

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

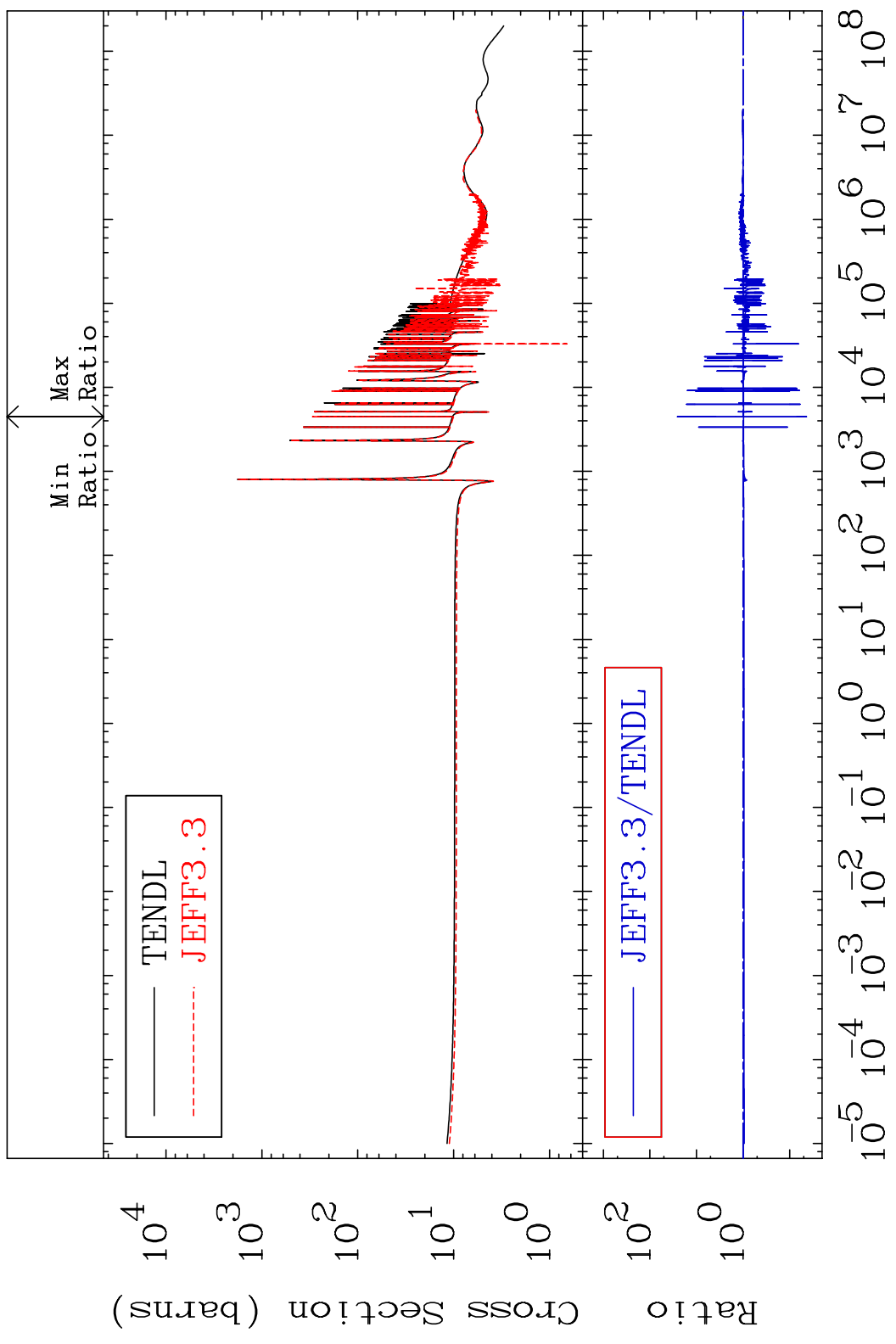
Press Mouse Button to Start

MAT 8325

Total

83-Bi-209

Cross Section -95.63 To 2500. %



1

Incident Energy (eV)

83-Bi-209

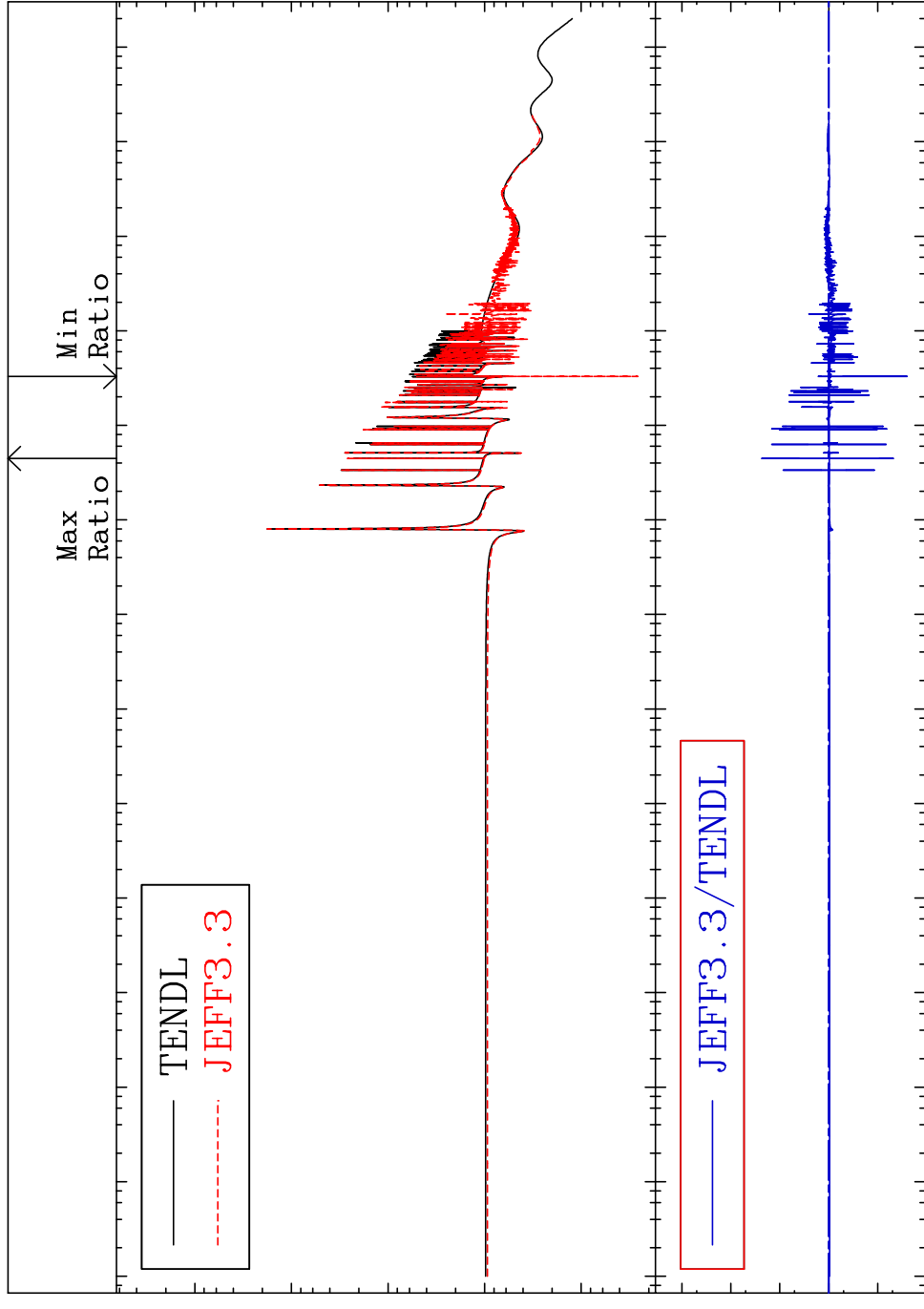
MAT 8325

Elastic

83-Bi-209

Cross Section

-97.50 To 2225. %



10⁴
10³
10²
10¹
10⁰
Cross Section (barns)

10²
10⁰
Ratio

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

2

83-Bi-209

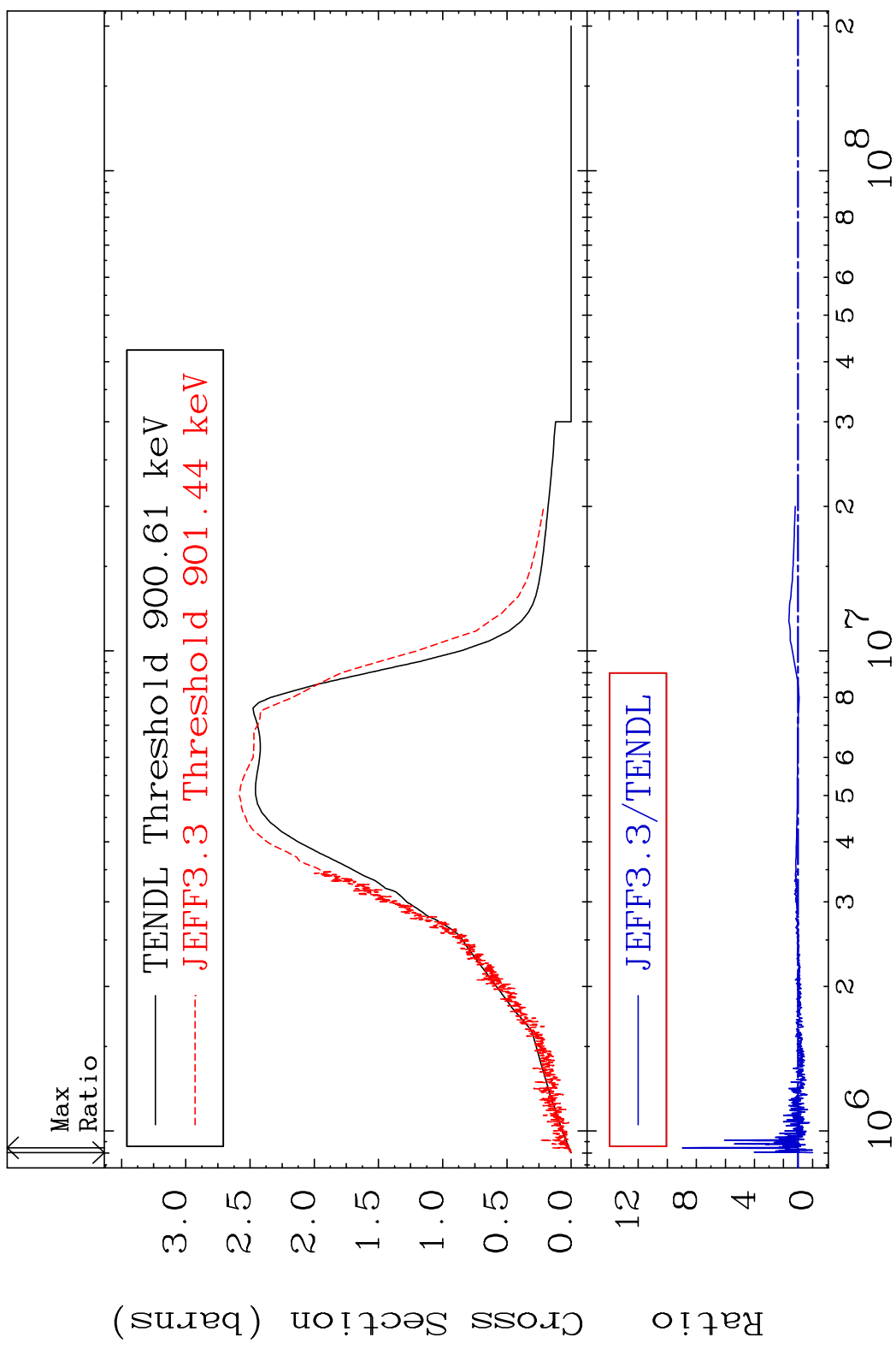
MAT 8325

Inelastic

83-Bi-209

Cross Section

-100.0 To 796.3 %



3

Incident Energy (eV)

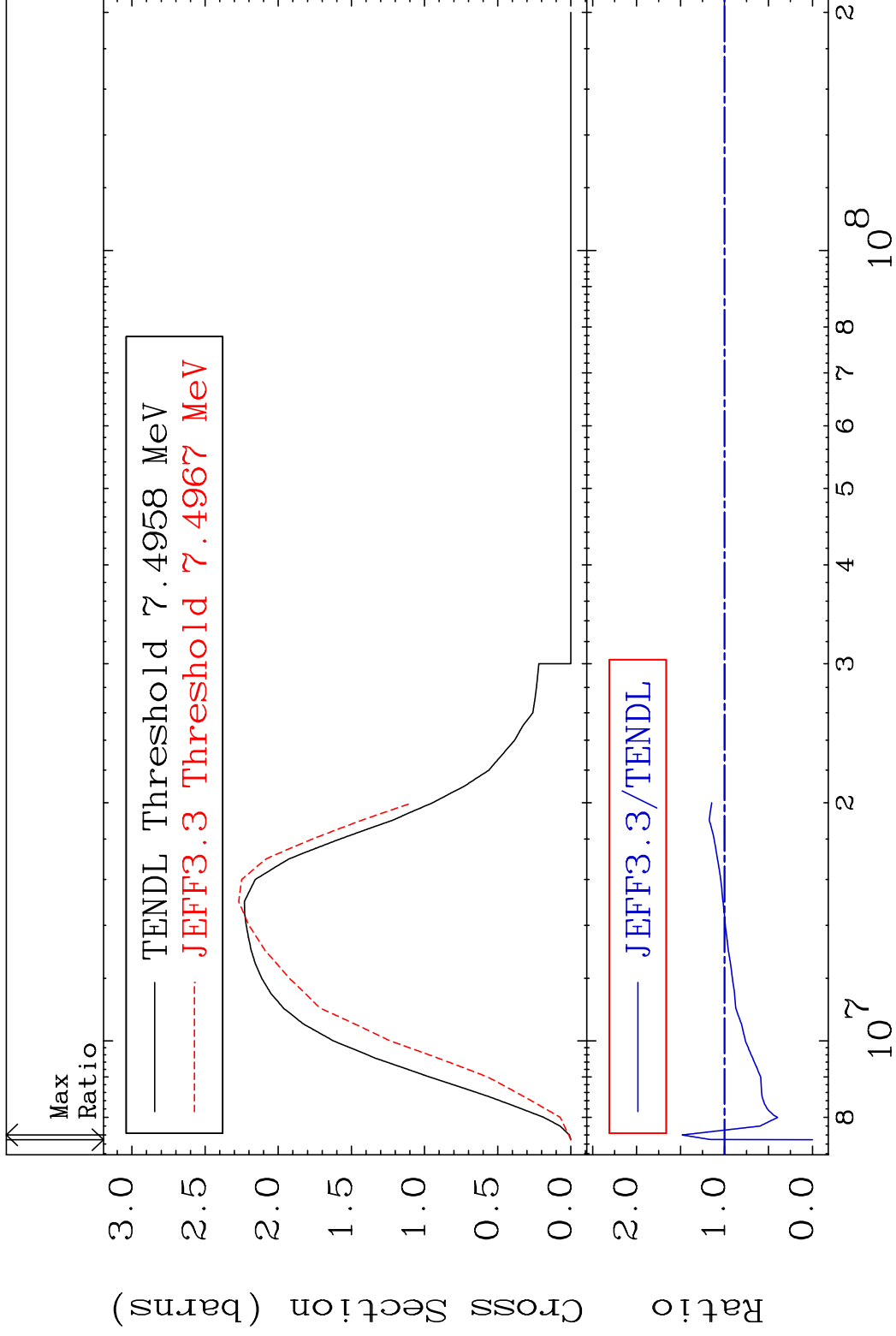
83-Bi-209

MAT 8325

(n,2n)

83-Bi-209

Cross Section -100.0 To 48.19 %



4

Incident Energy (eV)

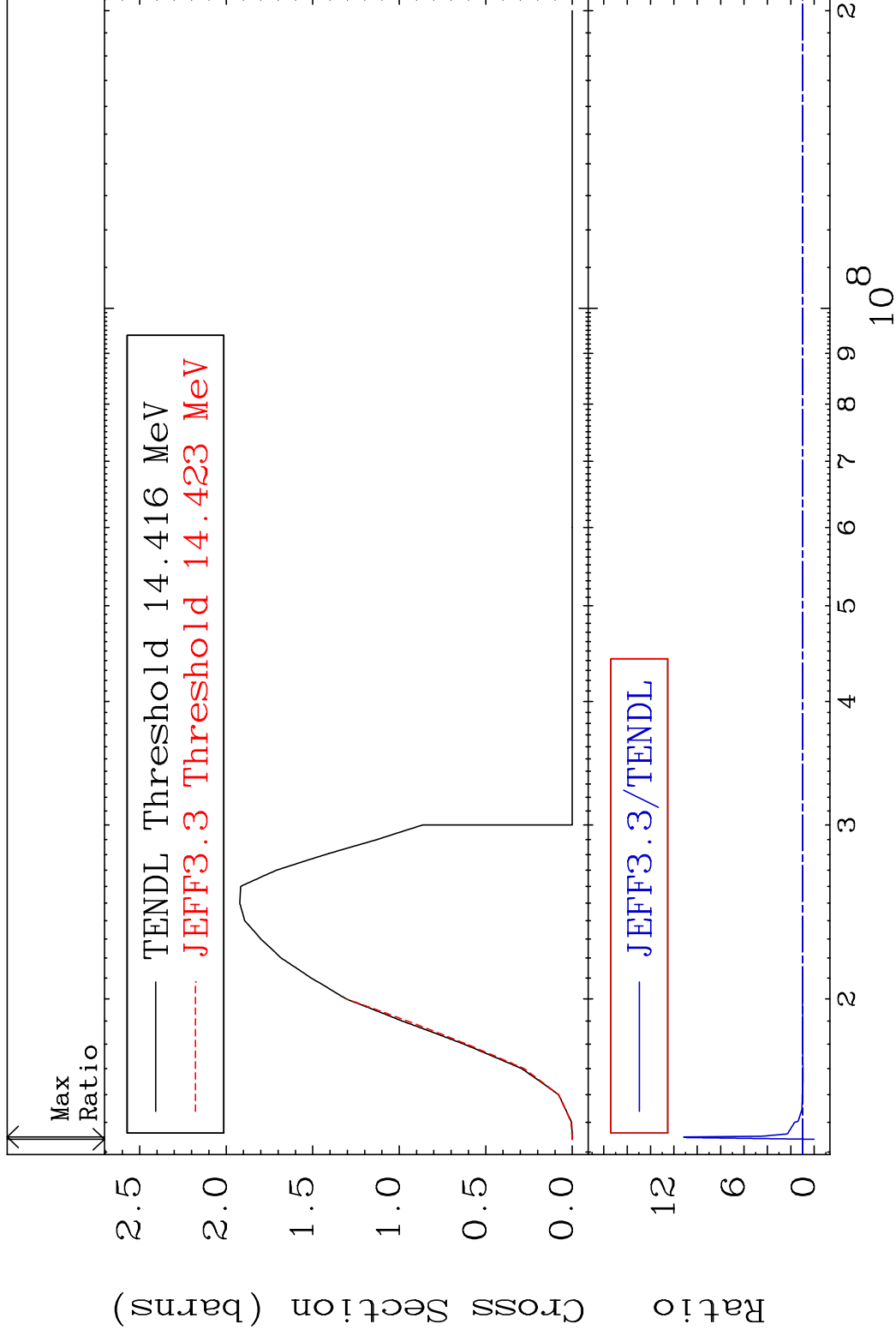
83-Bi-209

MAT 8325

(n,3n)

83-Bi-209

Cross Section -100.0 To 1017. %



5

Incident Energy (eV)

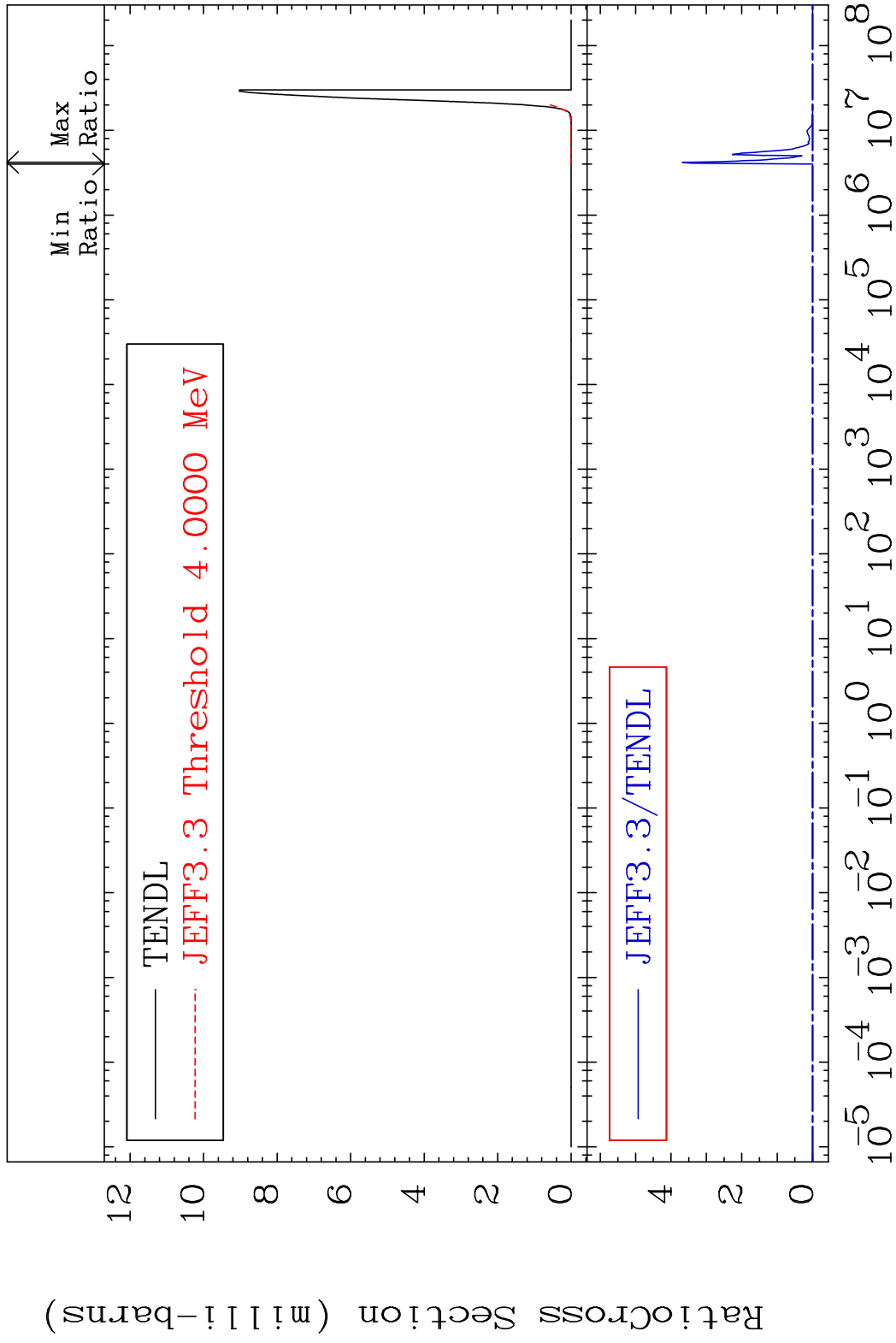
83-Bi-209

MAT 8325

(n, n') α

83-Bi-209

Cross Section -100.0 To 9999. %



6

Incident Energy (eV)

