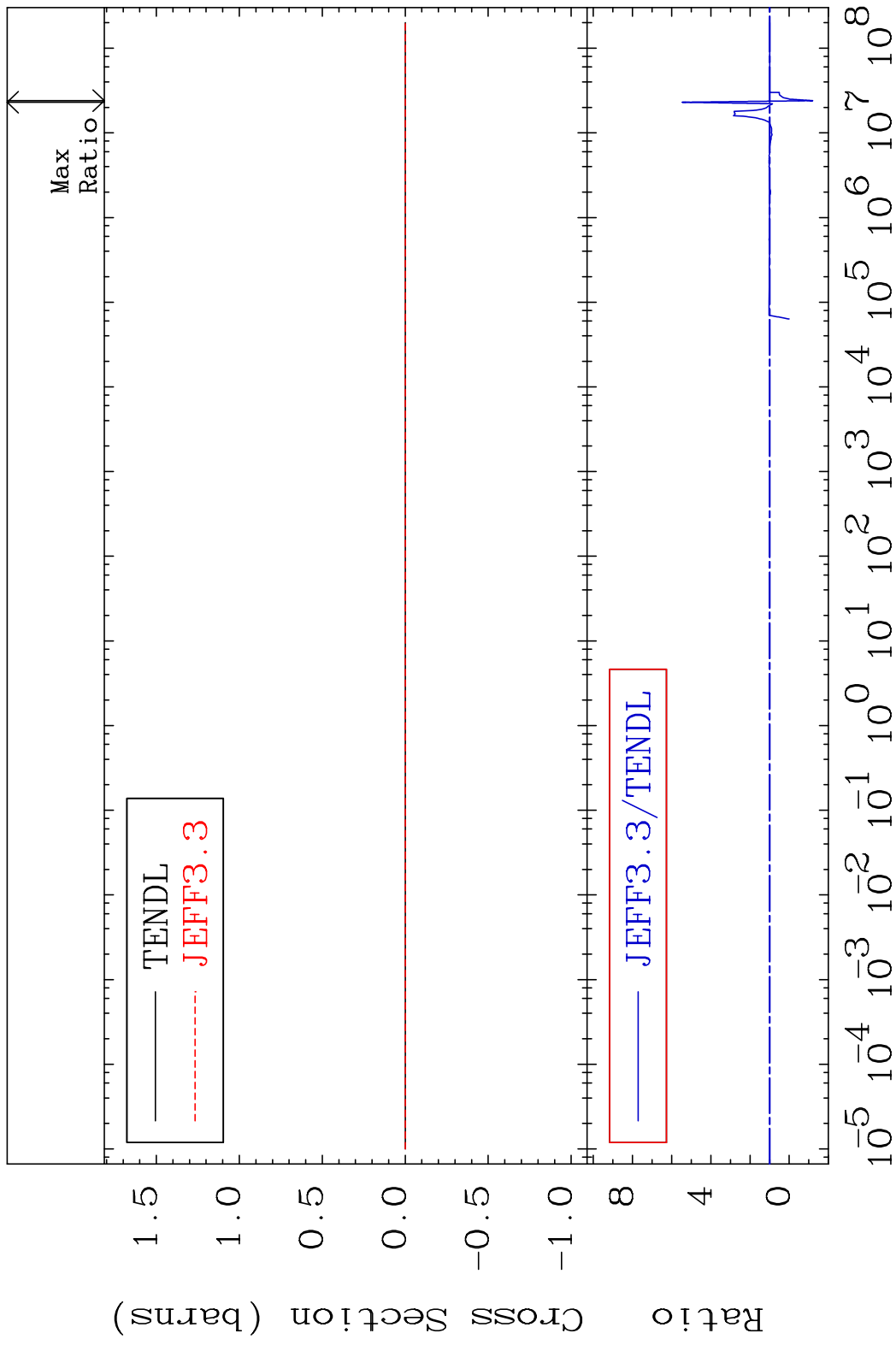






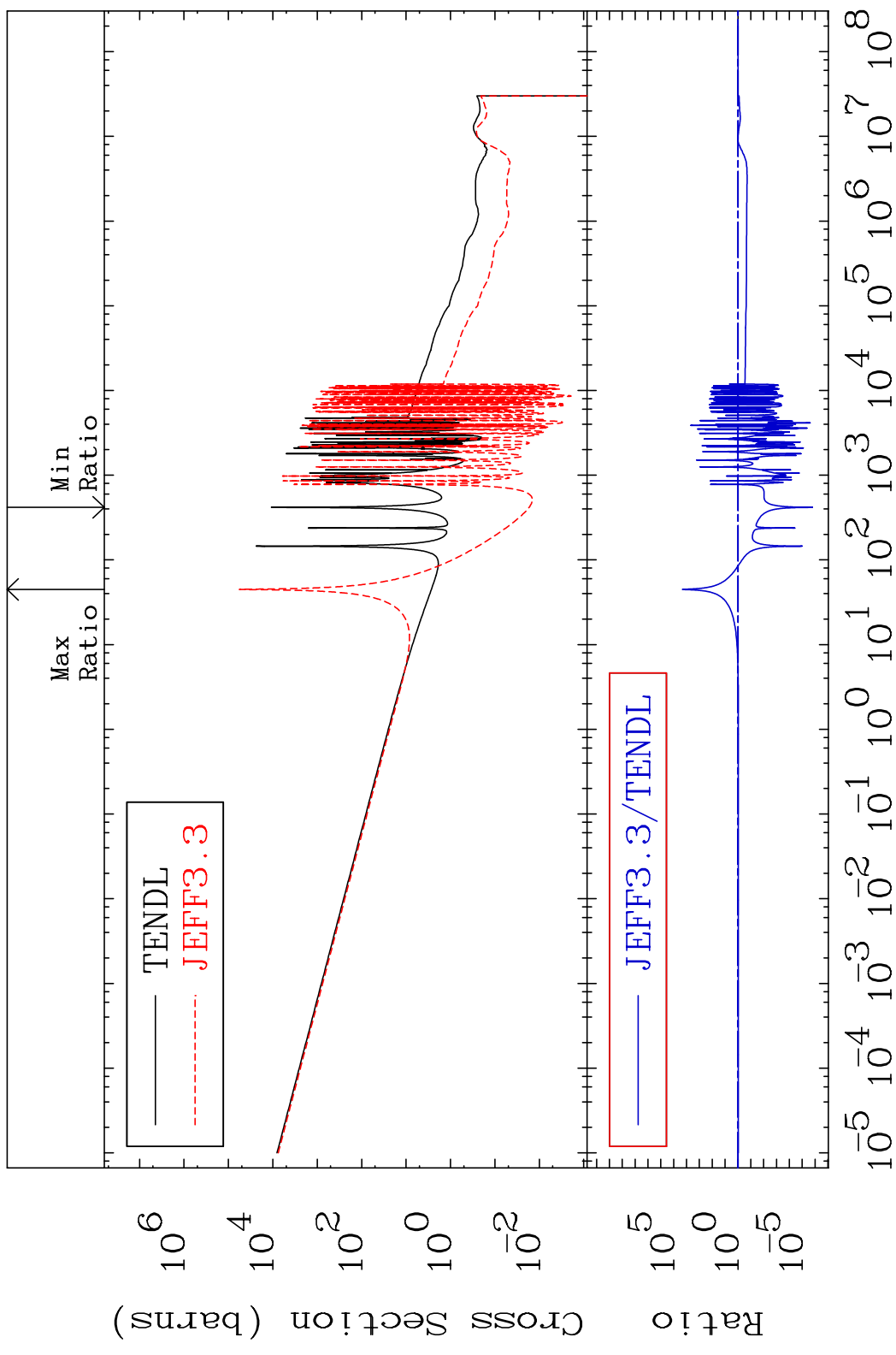


MAT 8322 Kerma fission (mt18 or mt19-20-21-38) ^{83}Bi -208
 Cross Section -219.1 To 445.5 %