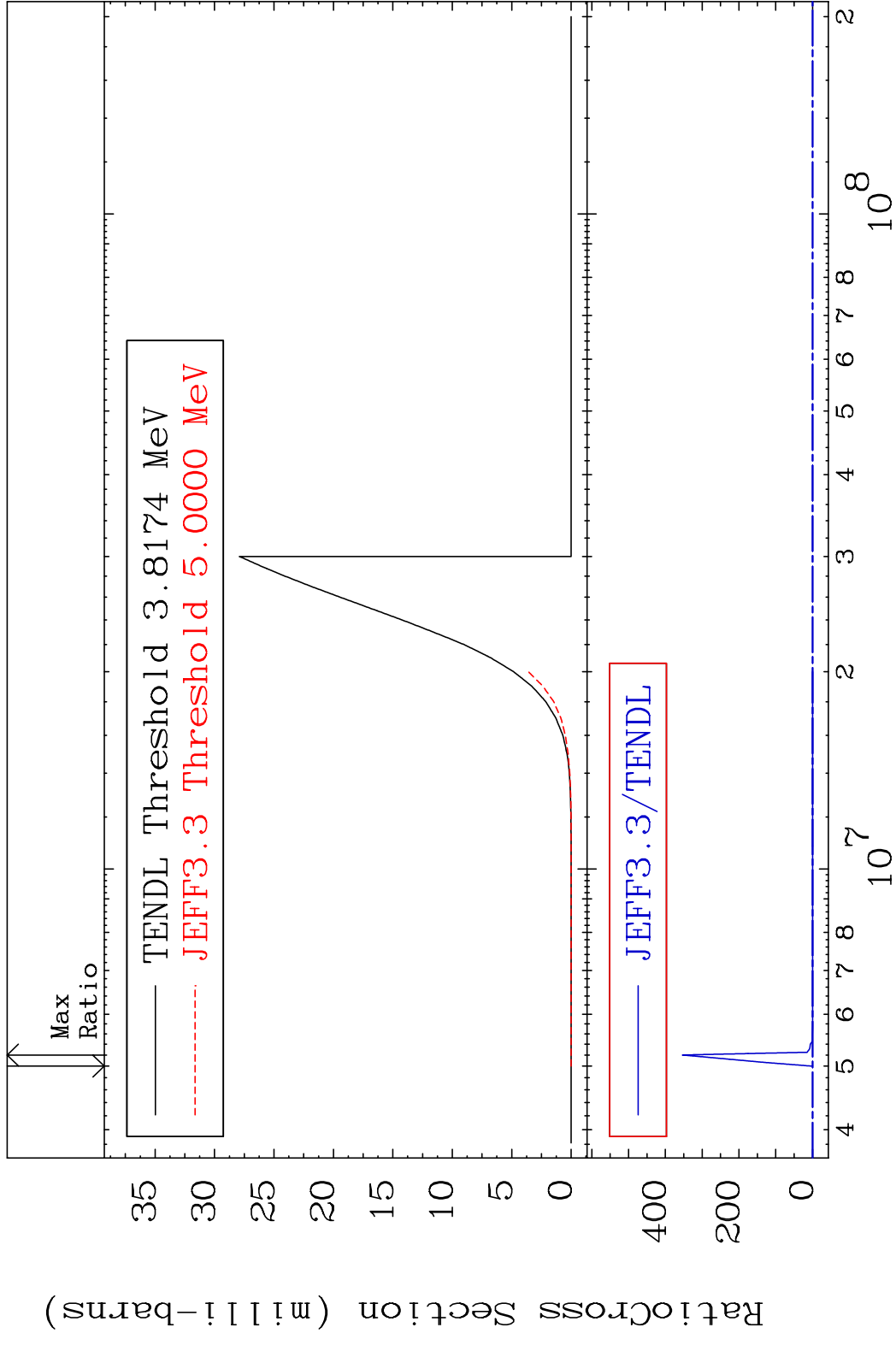
83-Bi-209

MAT 8325

(n, n') p

83-Bi-209

Cross Section -100.0 To 9999. %

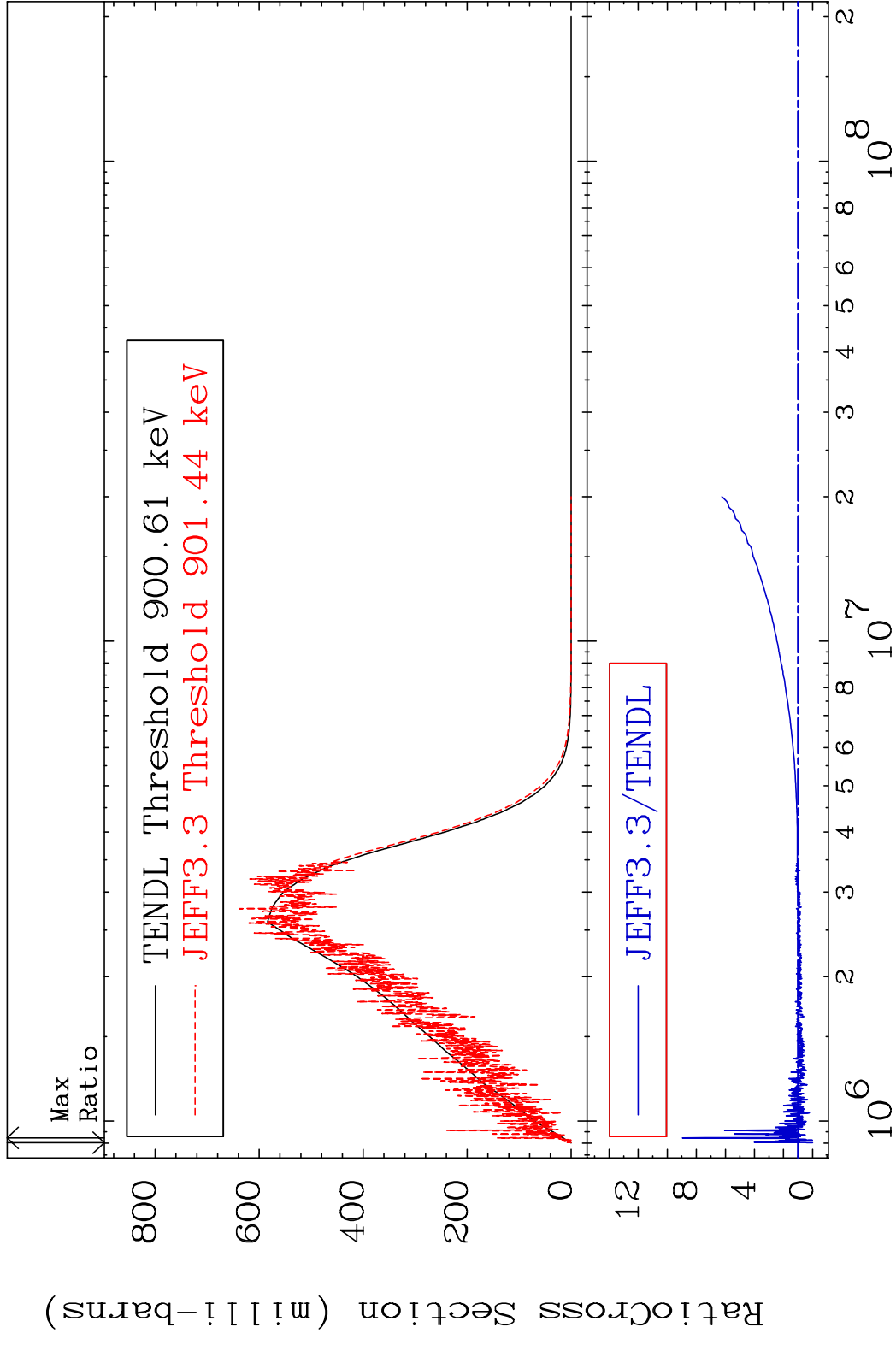


7

Incident Energy (eV)

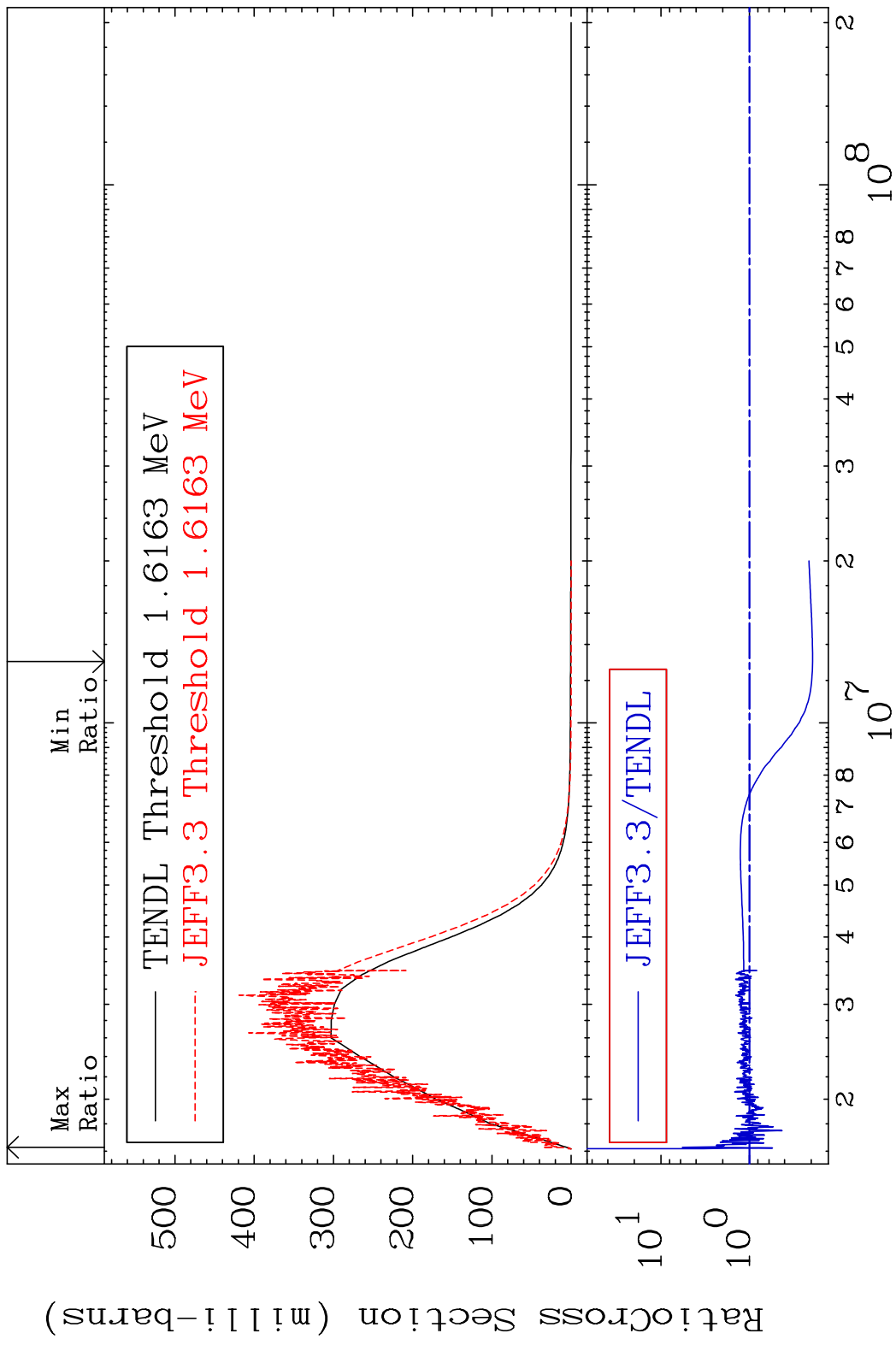
83-Bi-209

MAT 8325 MT= 51 (n, n') Level 83-Bi-209
 Cross Section -100.0 To 796.3 %

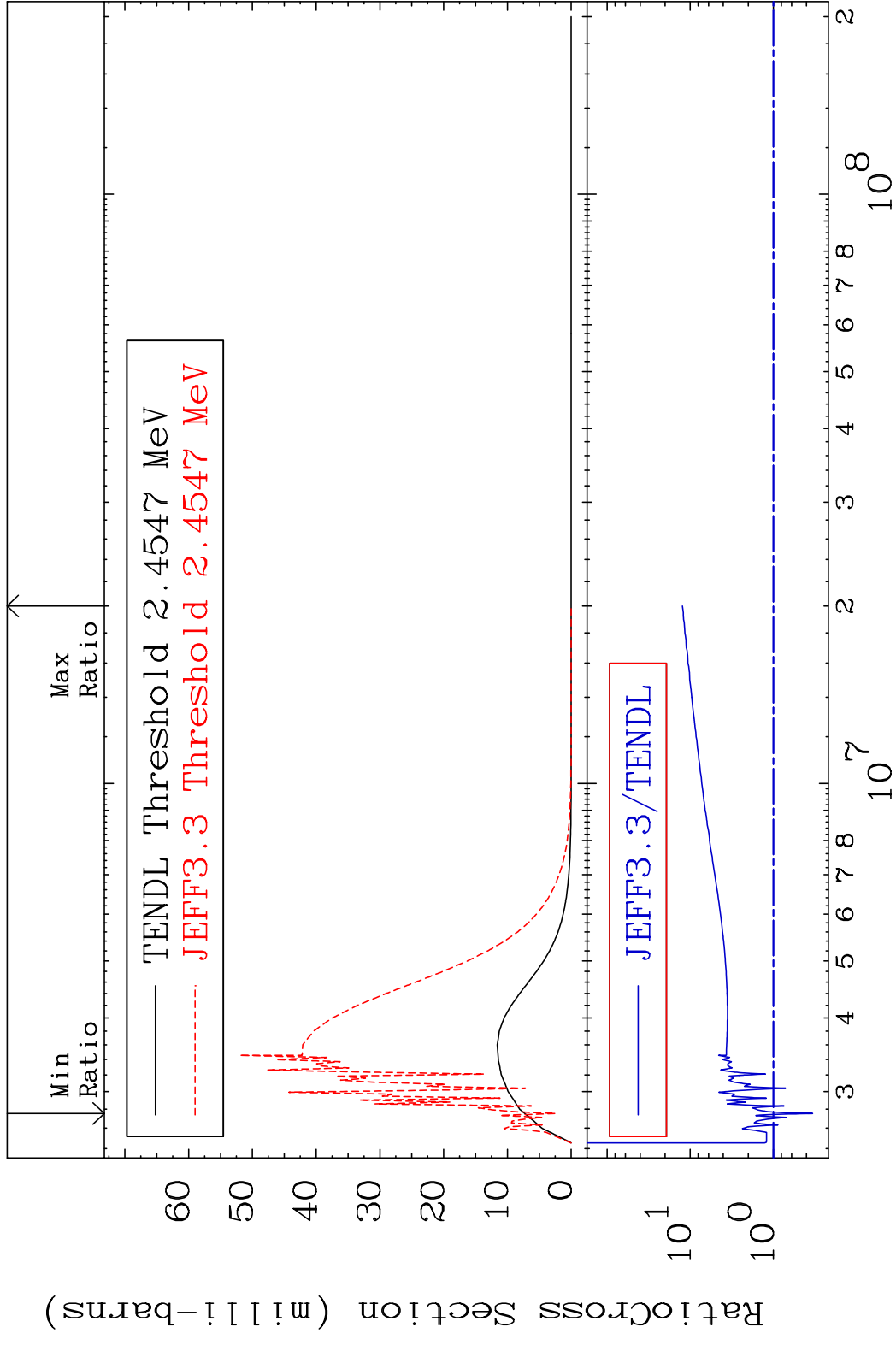


8 Incident Energy (eV) 83-Bi-209

MAT 8325 MT= 52 (n,n') Level 83-Bi-209
 Cross Section -80.70 To 472.8 %

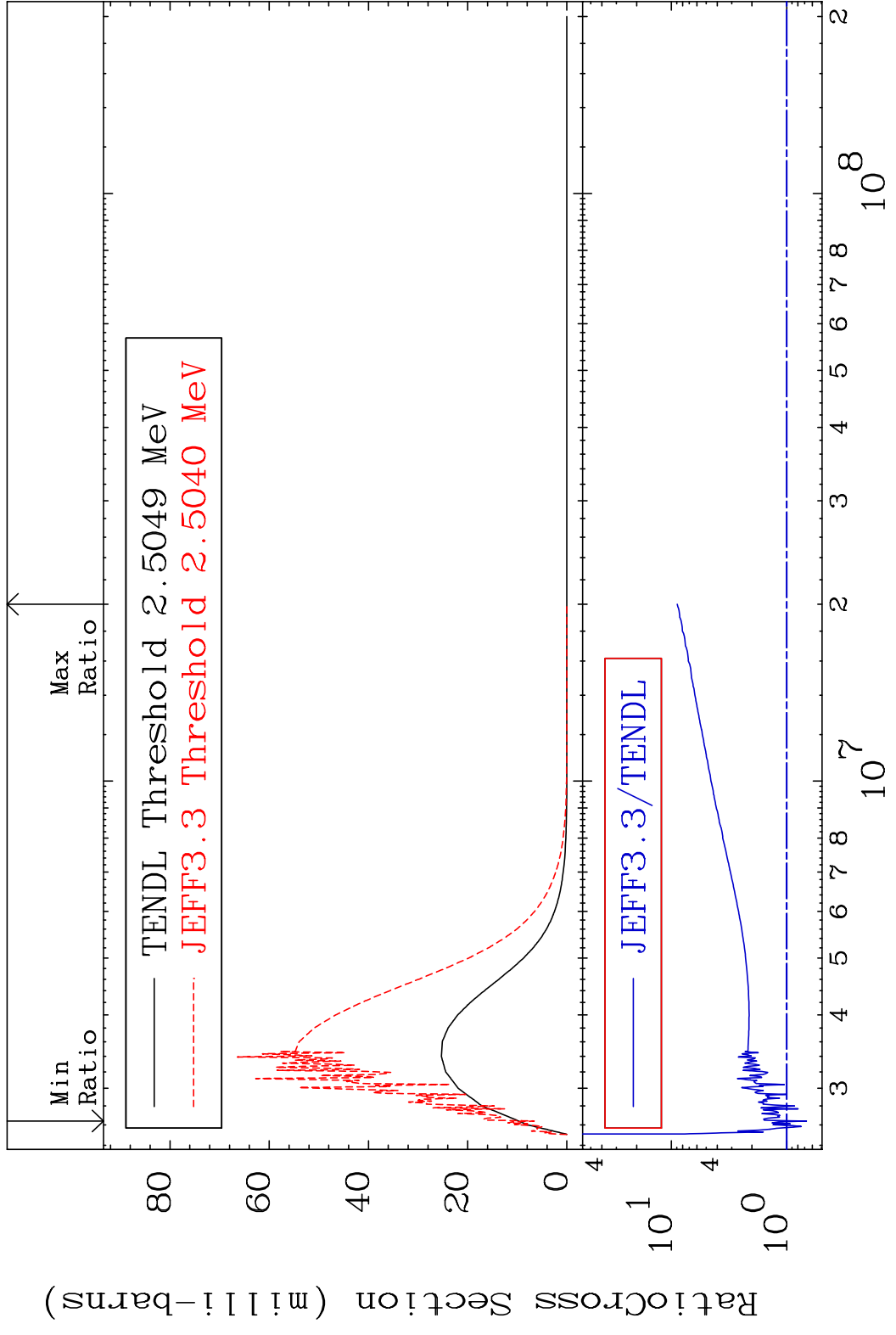


MAT 8325 MT= 53 (n, n') Level 83-Bi-209
 Cross Section -66.29 To 1141. %

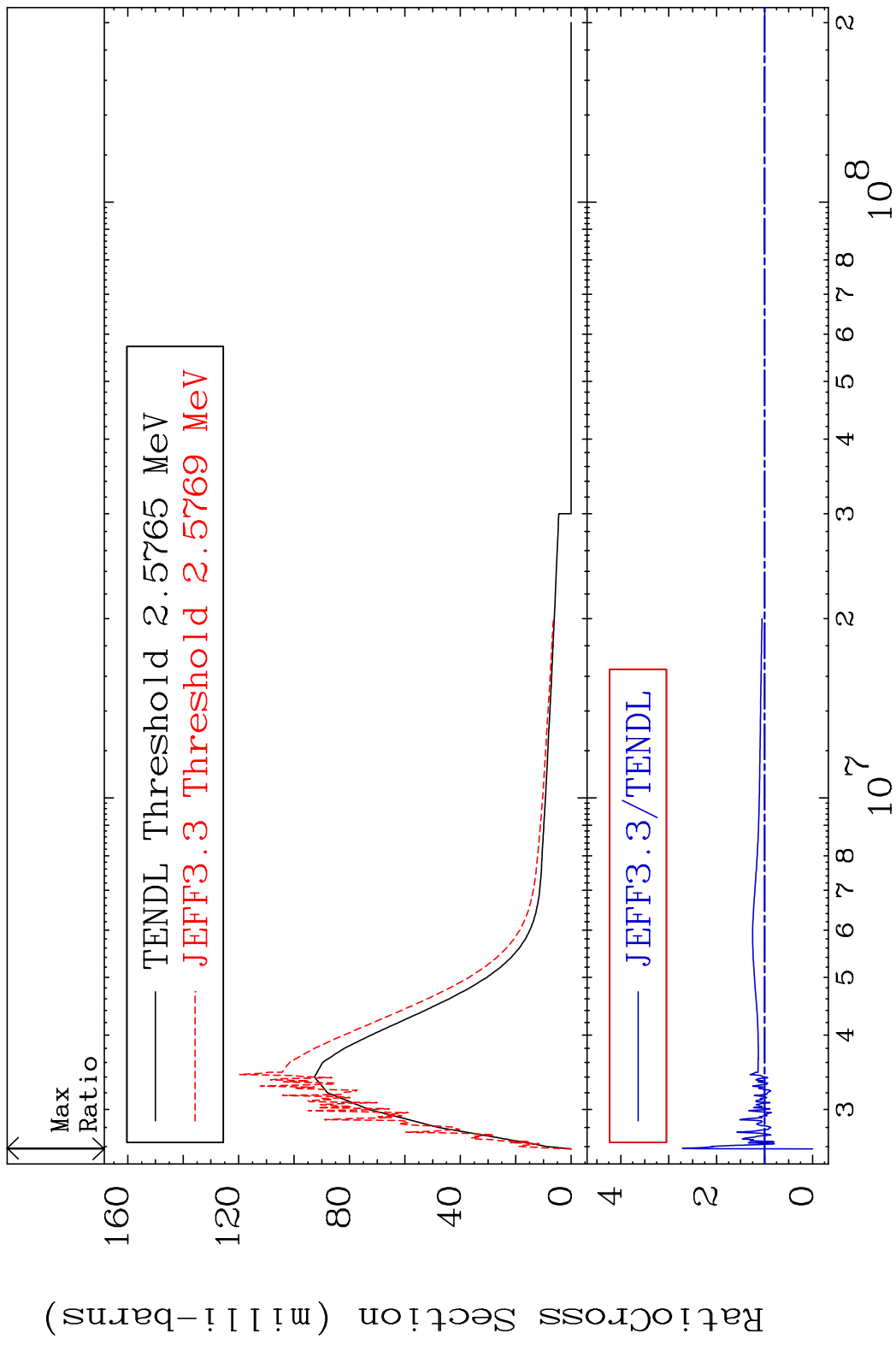


10 Incident Energy (eV) 83-Bi-209

MAT 8325 MT= 54 (n, n') Level 83-Bi-209
 Cross Section -32.53 To 790.6 %

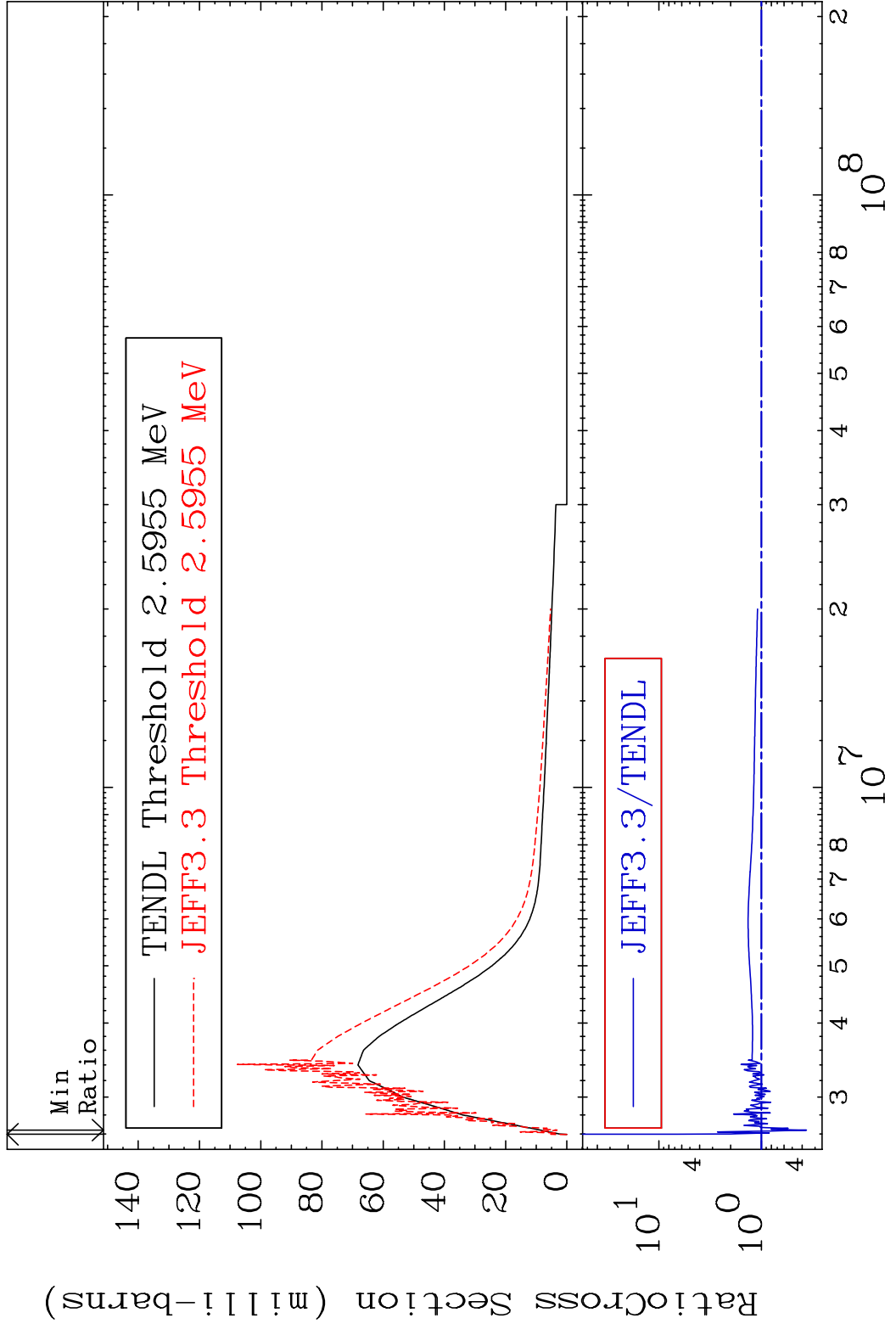


MAT 8325 MT= 55 (n, n') Level 83-Bi-209
 Cross Section -100.0 To 171.5 %

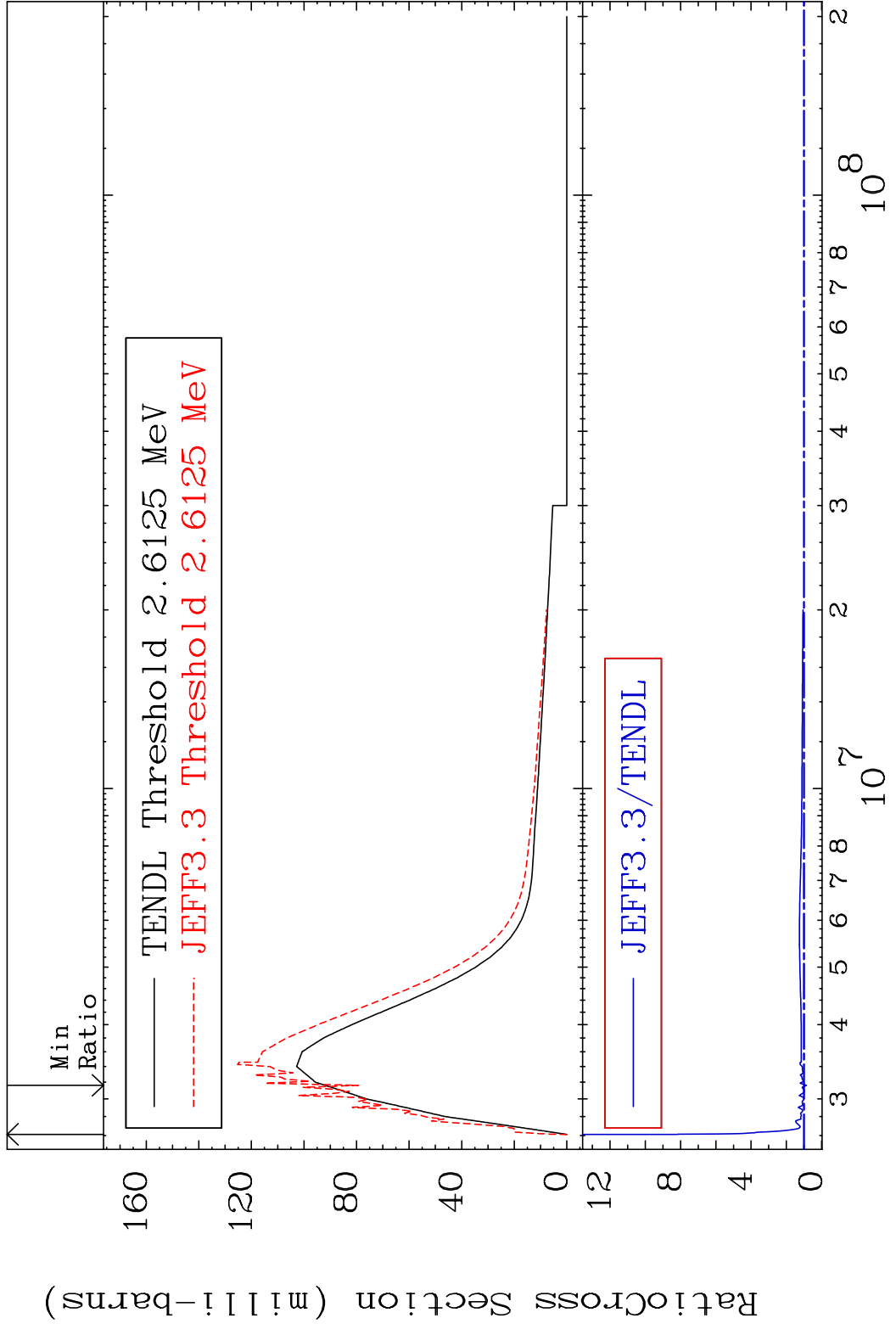


12 Incident Energy (eV) 83-Bi-209

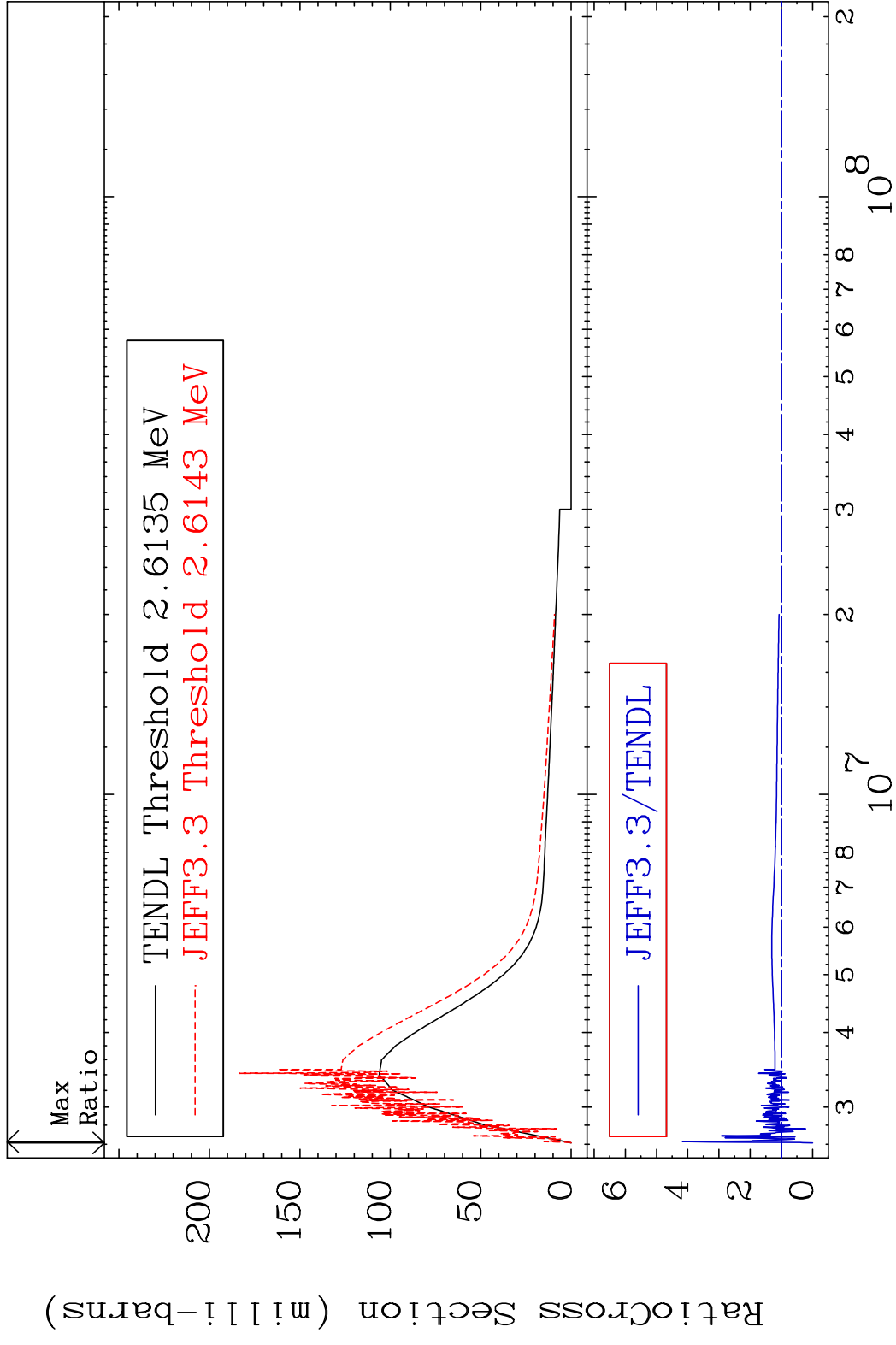
MAT 8325 MT= 56 (n,n') Level 83-Bi-209
 Cross Section -63.61 To 563.6 %



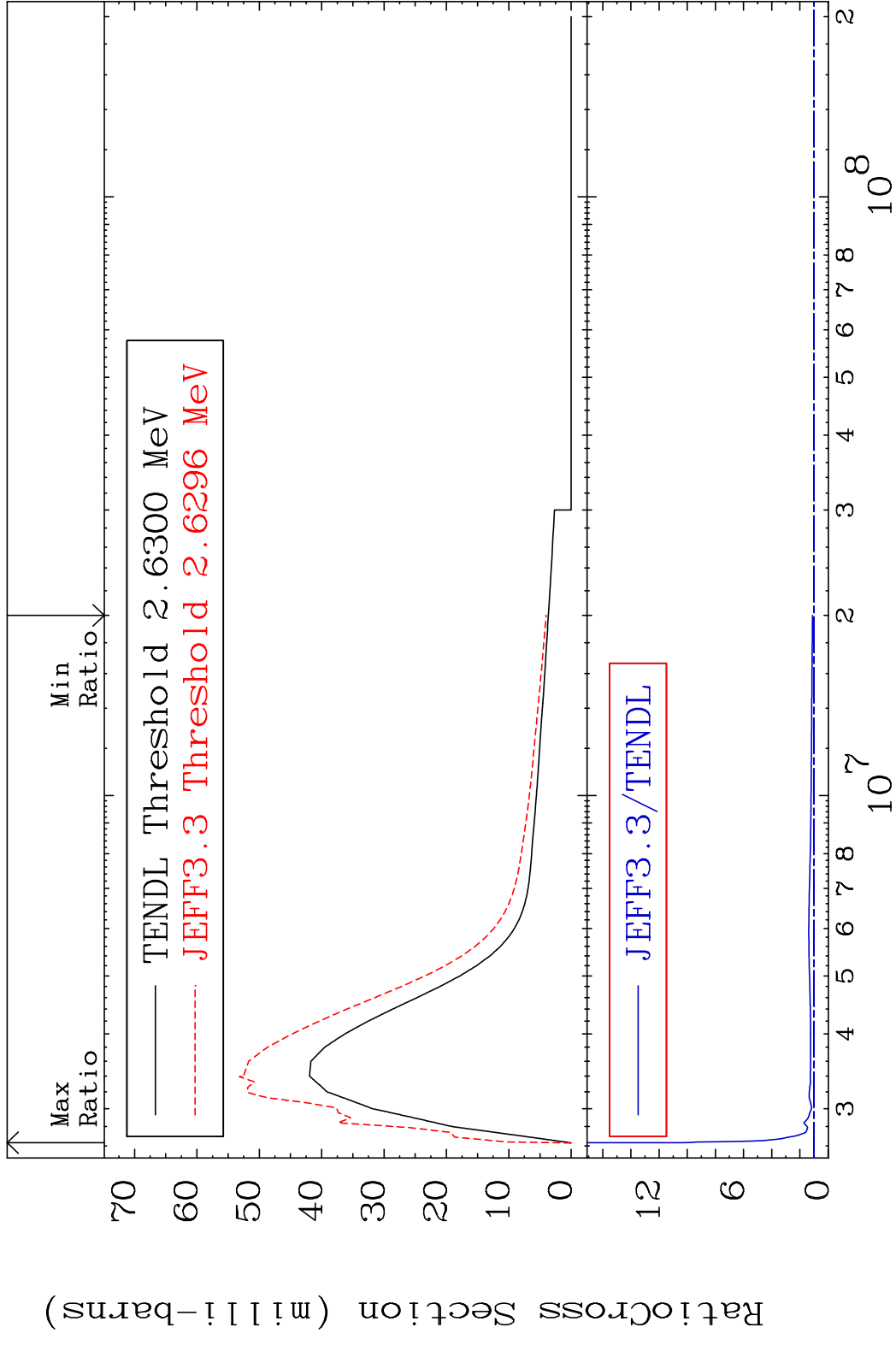
MAT 8325 MT= 57 (n, n') Level 83-Bi-209
 Cross Section -13.73 To 719.2 %



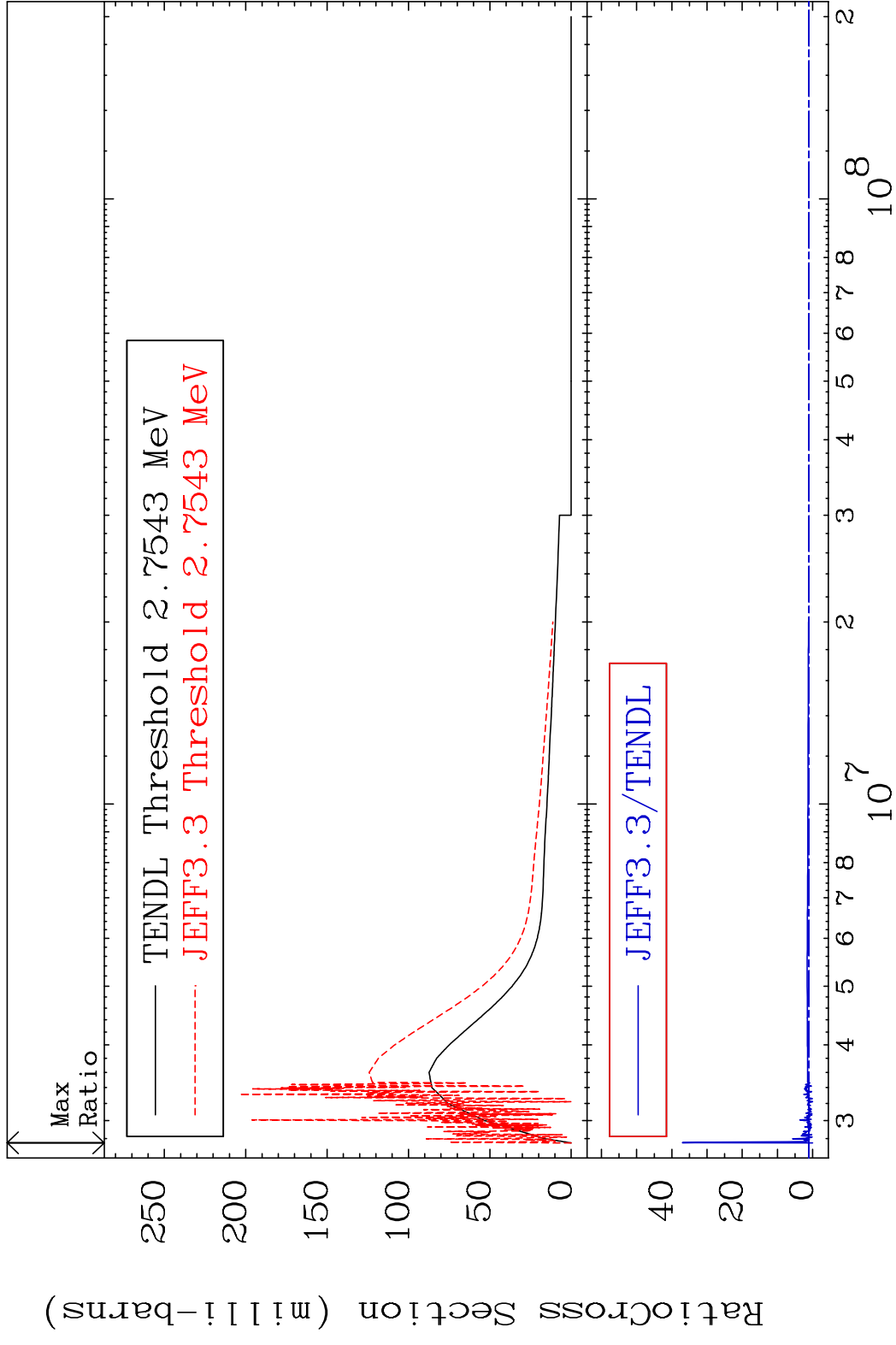
MAT 8325 MT= 58 (n, n') Level 83-Bi-209
 Cross Section -100.0 To 317.3 %



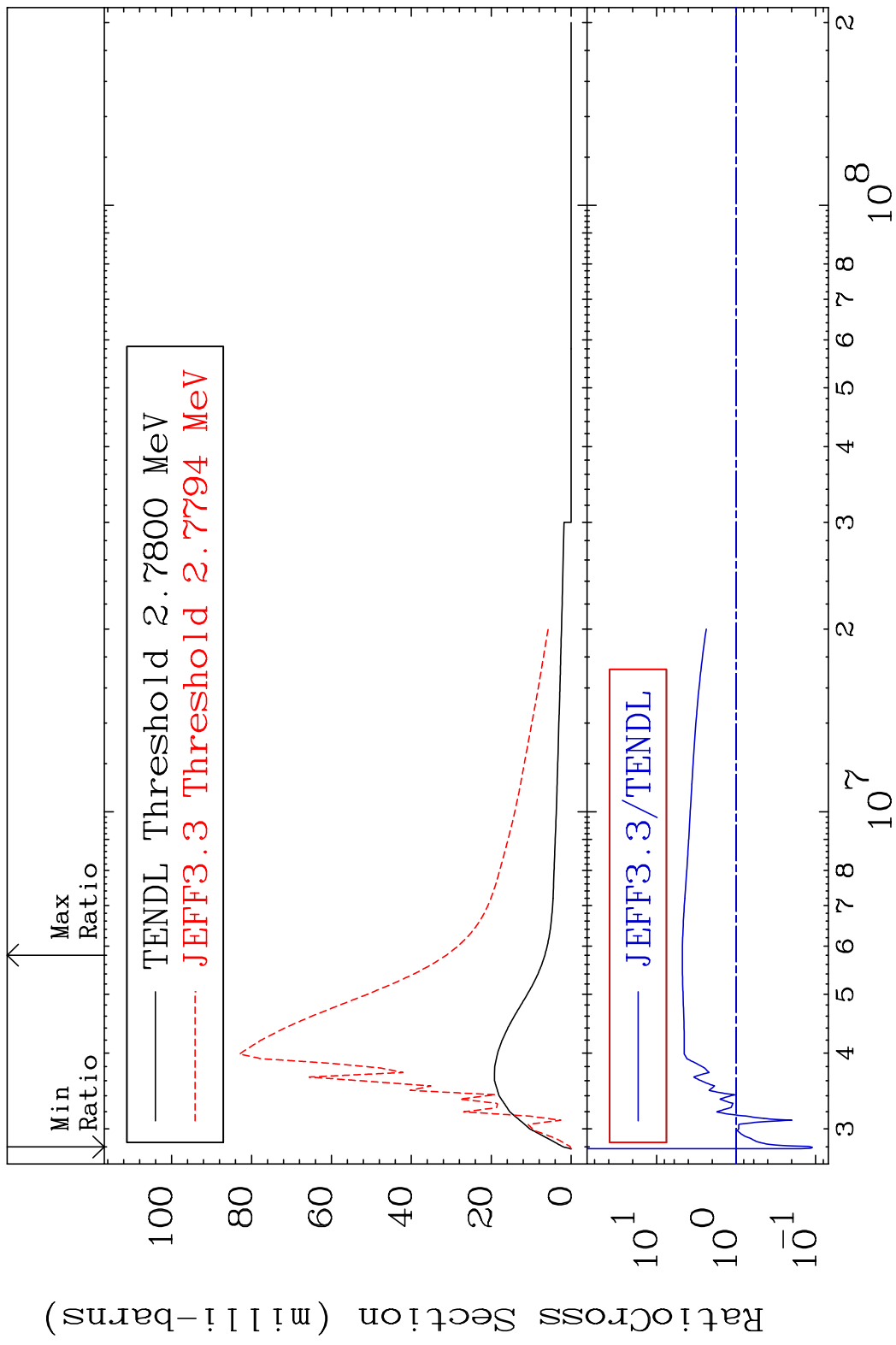
MAT 8325 MT= 59 (n, n') Level 83-Bi-209
 Cross Section 9.772 To 934.7 %



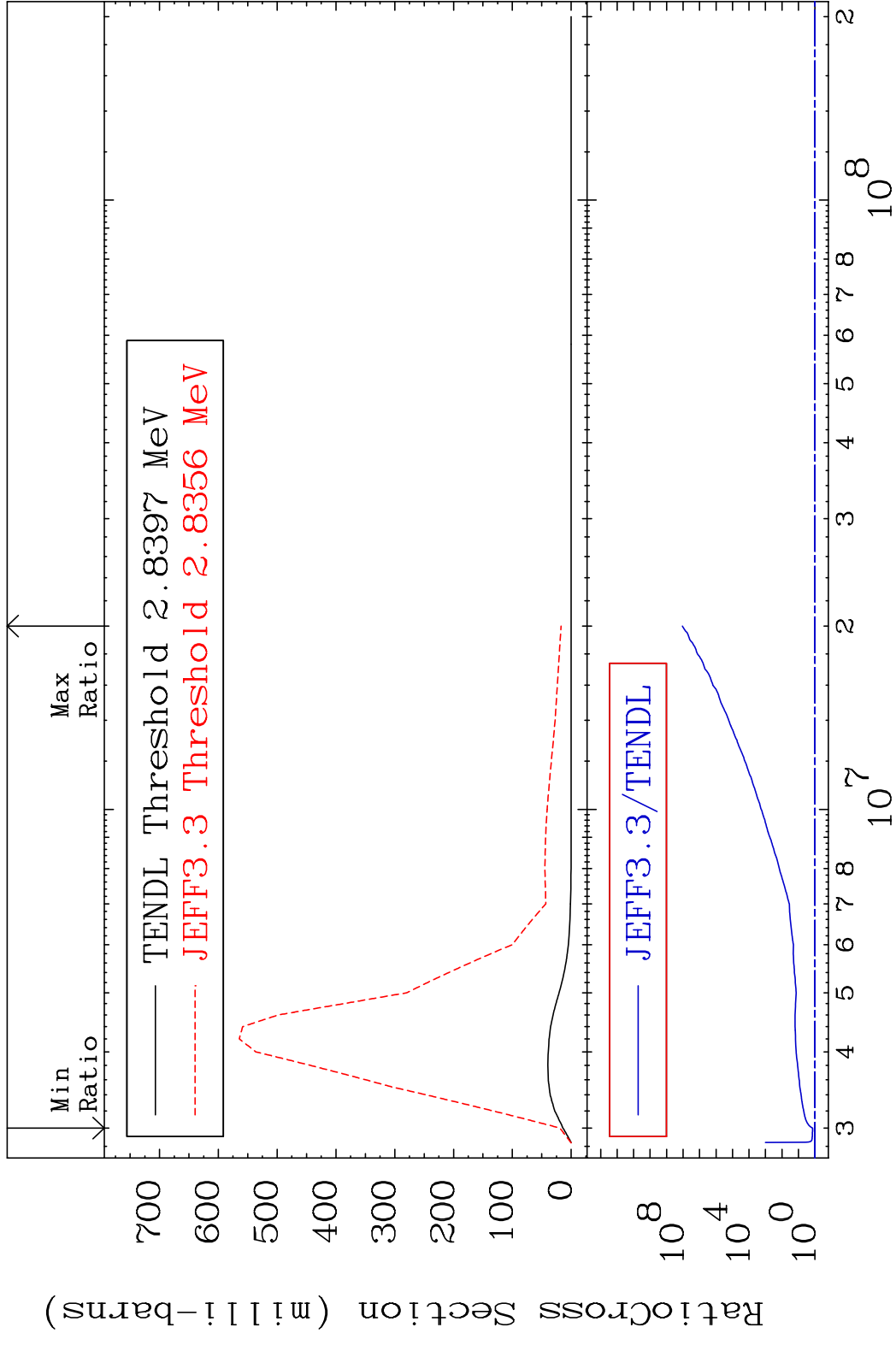
MAT 8325 MT= 60 (n,n') Level 83-Bi-209
 Cross Section -100.0 To 3601. %