MAT 8322

Kerma capture (mt102) 83-Bi-208
Cross Section -100.0 To 9999. %

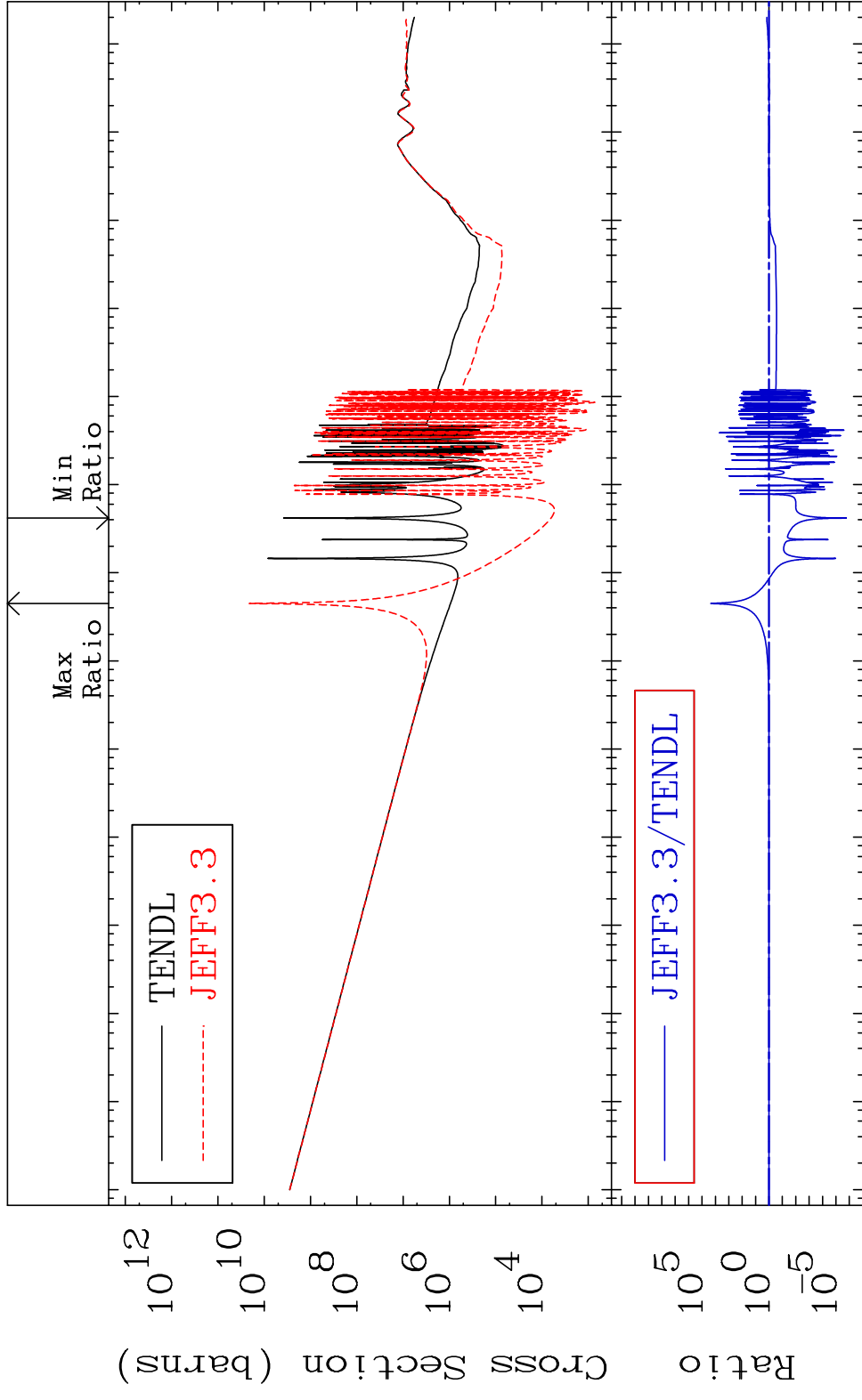


72

Incident Energy (eV) 83-Bi-208

MAT 8322

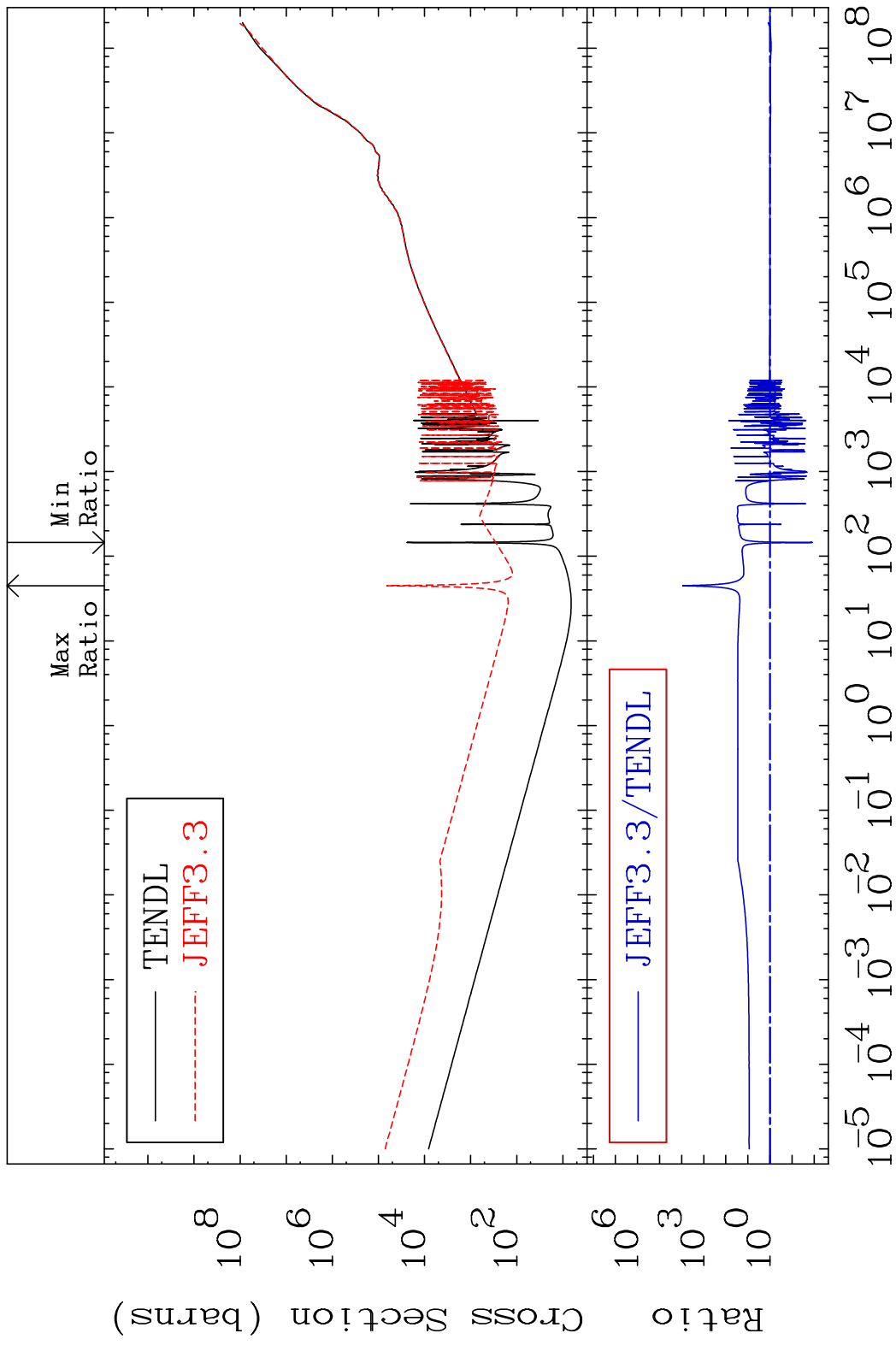
Total photon (eV-barns) 83-Bi-208
Cross Section -100.0 To 9999. %



73

Incident Energy (eV) 83-Bi-208

MAT 8322 Total kinematic kerma (high limit) 83-Bi-208
 Cross Section -98.83 To 9999. %