MAT 8325 MT= 61 (n, n') Level 83-Bi-209
 Cross Section -89.05 To 374.4 %



MAT 8325 MT= 62 (n, n') Level 83-Bi-209
 Cross Section 38.96 To 9999. %

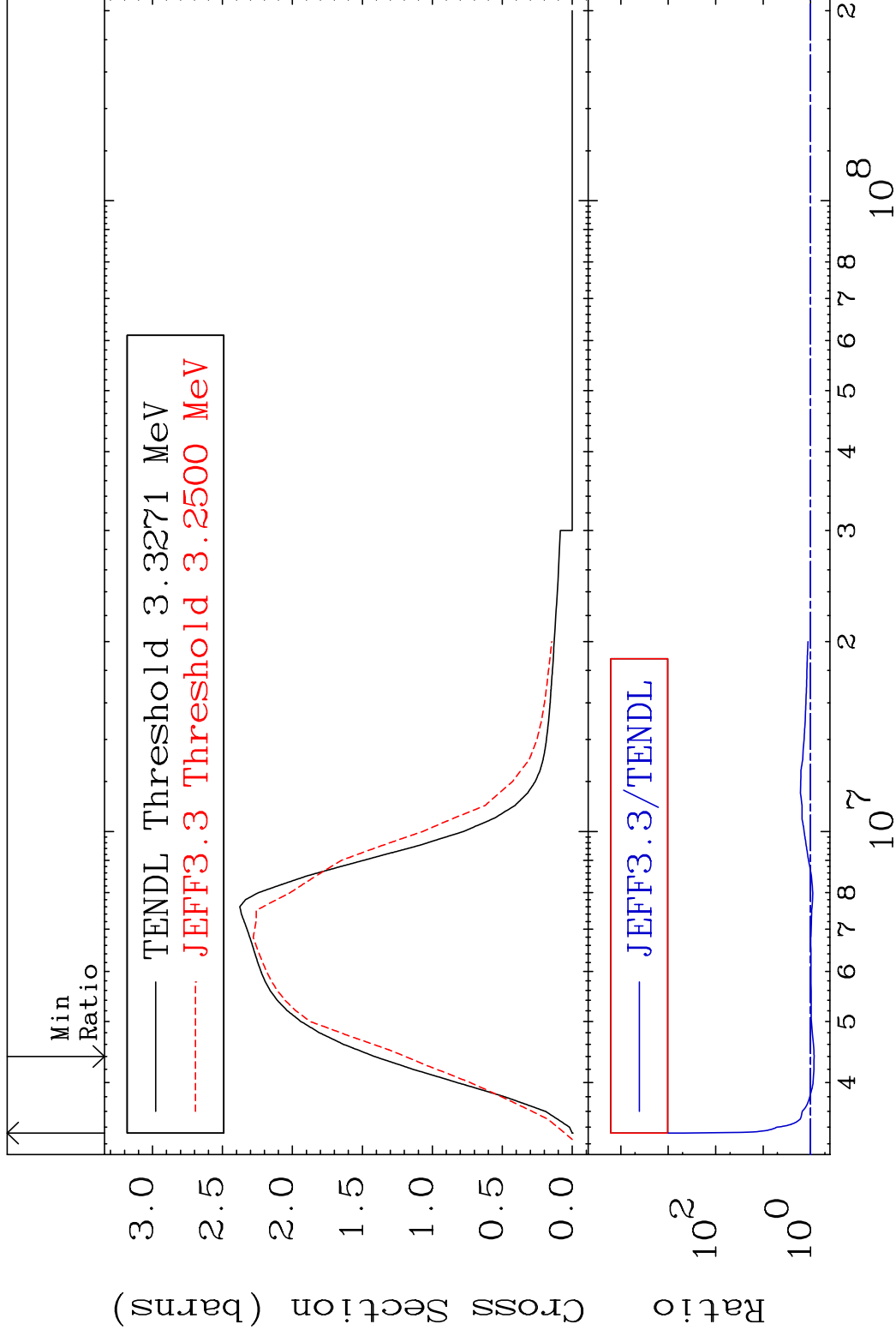


MAT 8325

(n,n') Continuum

83-Bi-209

Cross Section -15.64 To 9999. %



20

Incident Energy (eV)

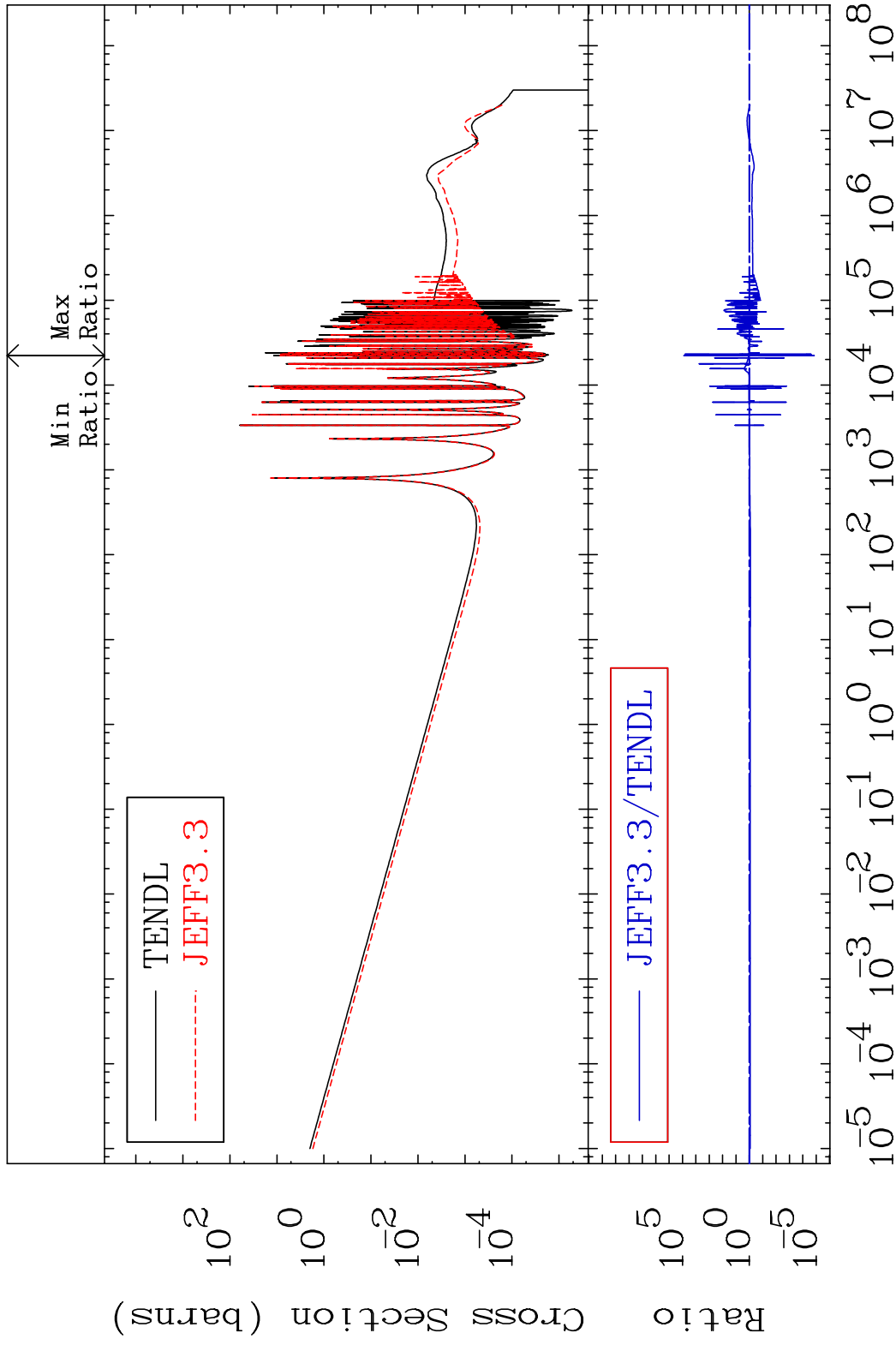
83-Bi-209

MAT 8325

(n, γ)

83-Bi-209

Cross Section -100.0 To 9999. %



21

Incident Energy (eV)

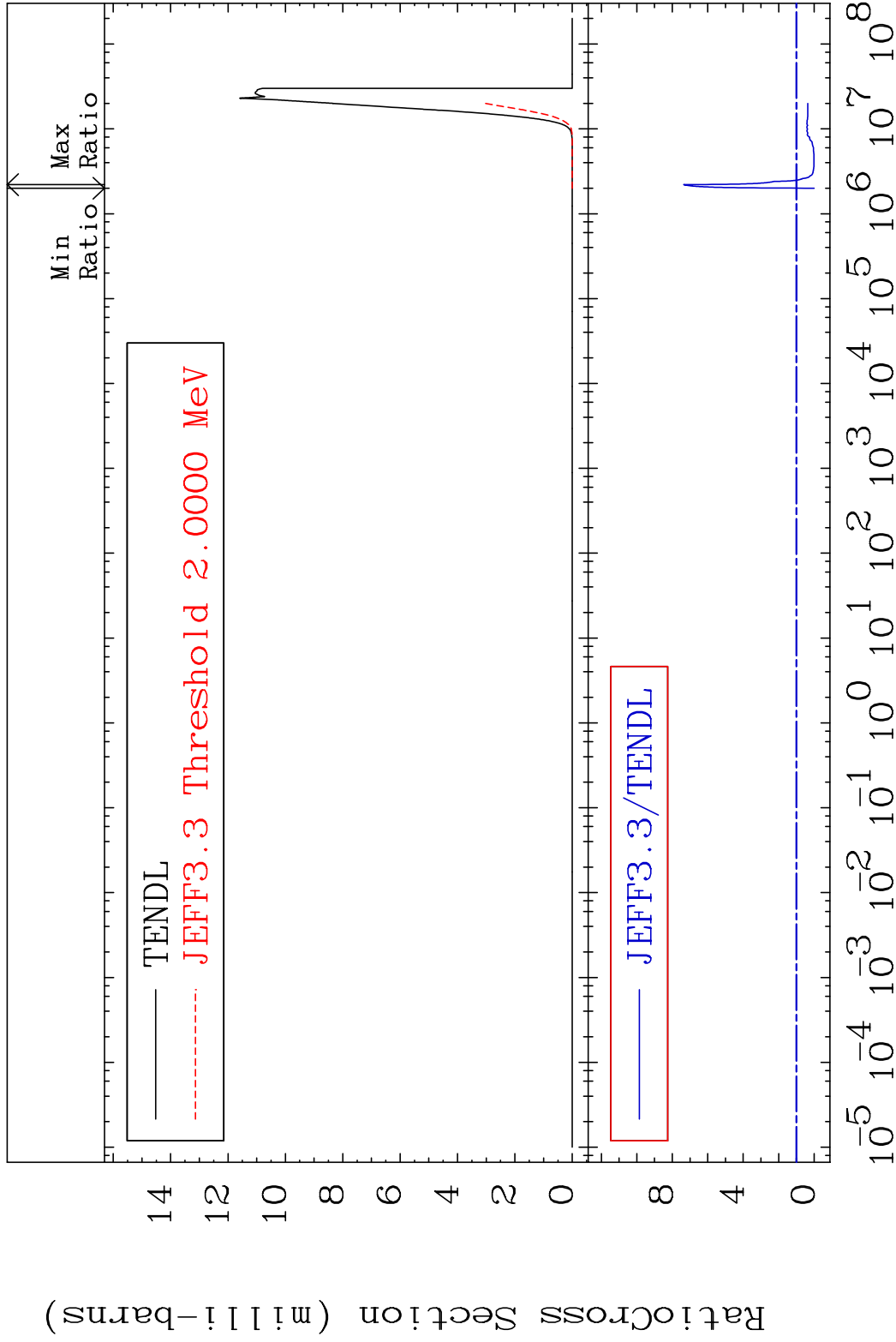
83-Bi-209

MAT 8325

(n, p)

83-Bi-209

Cross Section -100.0 To 635.8 %

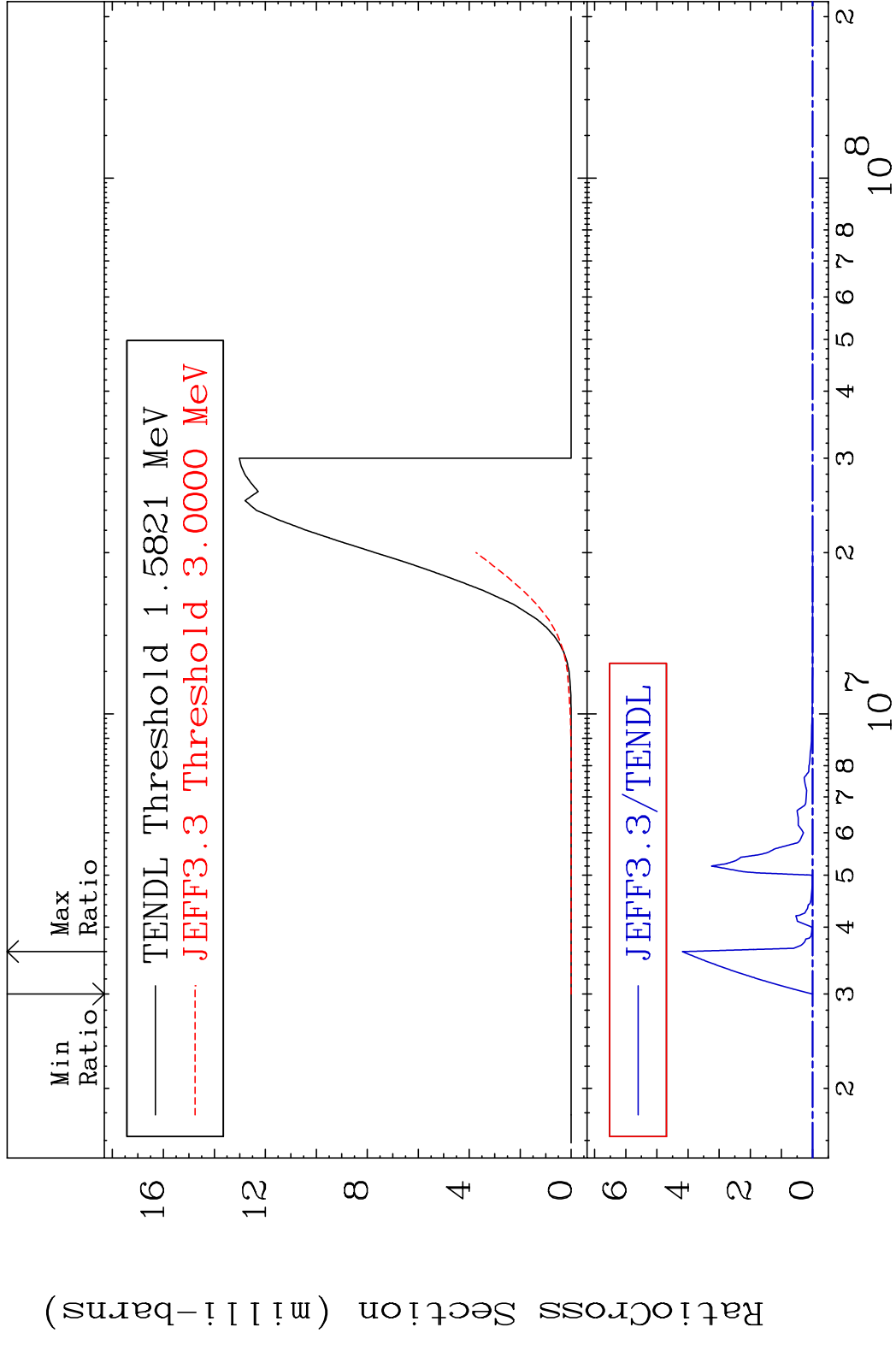


22

Incident Energy (eV)

83-Bi-209

MAT 8325 (n,d) 83-Bi-209
 Cross Section -100.0 To 9999. %



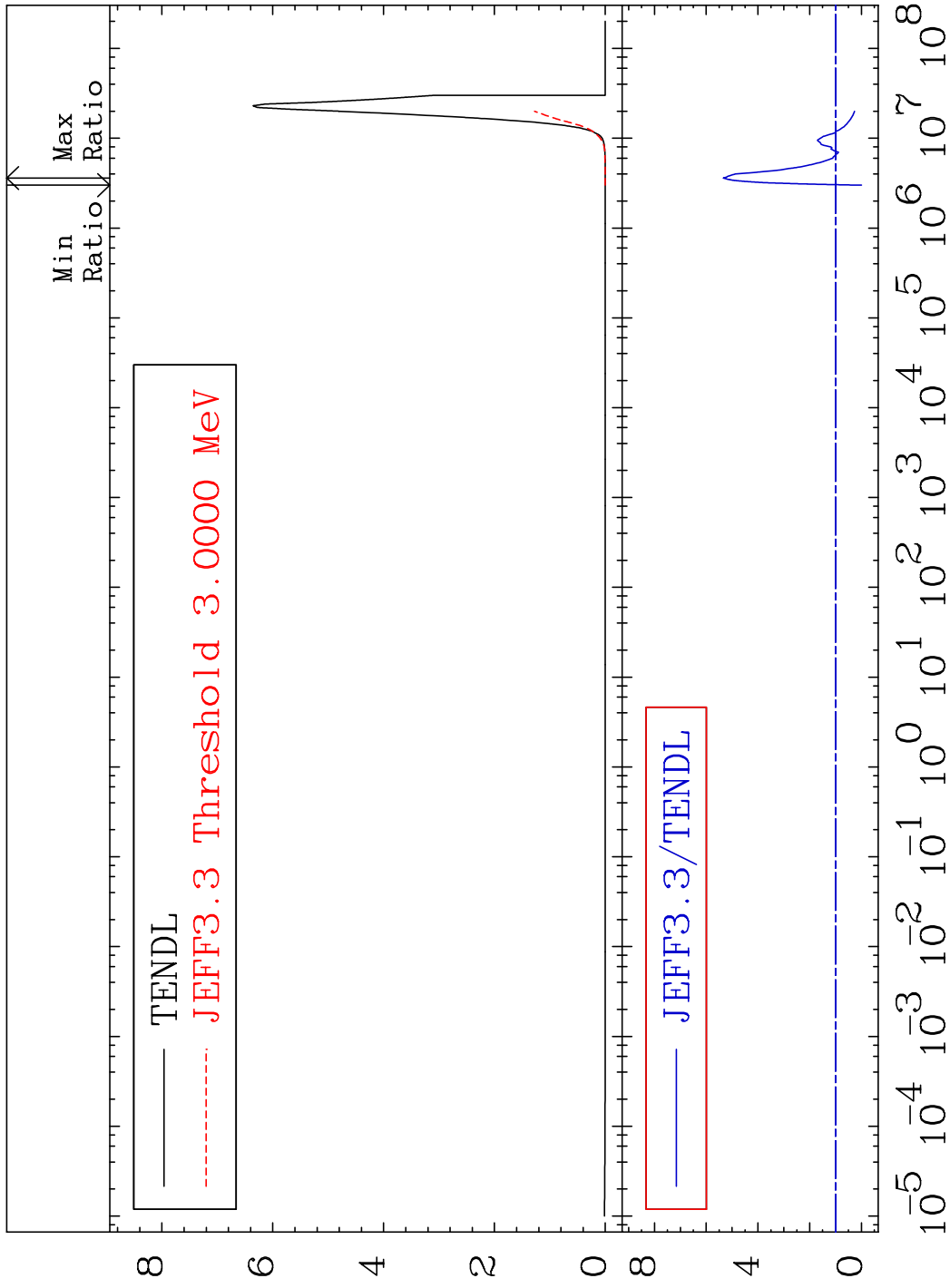
MAT 8325

(n, α)

83-Bi-209

Cross Section -100.0 To 434.1 %

RatioCross Section (milli-barns)



24

Incident Energy (eV)

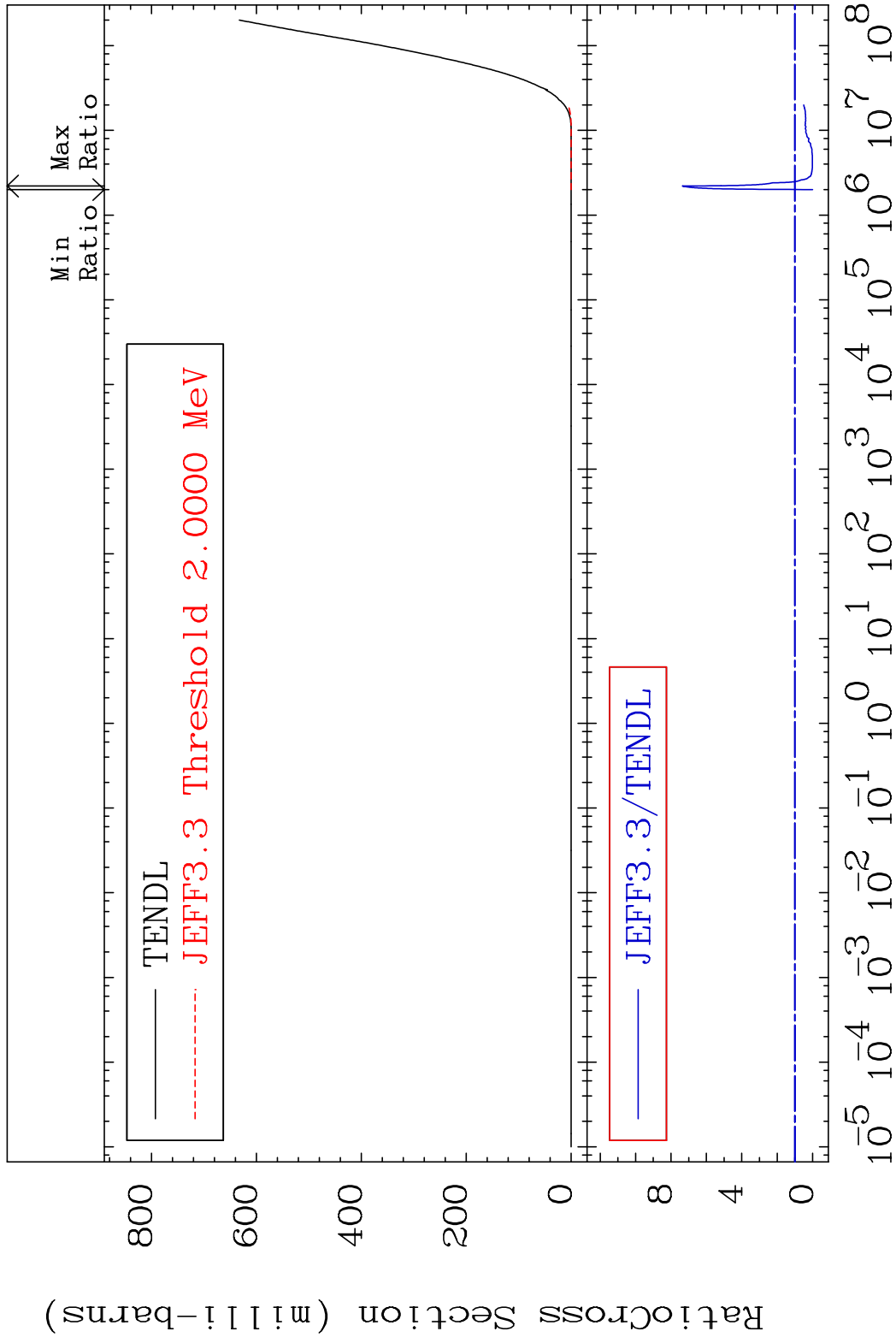
83-Bi-209

MAT 8325

Hydrogen Production

83-Bi-209

Cross Section -100.0 To 635.8 %

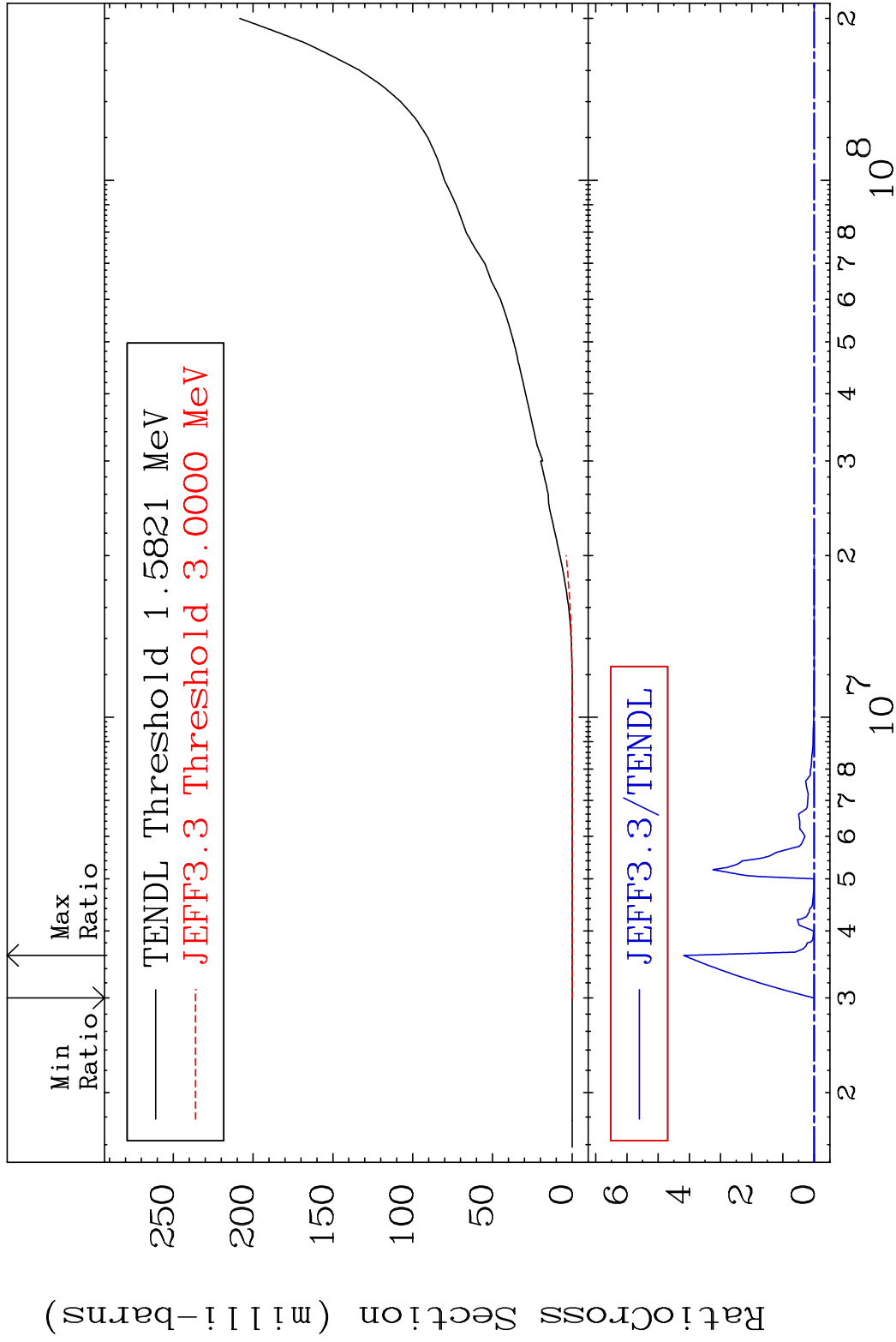


25

Incident Energy (eV)

83-Bi-209

Cross Section -100.0 To 9999. %

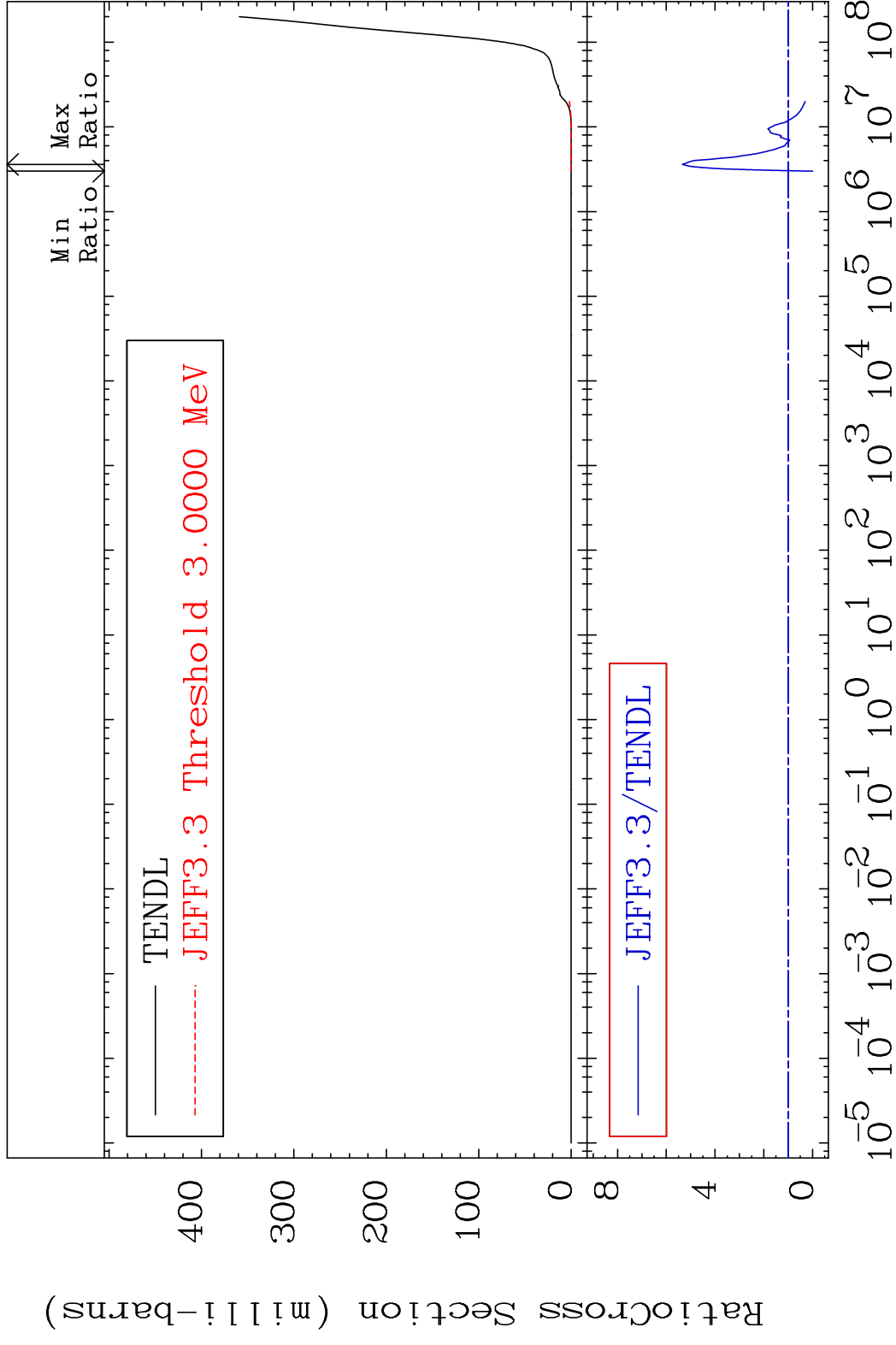


MAT 8325

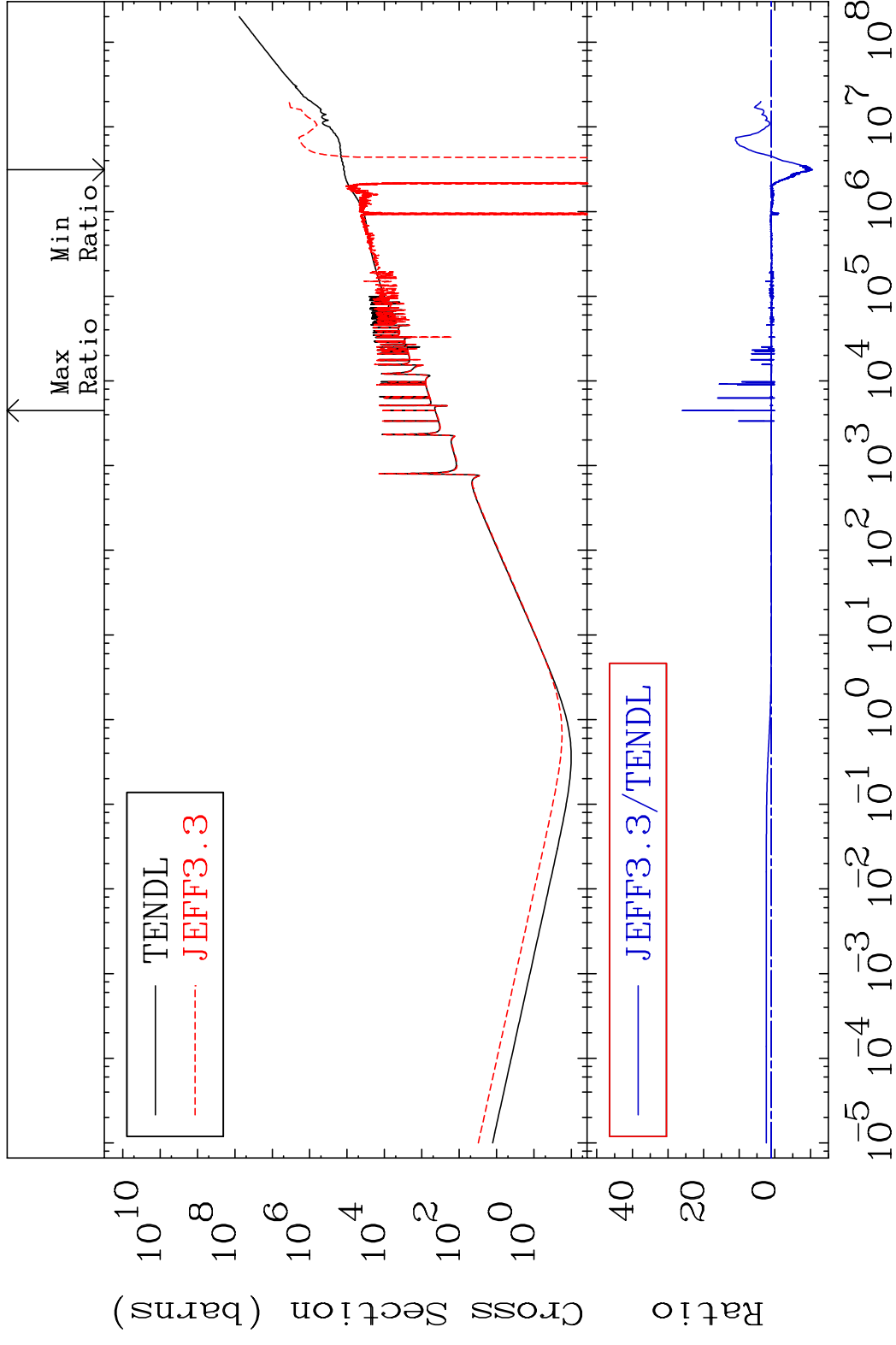
He-4 Production

83-Bi-209

Cross Section -100.0 To 434.1 %



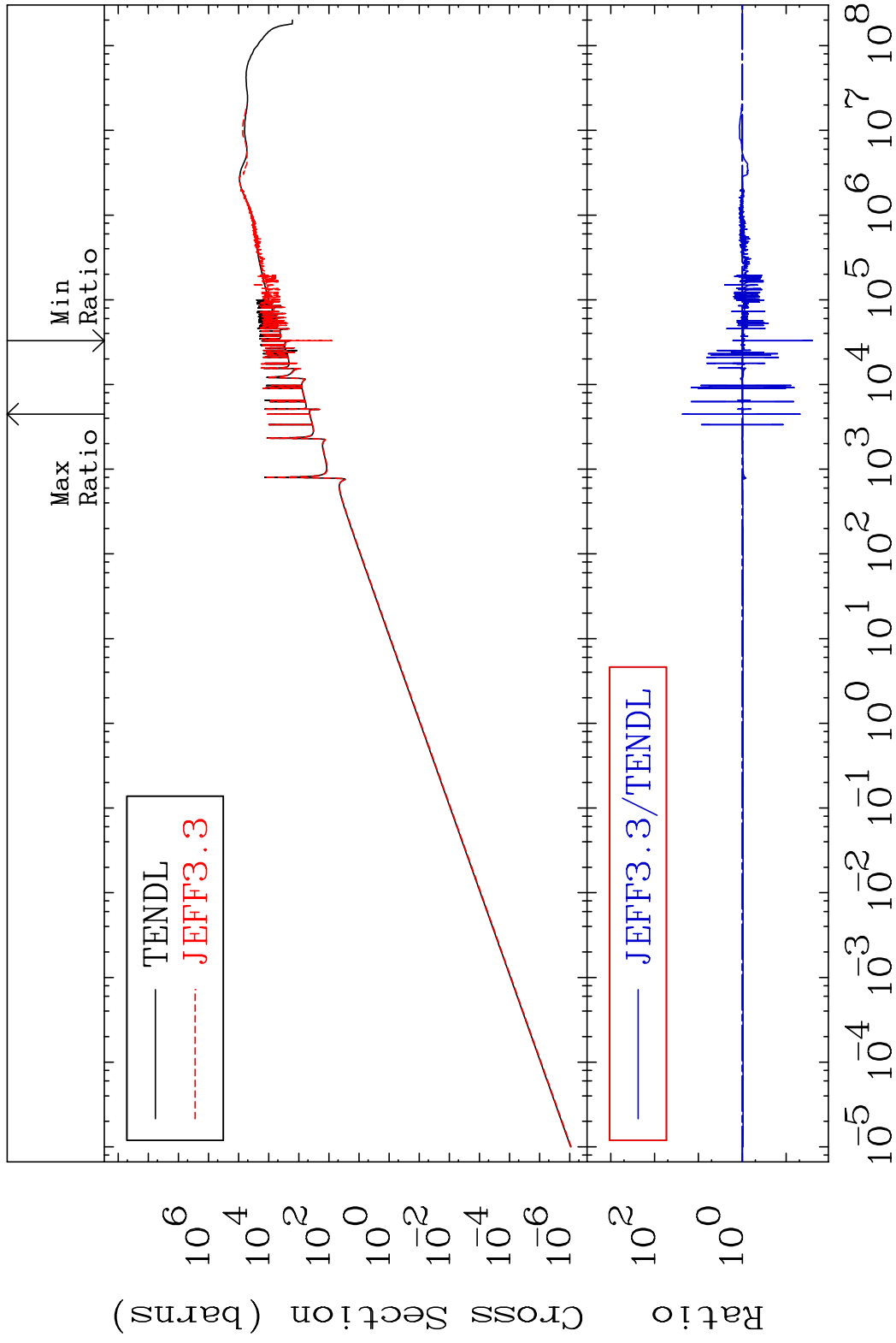
MAT 8325 Kerma total (eV-barns) 83-Bi-209
 Cross Section -1158. To 2497. %



MAT 8325

Kerma elastic
Cross Section

83-Bi-209
-97.51 To 2224. %

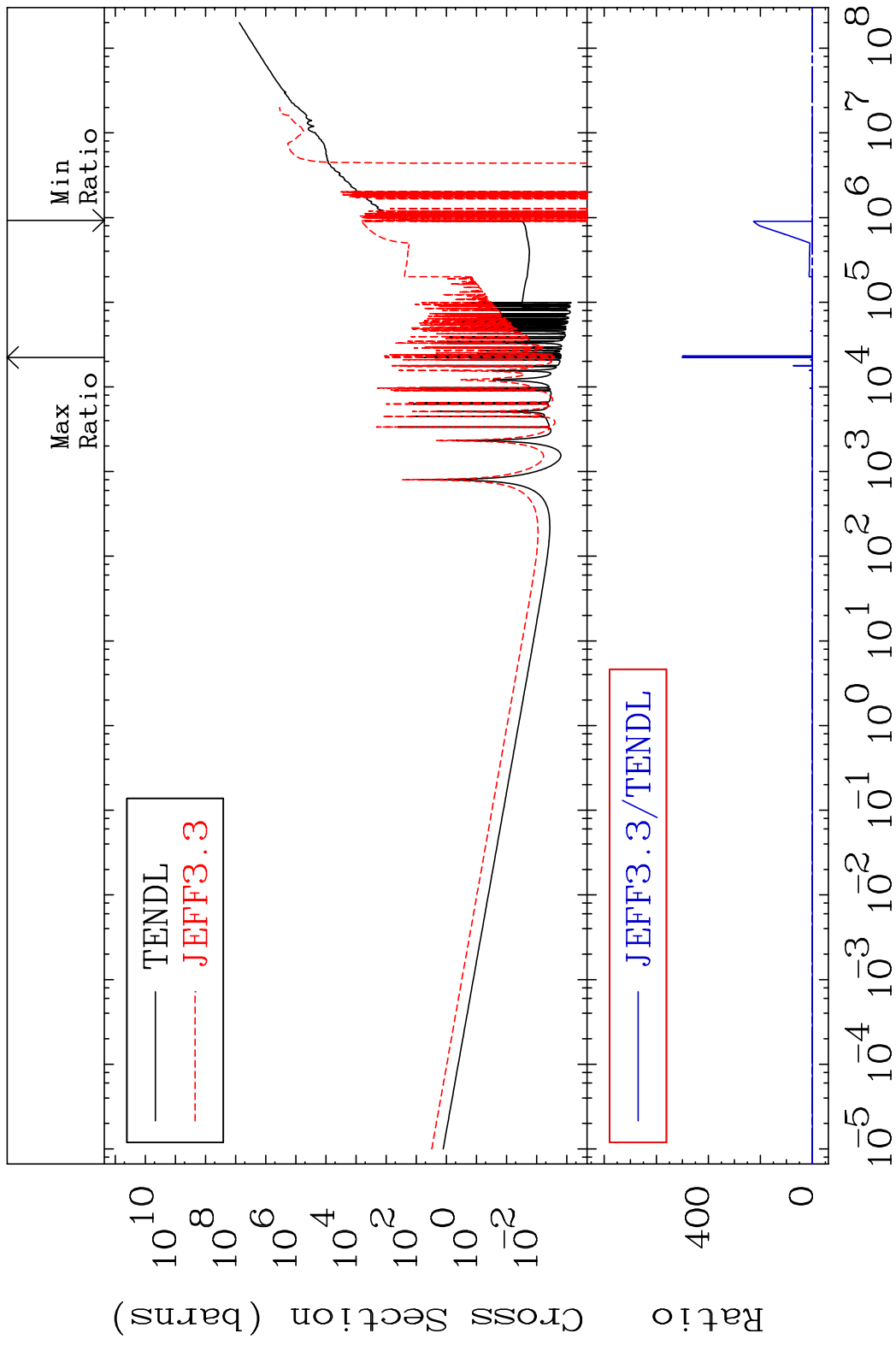


29

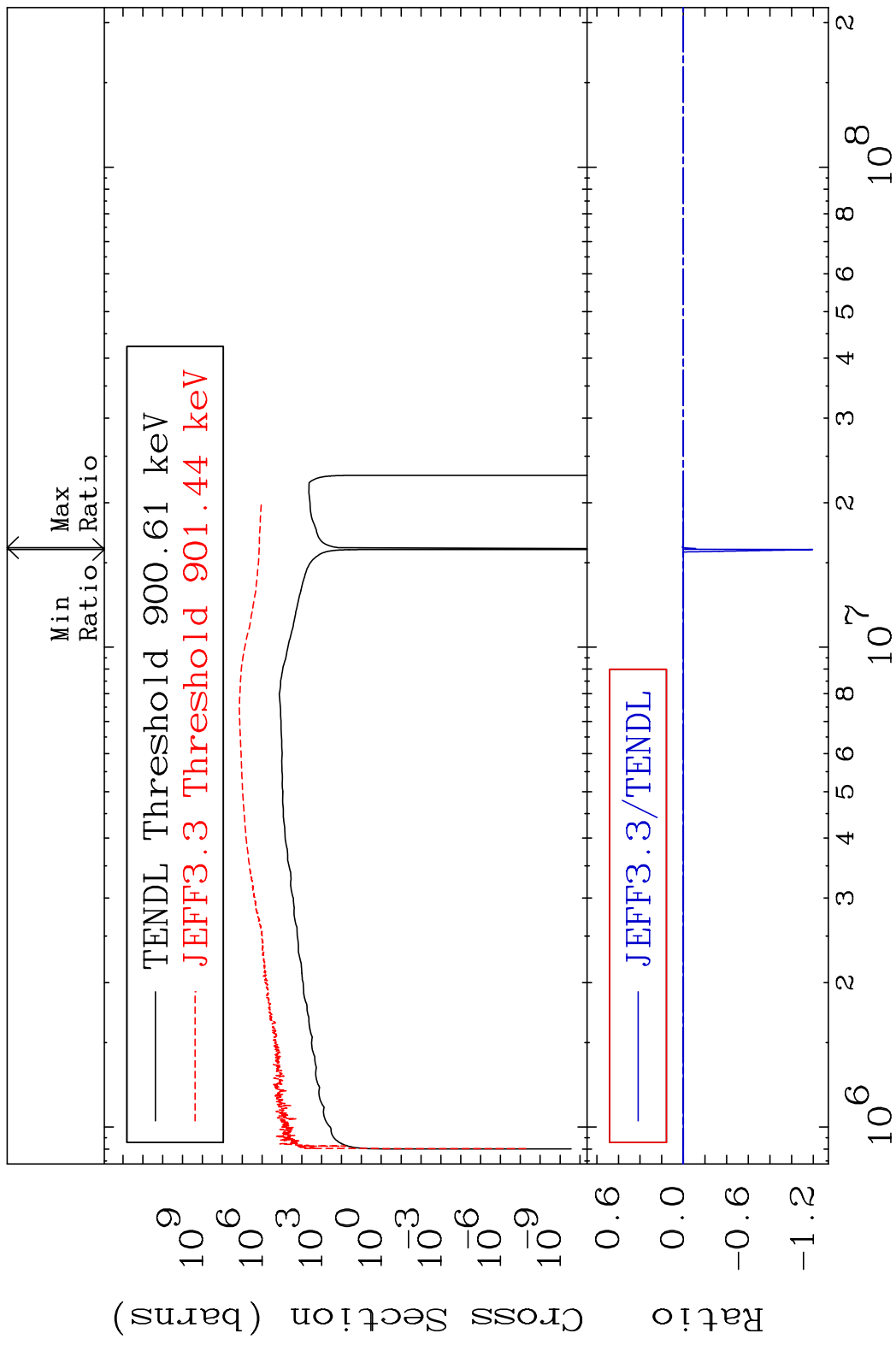
Incident Energy (eV)

83-Bi-209

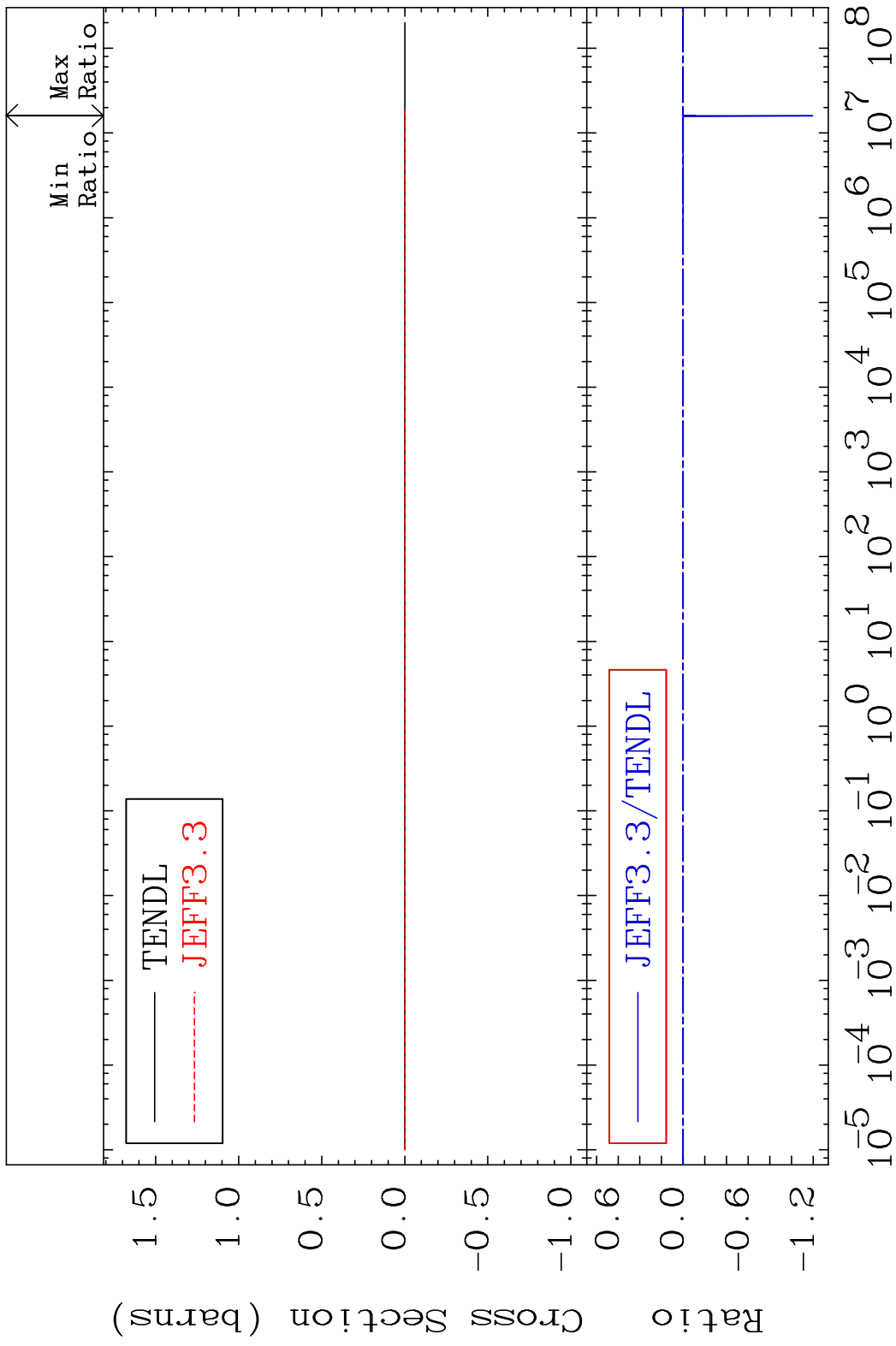
MAT 8325 Kerma non-elastic (all but mt2) 83-Bi-209
 Cross Section -9999. To 9999. %