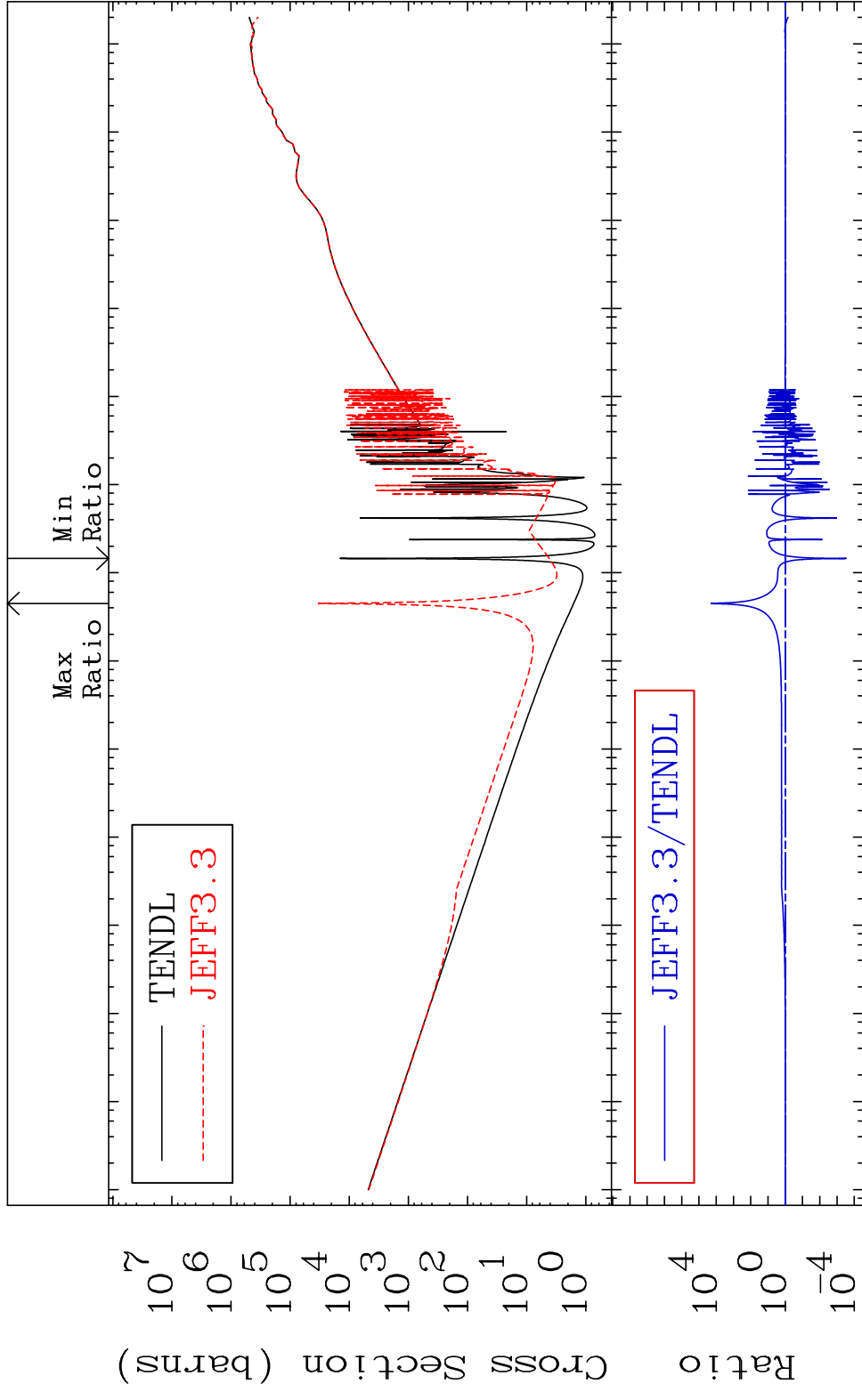


MAT 8322

Dpa total (eV-barns)

83-Bi-208

Cross Section -99.97 To 9999. %



75

Incident Energy (eV)