30 Incident Energy (eV) 83-Bi-209



MAT 8325 Kerma fission (mt18 or mt19-20-21-38) β 3-Bi-209
 Cross Section -9999. To 9999. %

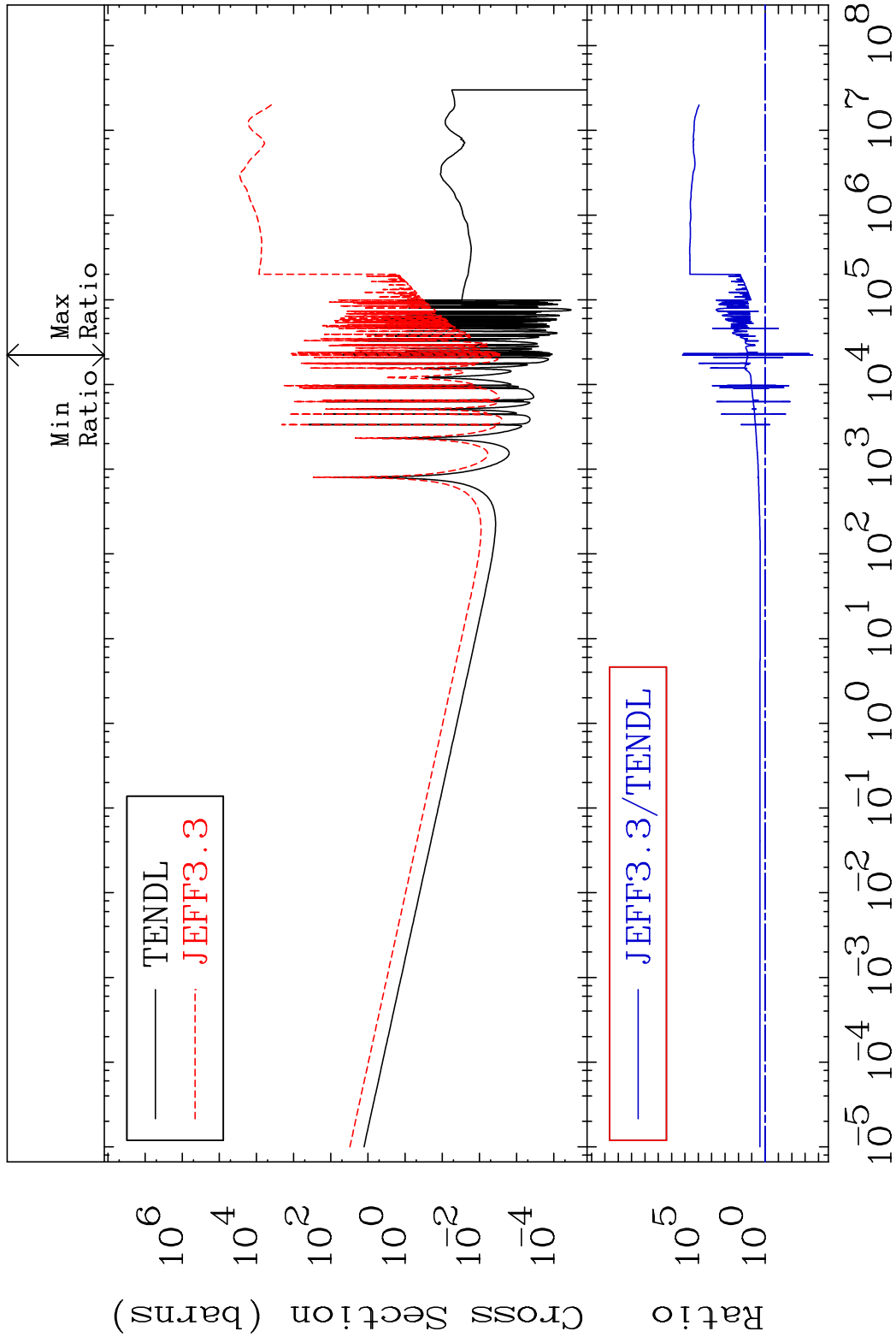


MAT 8325

Kerma capture (mt102)

83-Bi-209

Cross Section -99.97 To 9999. %



33

Incident Energy (eV)

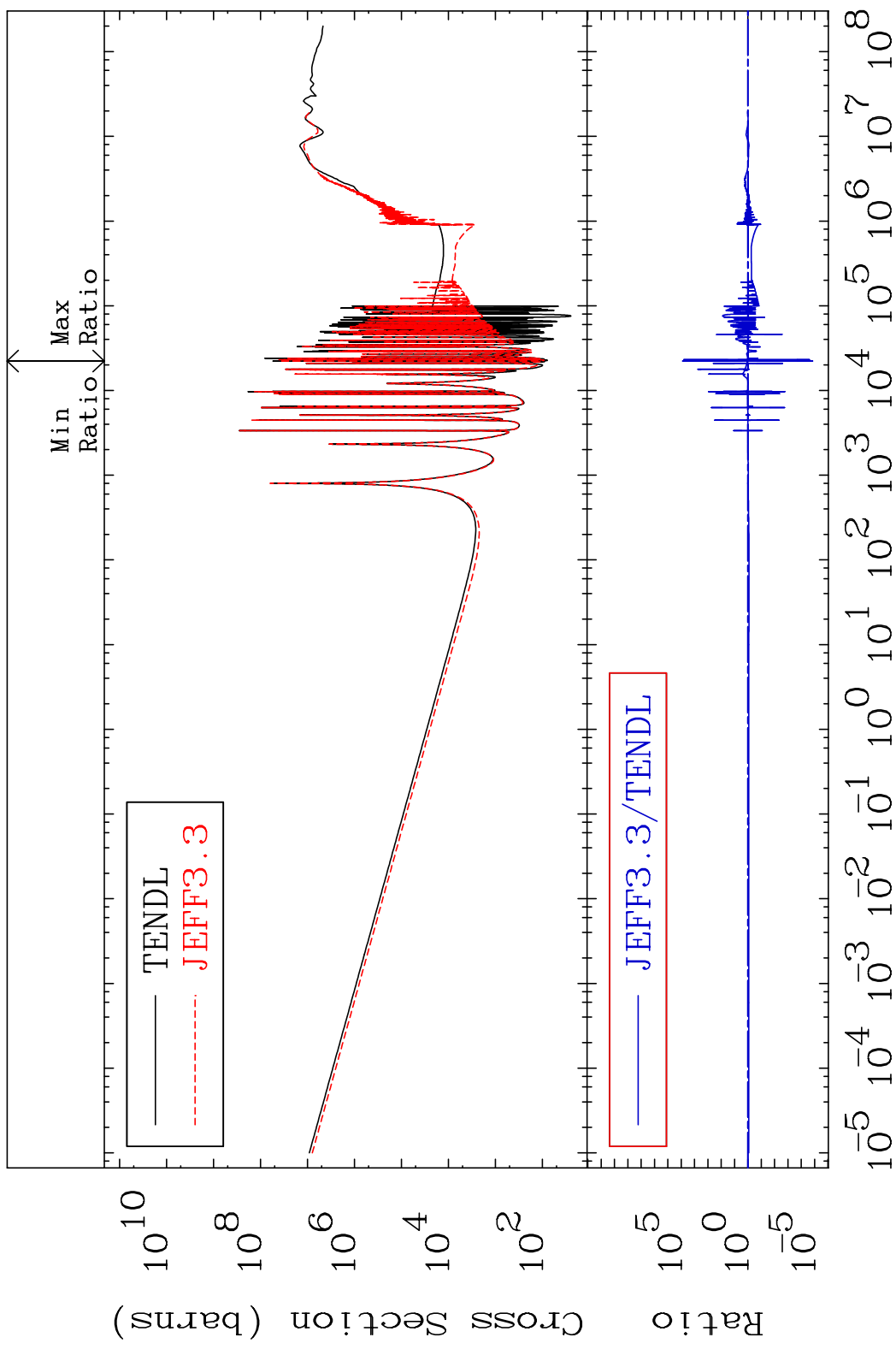
83-Bi-209

MAT 8325

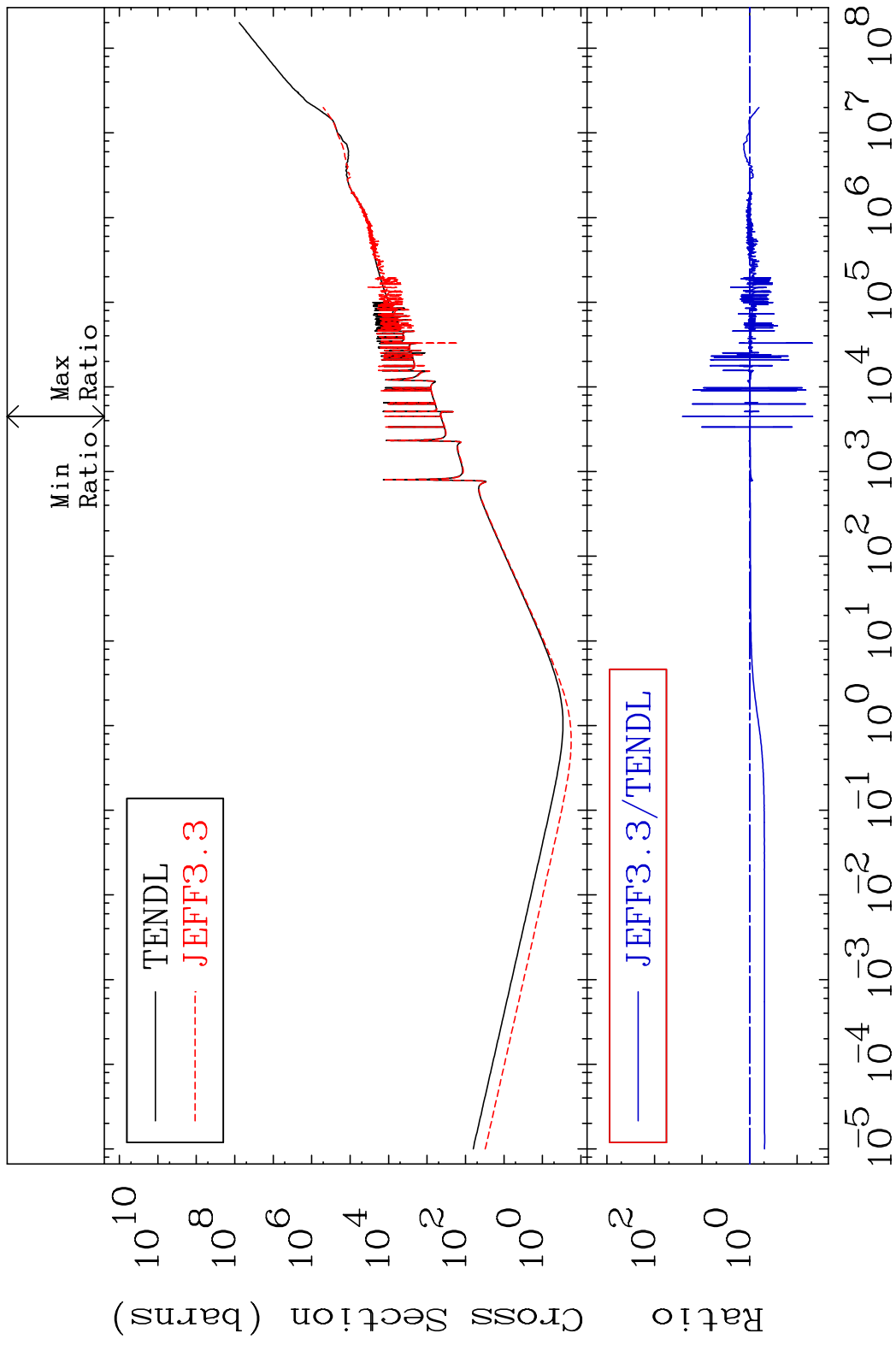
Total photon (eV-barns)

83-Bi-209

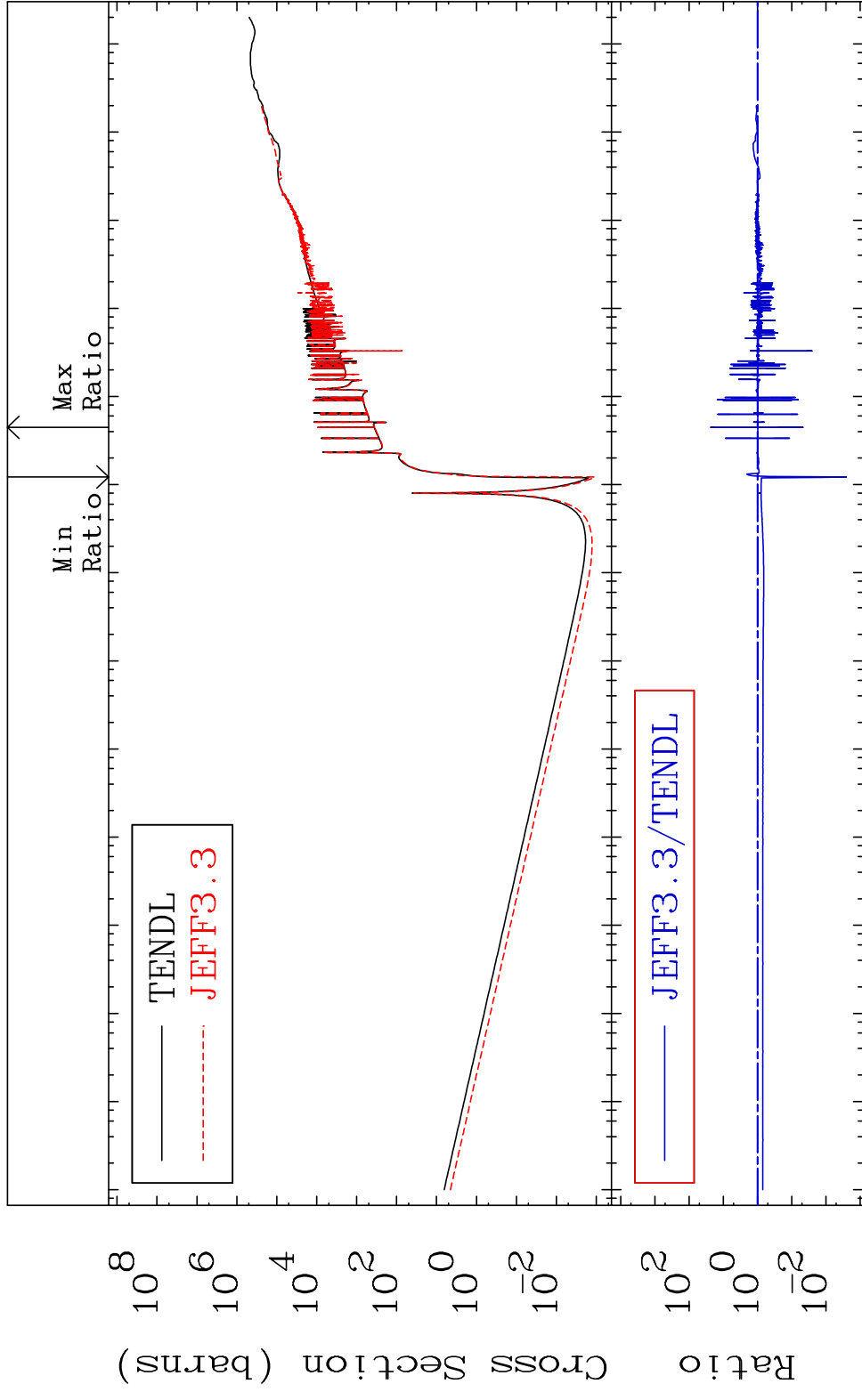
Cross Section -100.0 To 9999. %



MAT 8325 Total kinematic kerma (high limit) 83-Bi-209
 Cross Section -95.25 To 2497. %



MAT 8325 Dpa total (eV-barns) 83-Bi-209
 Cross Section -99.75 To 2228. %



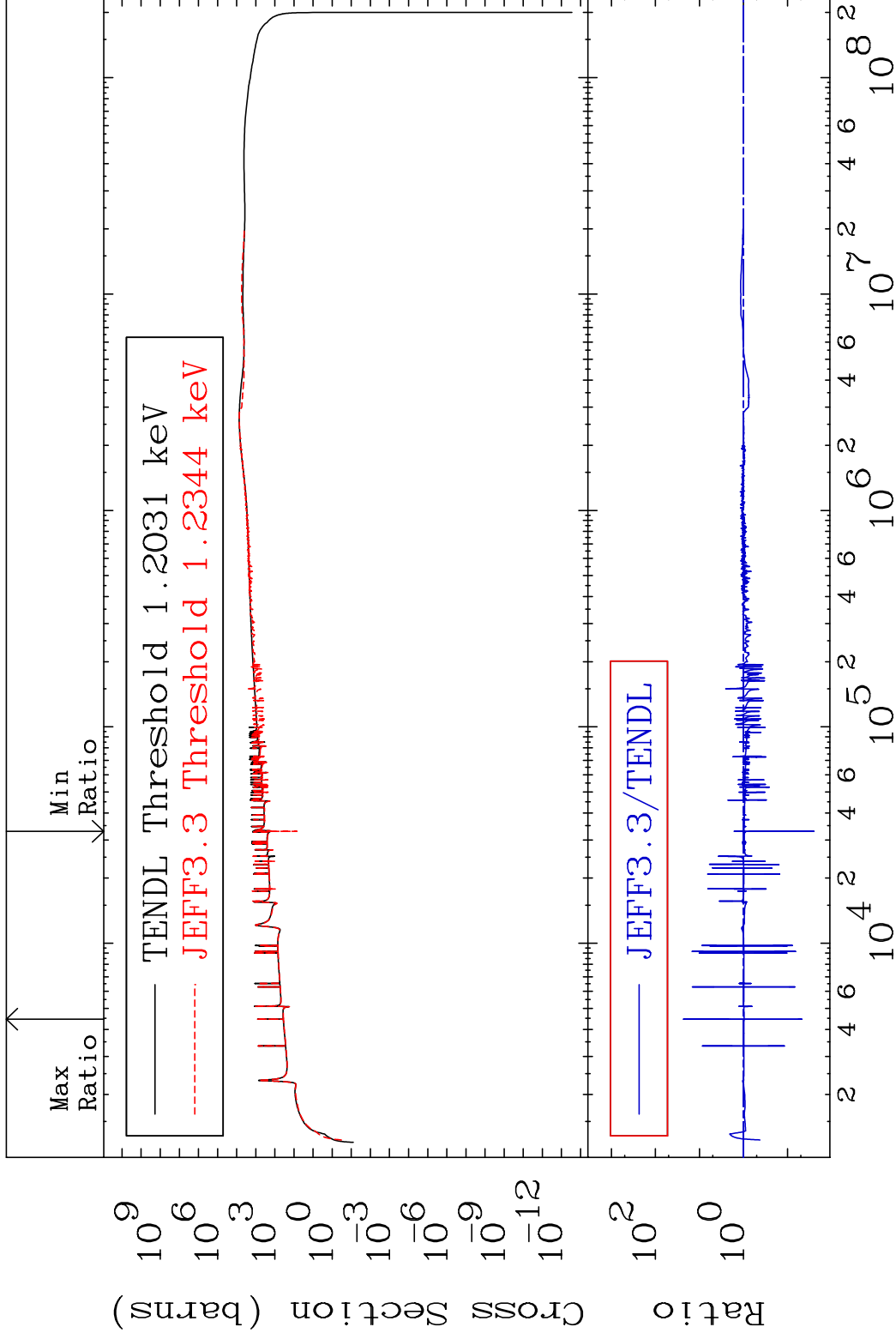
36 Incident Energy (eV) 83-Bi-209

MAT 8325

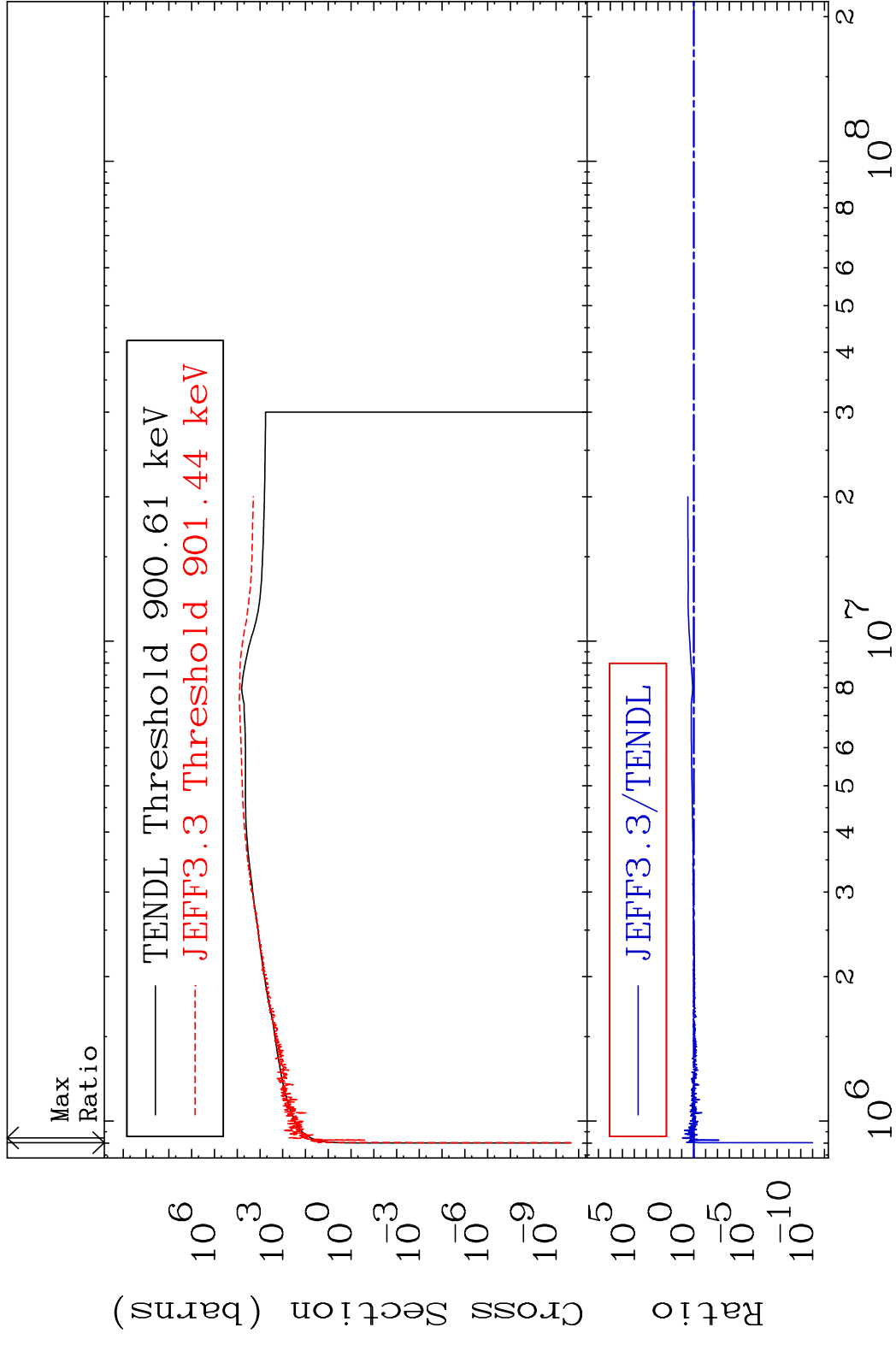
Dpa elastic (mt2)