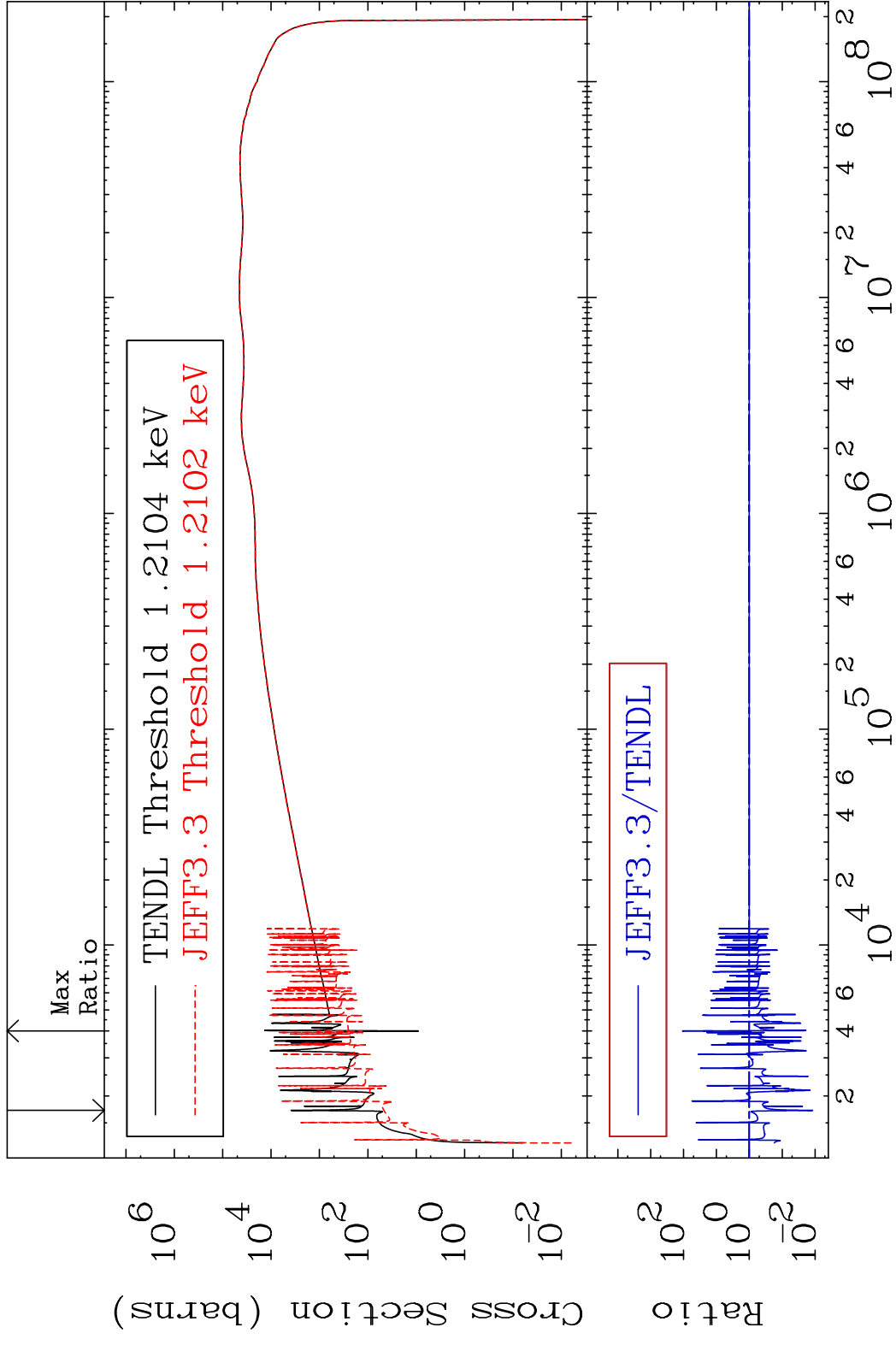
83-Bi-208

MAT 8322

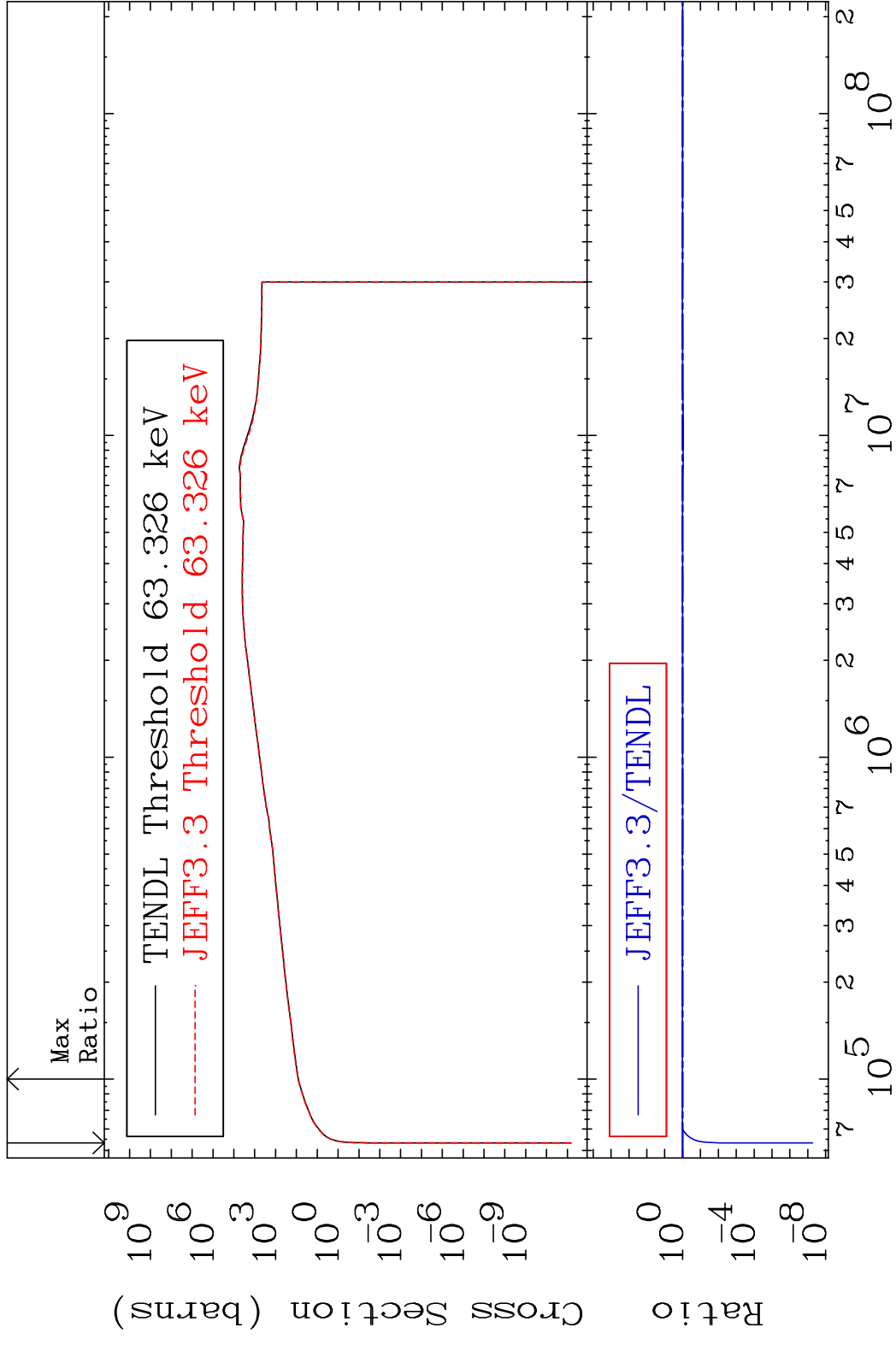
Dpa elastic (mt2)