83-Bi-209

Cross Section -97.51 To 2207. %

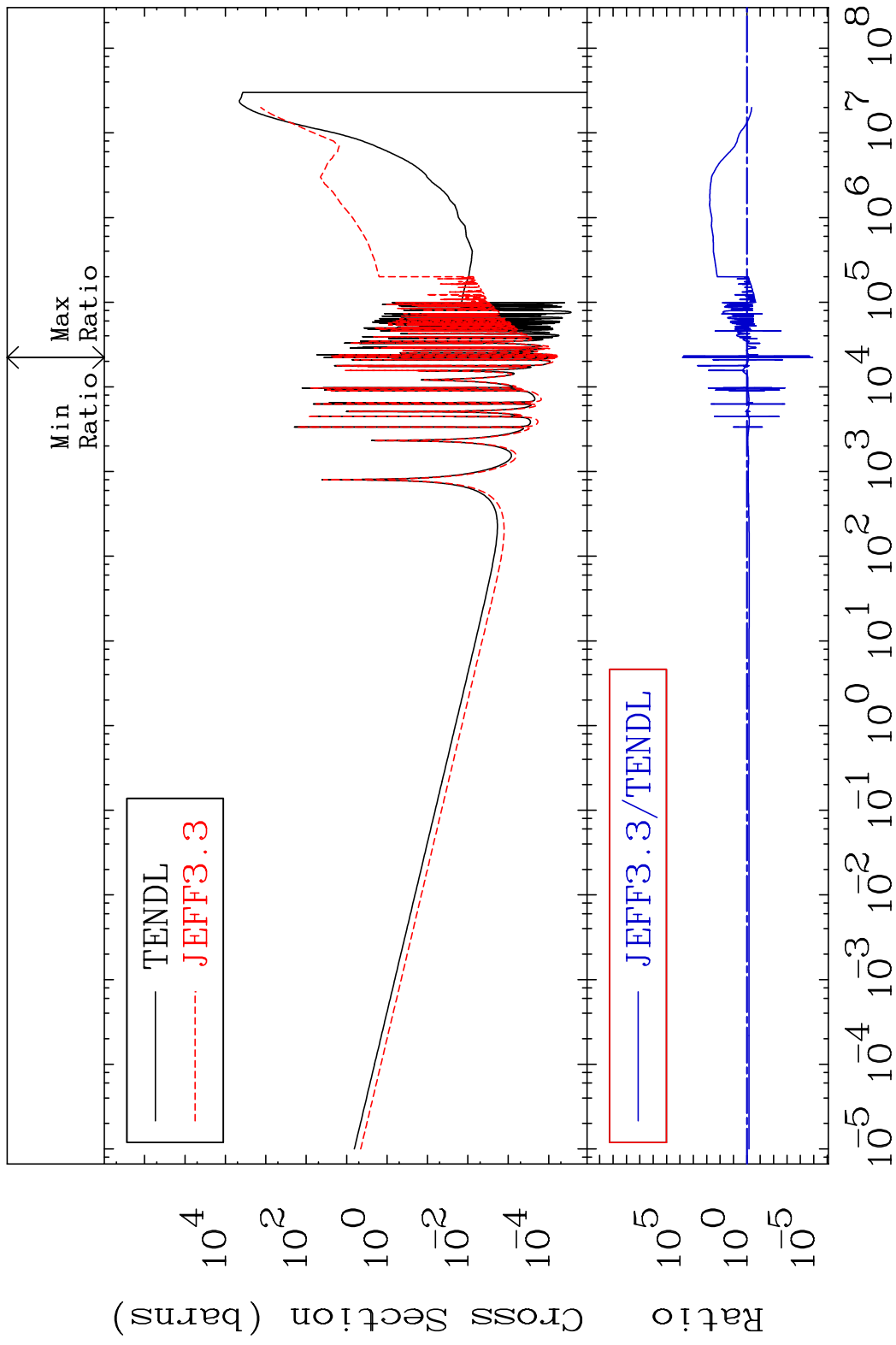


MAT 8325 Dpa inelastic (mt51-91) 83-Bi-209
 Cross Section -100.0 To 796.1 %



38 Incident Energy (eV) 83-Bi-209

MAT 8325 Dpa disappearance (mt102 -120) 83-Bi-209
 Cross Section -100.0 To 9999. %



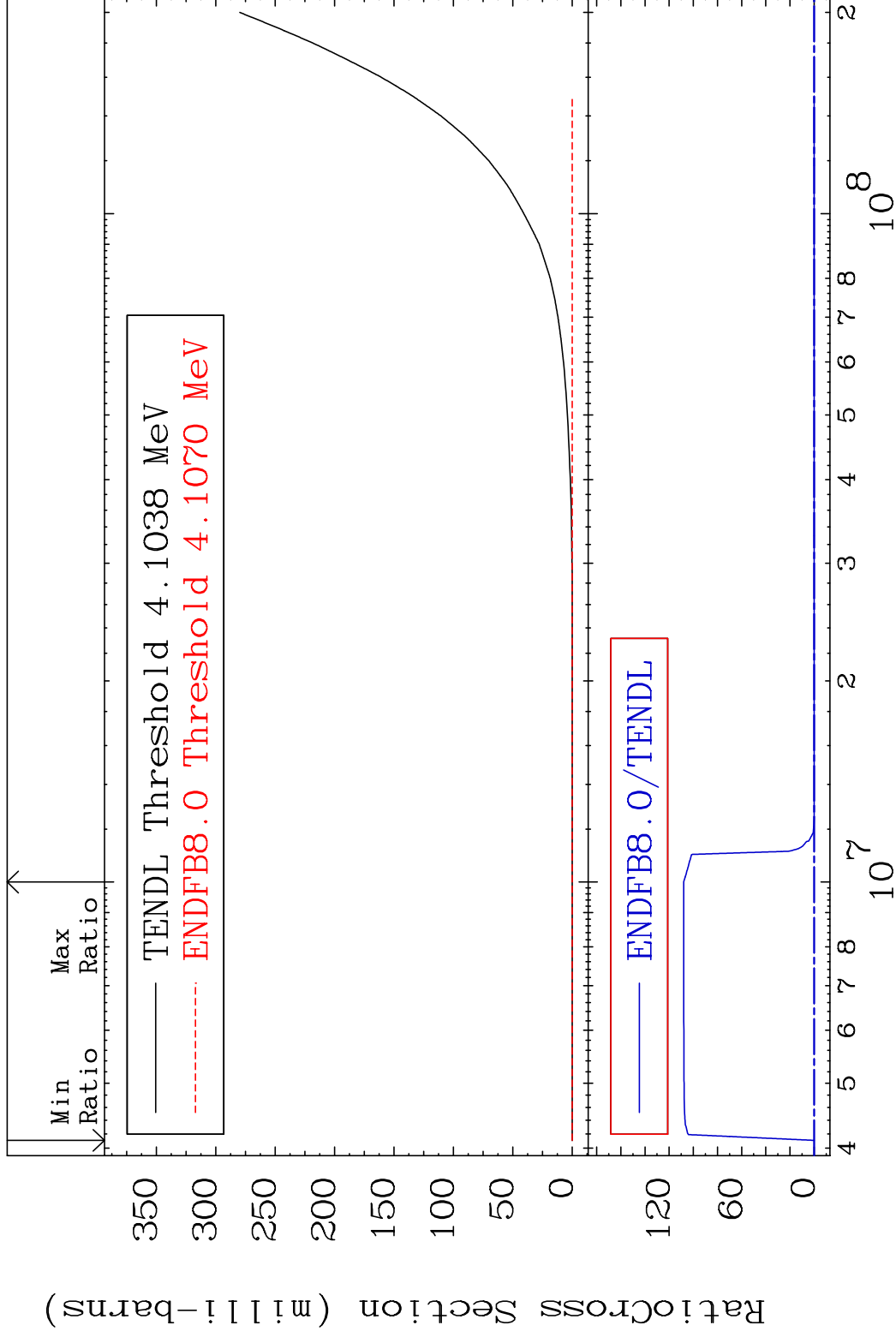
39 Incident Energy (eV) 83-Bi-209

MAT 8325

He-3 Production

83-Bi-209

Cross Section -100.0 To 9999. %



40

Incident Energy (eV)

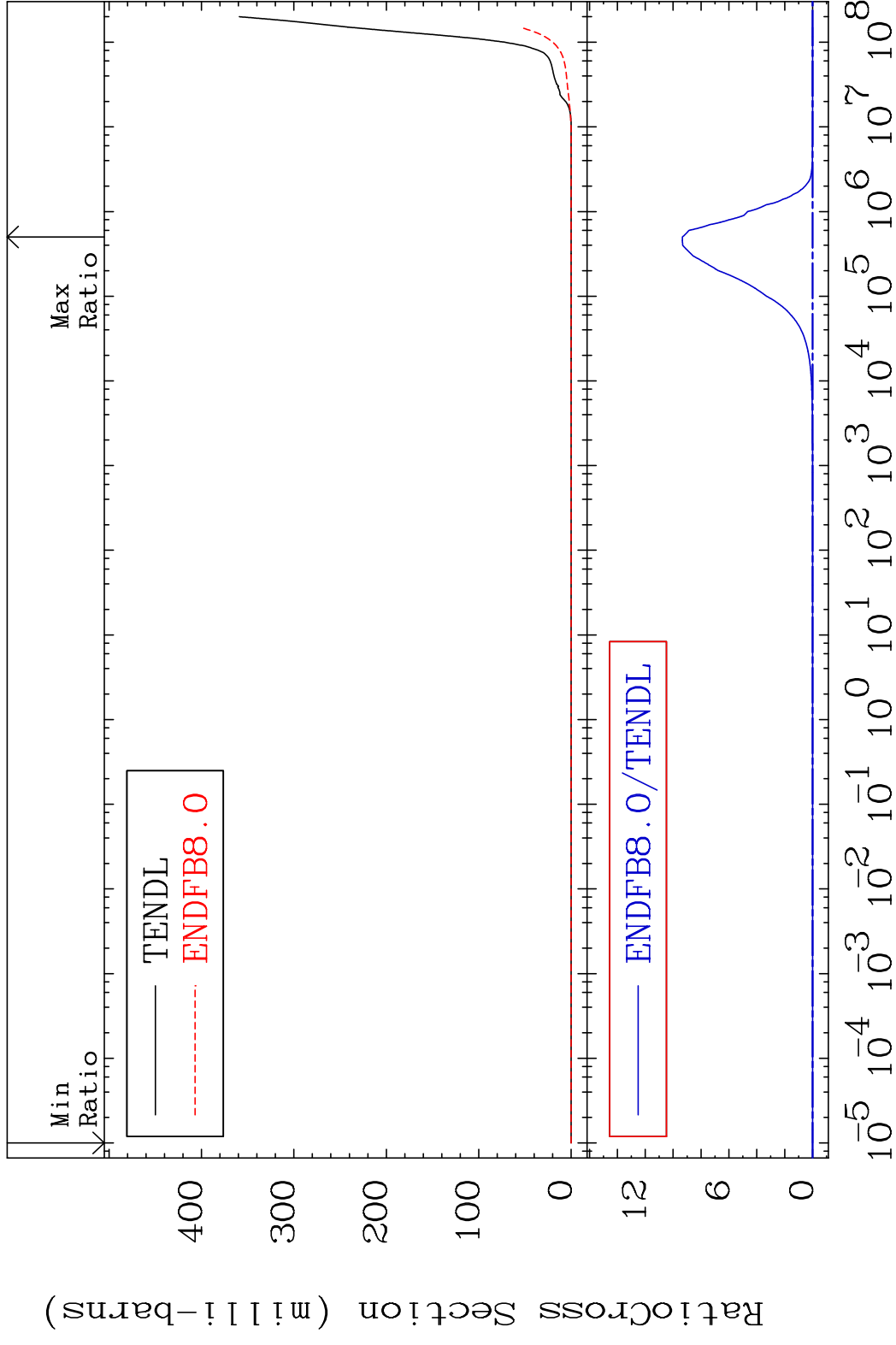
83-Bi-209

MAT 8325

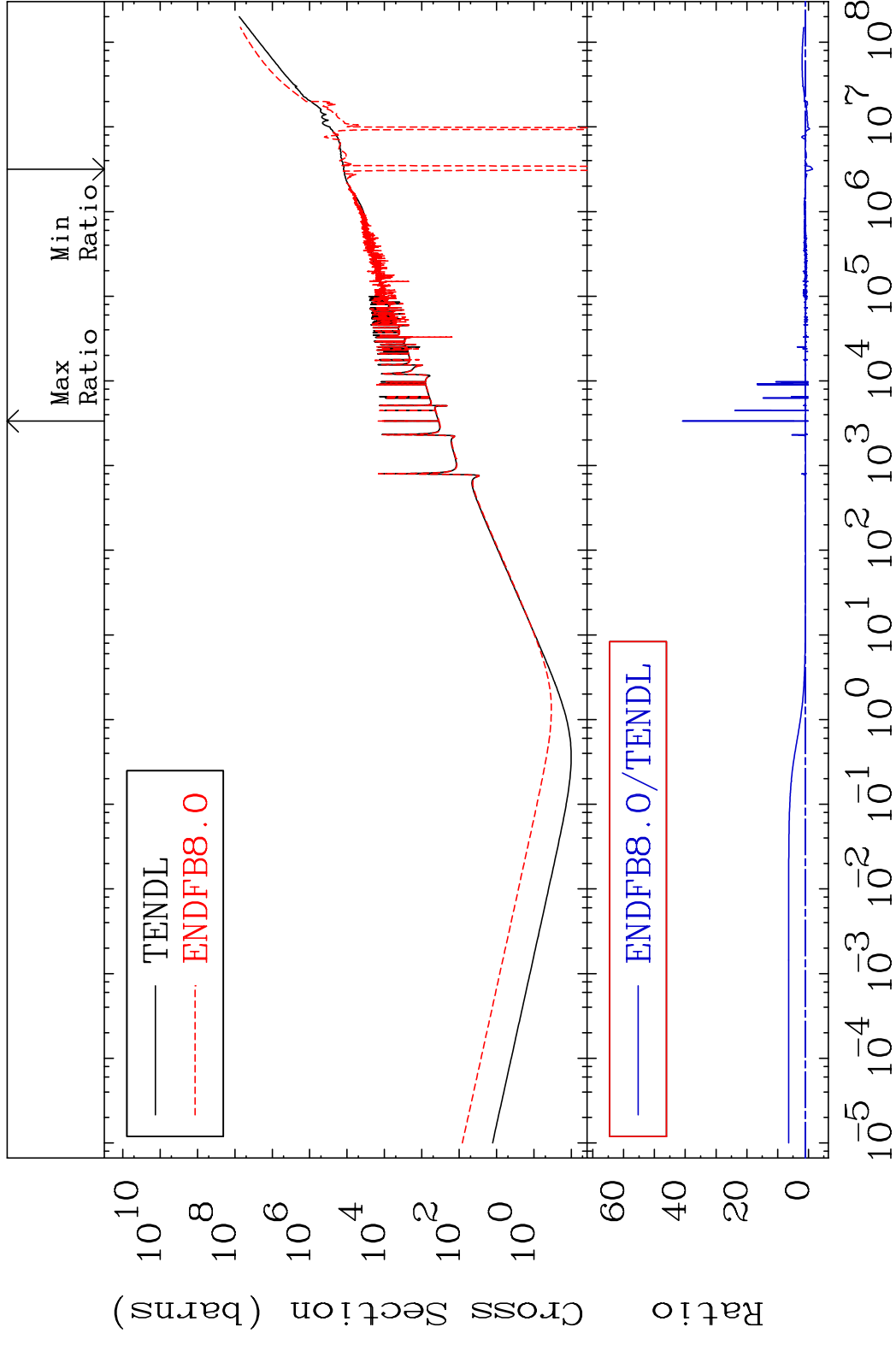
He-4 Production

83-Bi-209

Cross Section -100.0 To 9999. %



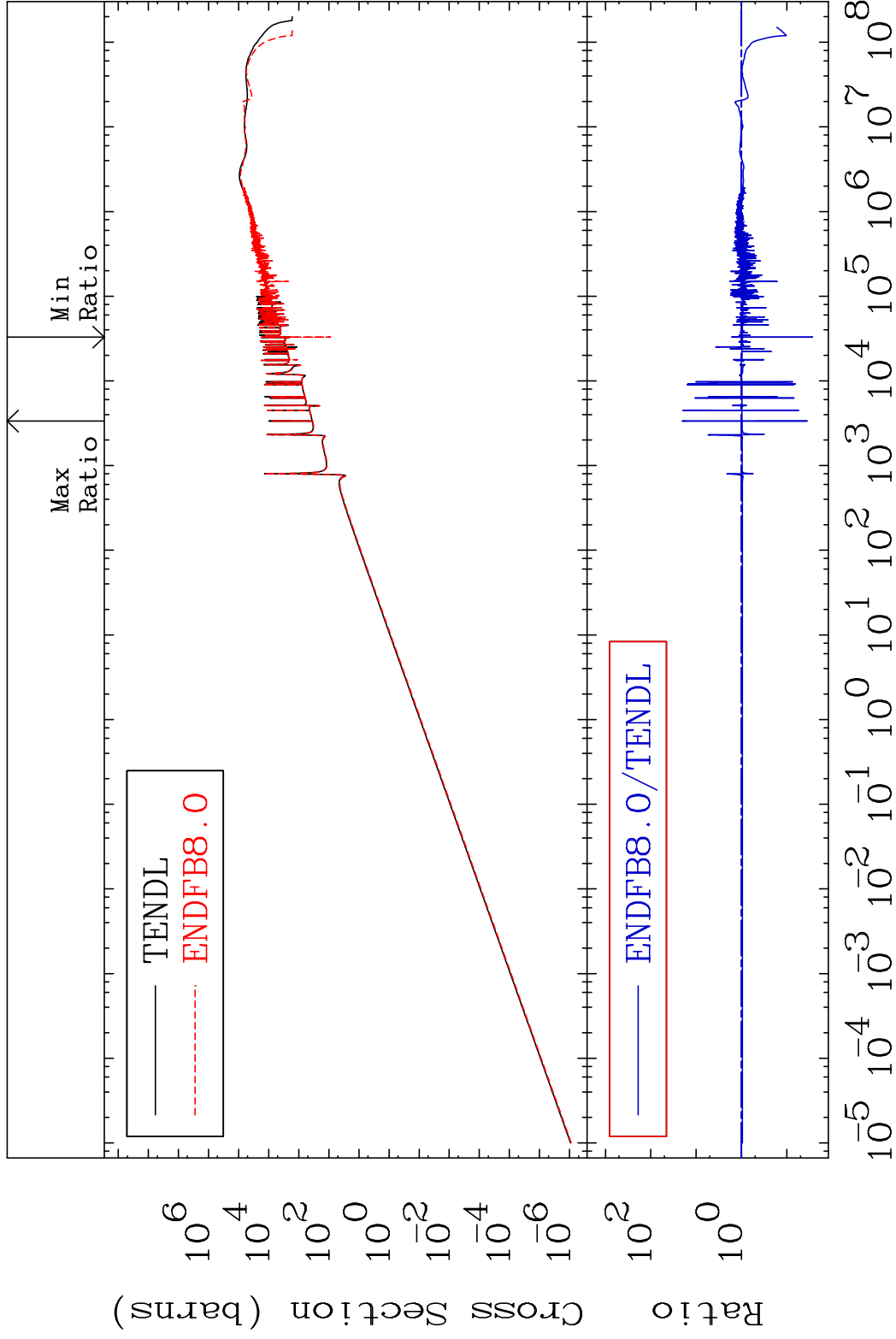
MAT 8325 Kerma total (eV-barns) 83-Bi-209
 Cross Section -234.2 To 3993. %



MAT 8325

Kerma elastic
Cross Section

83-Bi-209
-97.30 To 1911. %

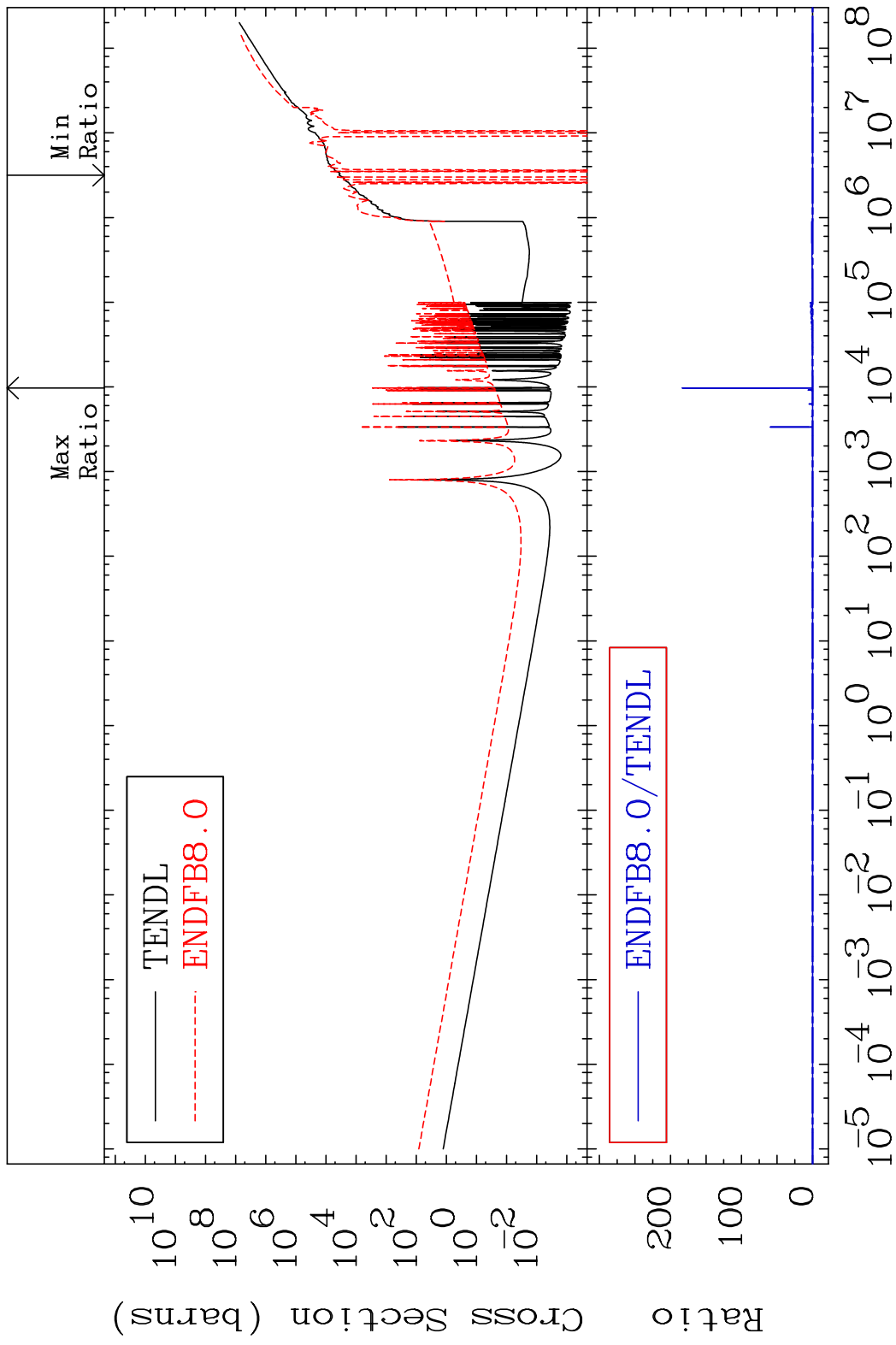


43

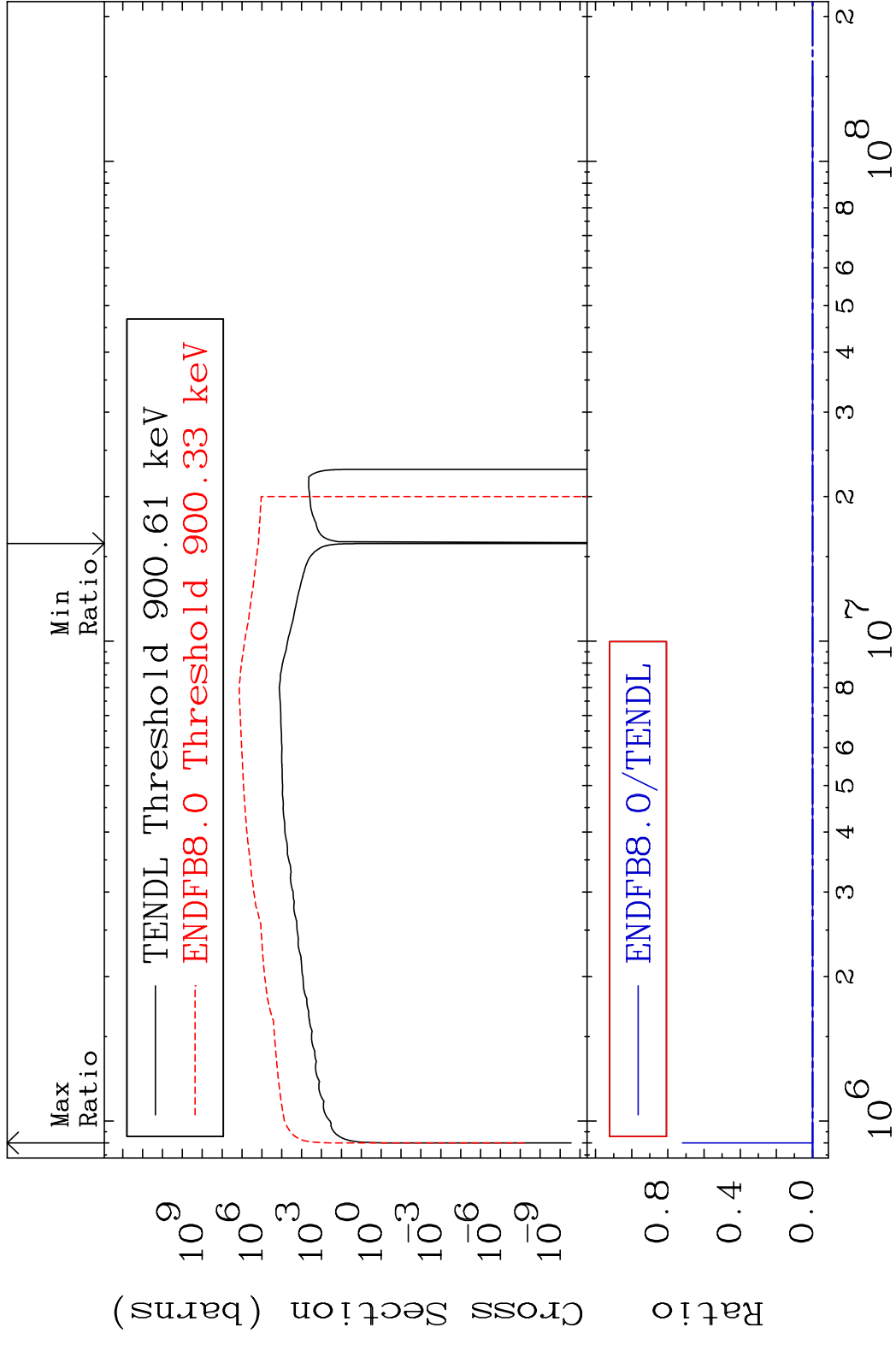
Incident Energy (eV)