83-Bi-208

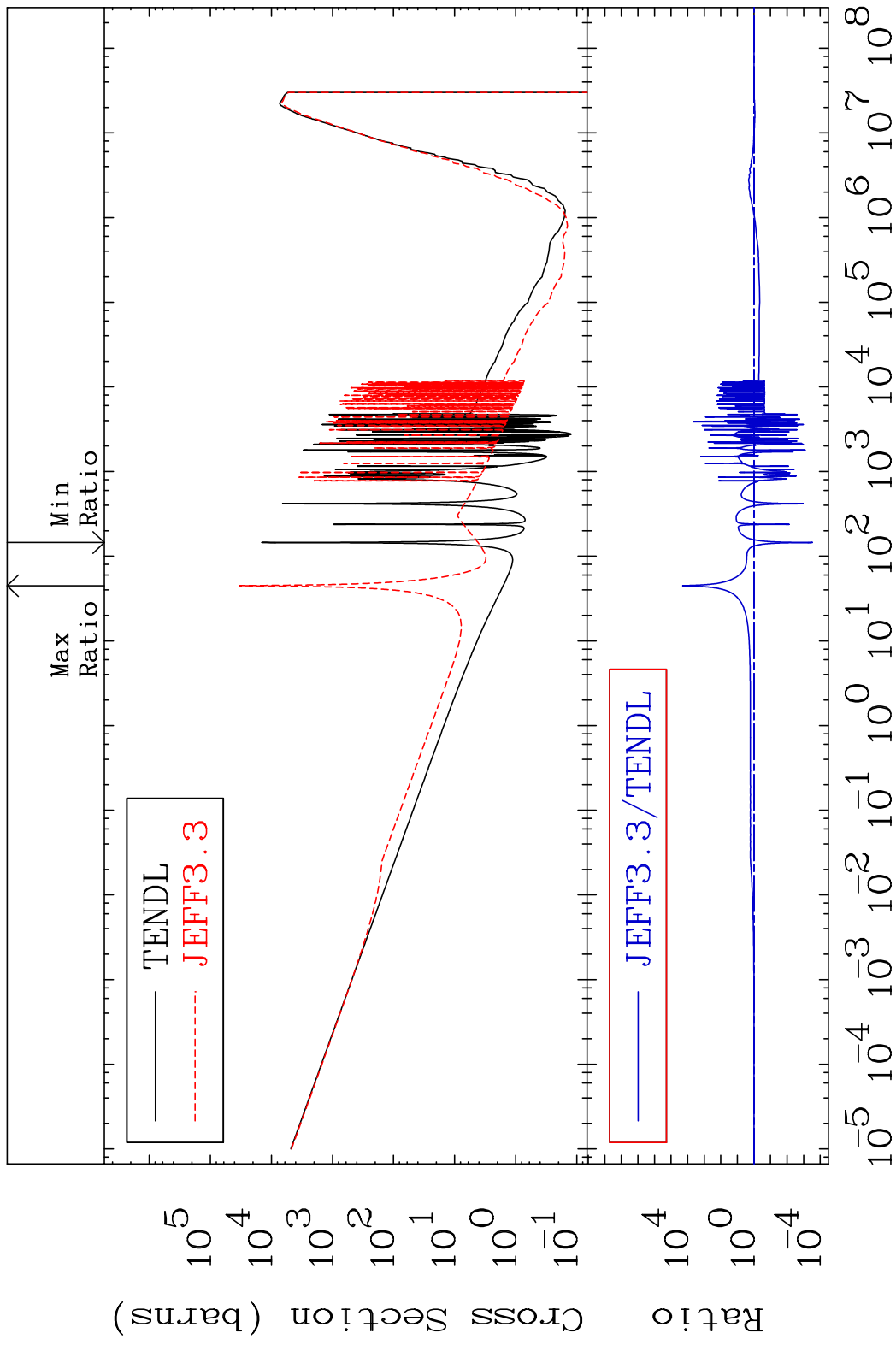
Cross Section -98.81 To 9999. %



MAT 8322 Dpa inelastic (mt51-91) 83-Bi-208
 Cross Section -100.0 To 2.959 %



MAT 8322 Dpa disappearance (mt102 -120) 83-Bi-208
 Cross Section -99.97 To 9999. %



78 Incident Energy (eV) 83-Bi-208