83-Bi-209

MAT 8325 Kerma non-elastic (all but mt2) 83-Bi-209
 Cross Section -793.7 To 9999. %

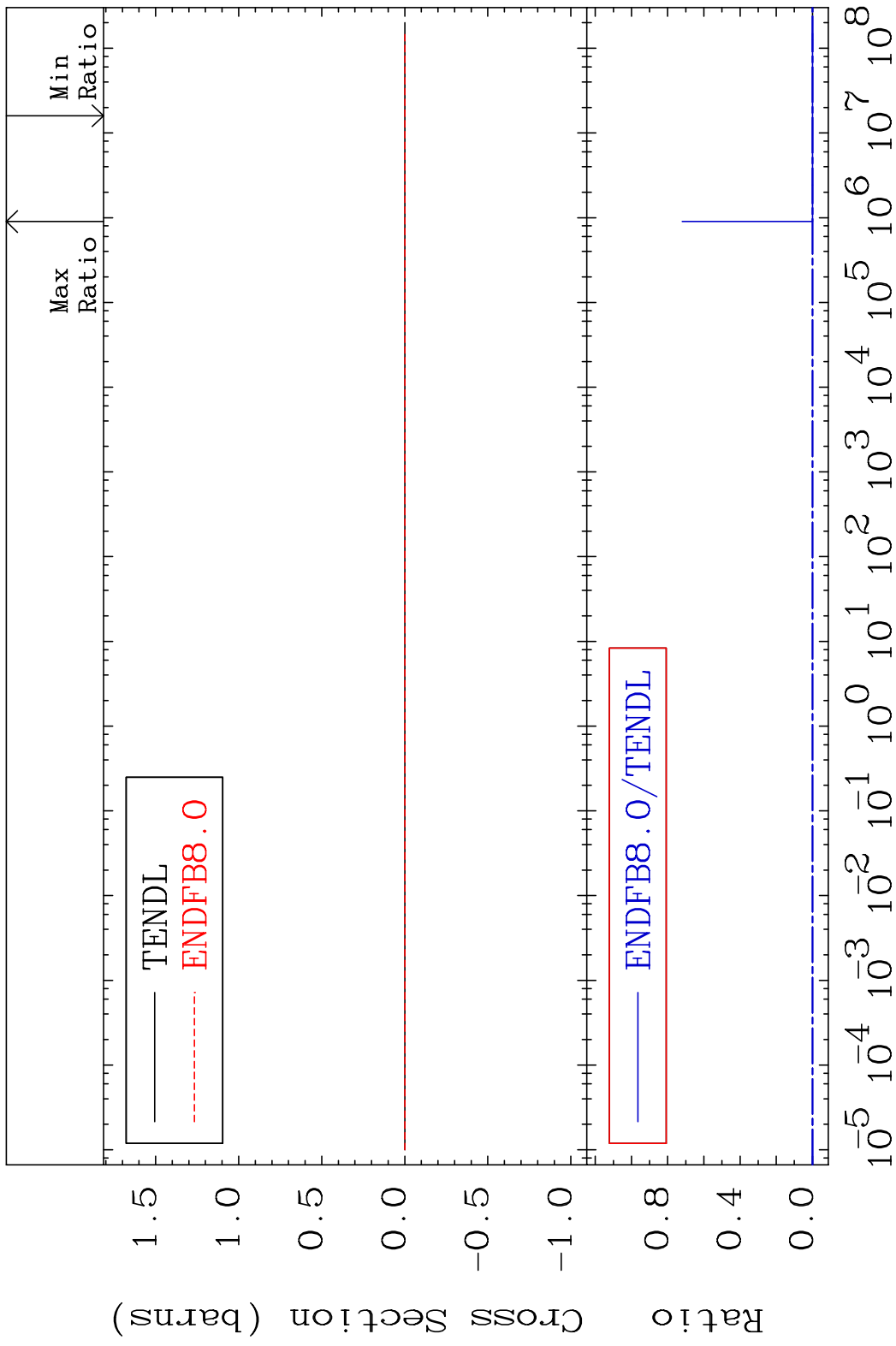


MAT 8325 Kerma inelastic (mt51-91) 83-Bi-209
 Cross Section -9999. To 9999. %

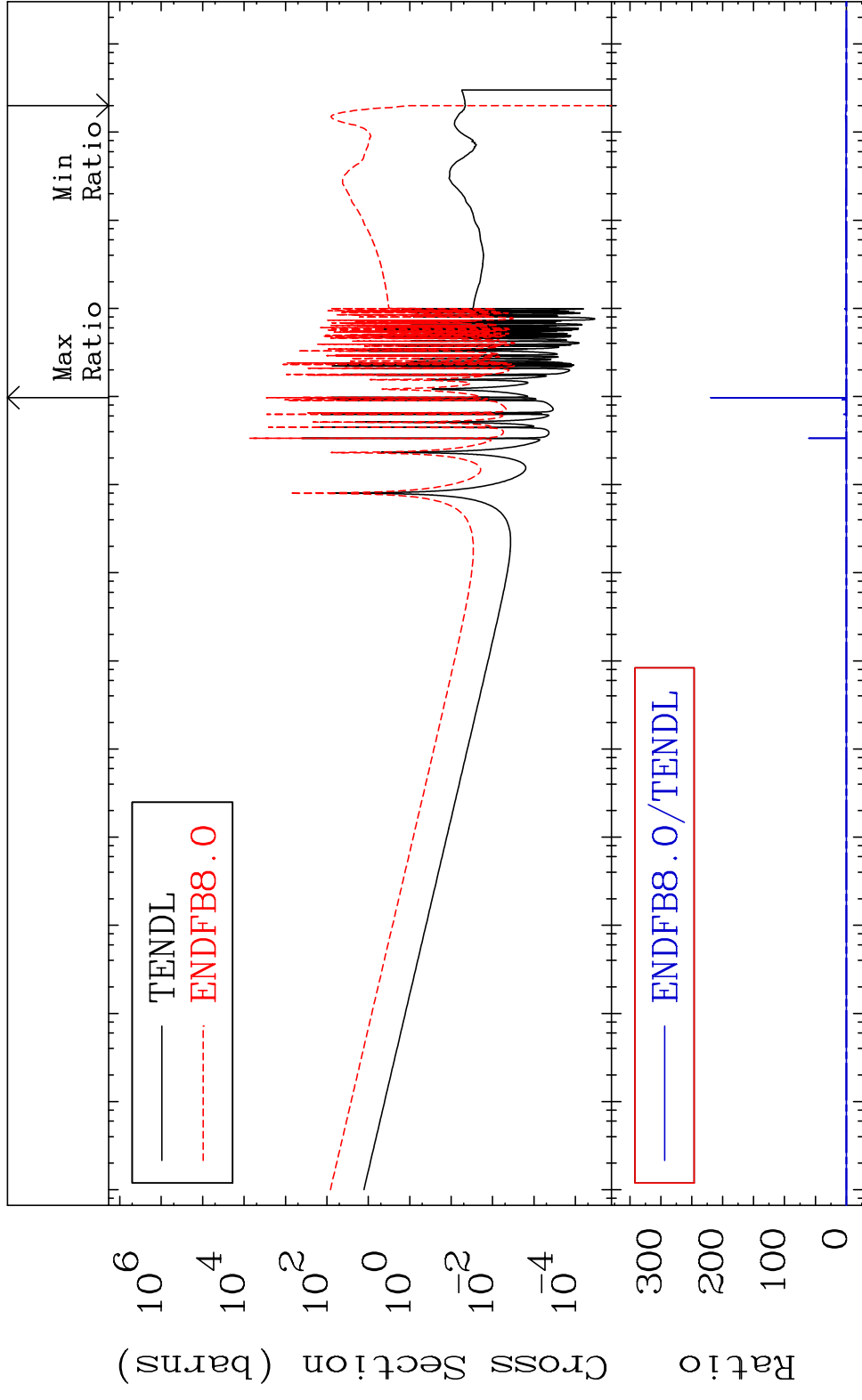


45 Incident Energy (eV) 83-Bi-209

MAT 8325 Kerma fission (mt18 or mt19-20-21-38)83-Bi-209
 Cross Section -9999. To 9999. %

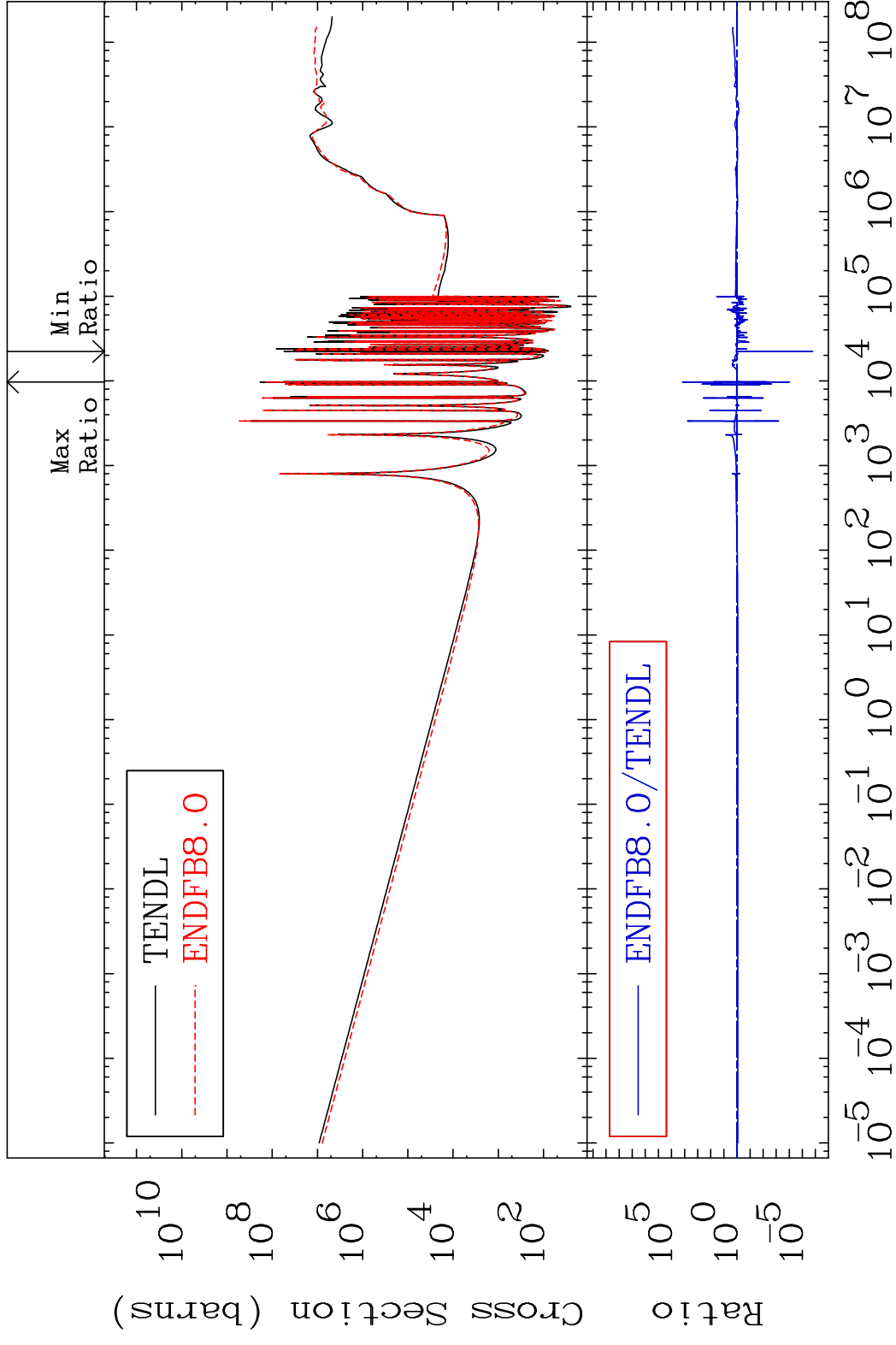


MAT 8325 Kerma capture (mt102) 83-Bi-209
 Cross Section -100.0 To 9999. %

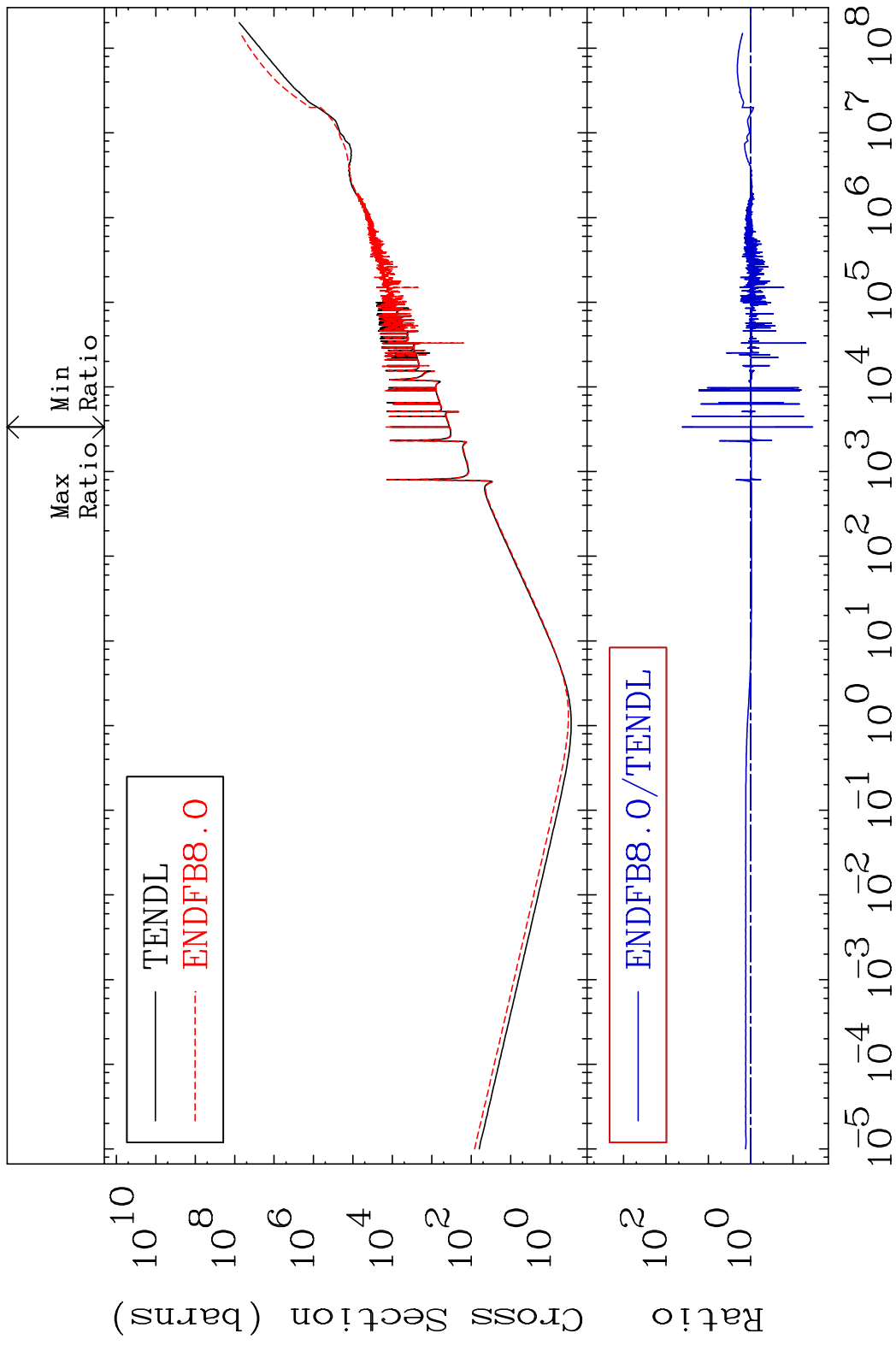


47 Incident Energy (eV) 83-Bi-209

MAT 8325 Total photon (eV-barns) 83-Bi-209
 Cross Section -100.0 To 9999. %



MAT 8325 Total kinematic kerma (high limit) 83-Bi-209
Cross Section -96.55 To 3993. %

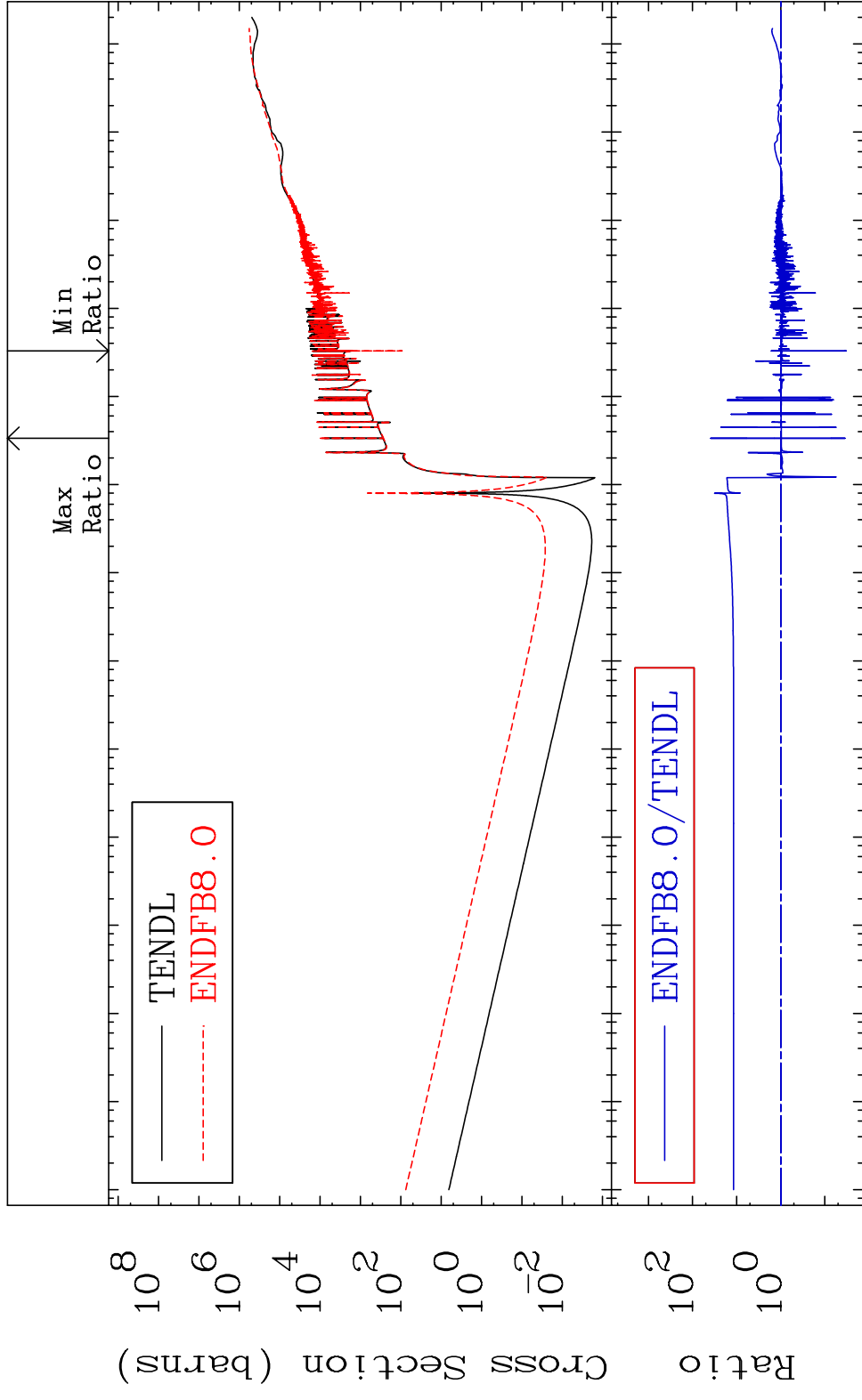


MAT 8325

Dpa total (eV-barns)

83-Bi-209

Cross Section -96.75 To 3765. %



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

50

Incident Energy (eV)

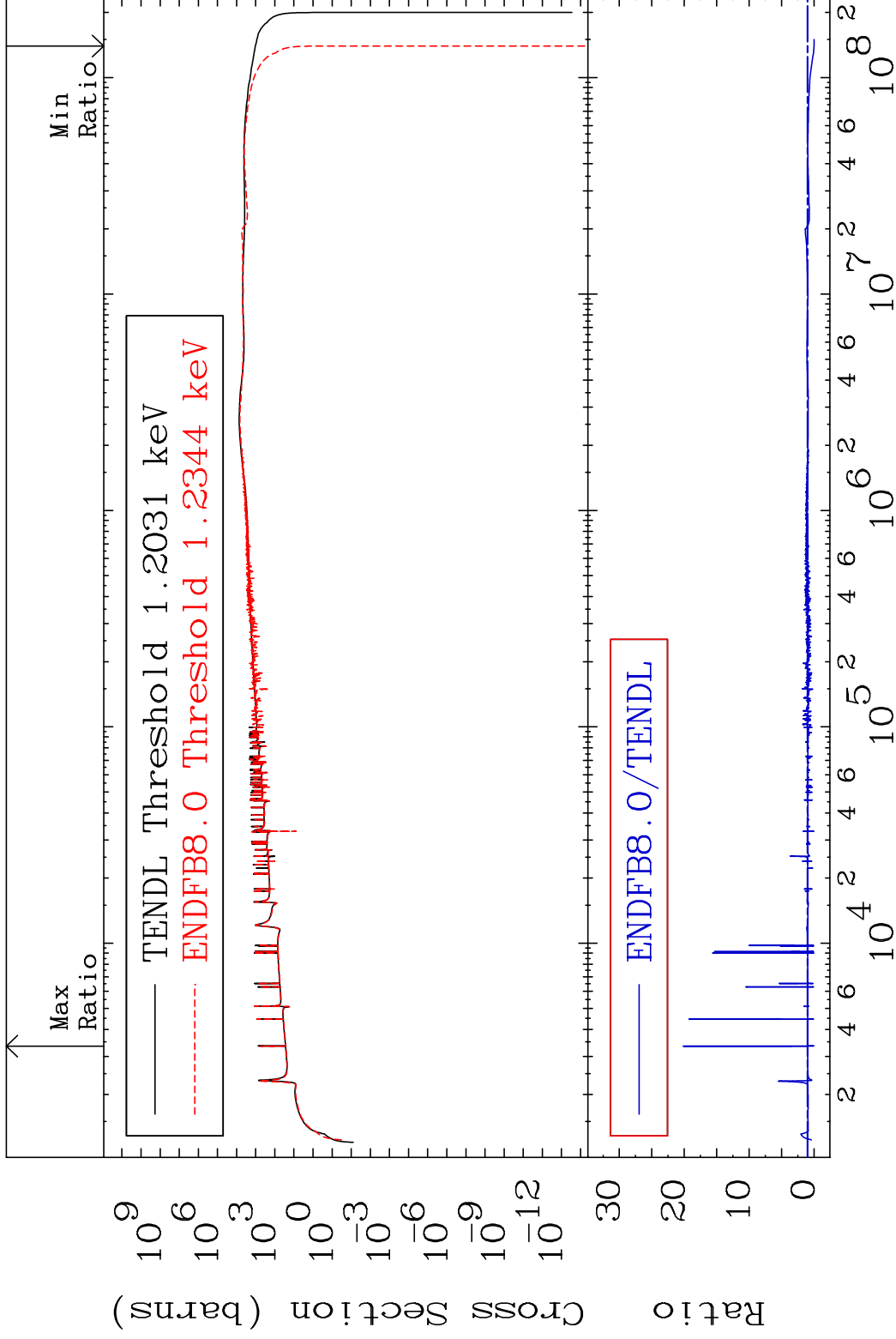
83-Bi-209

MAT 8325

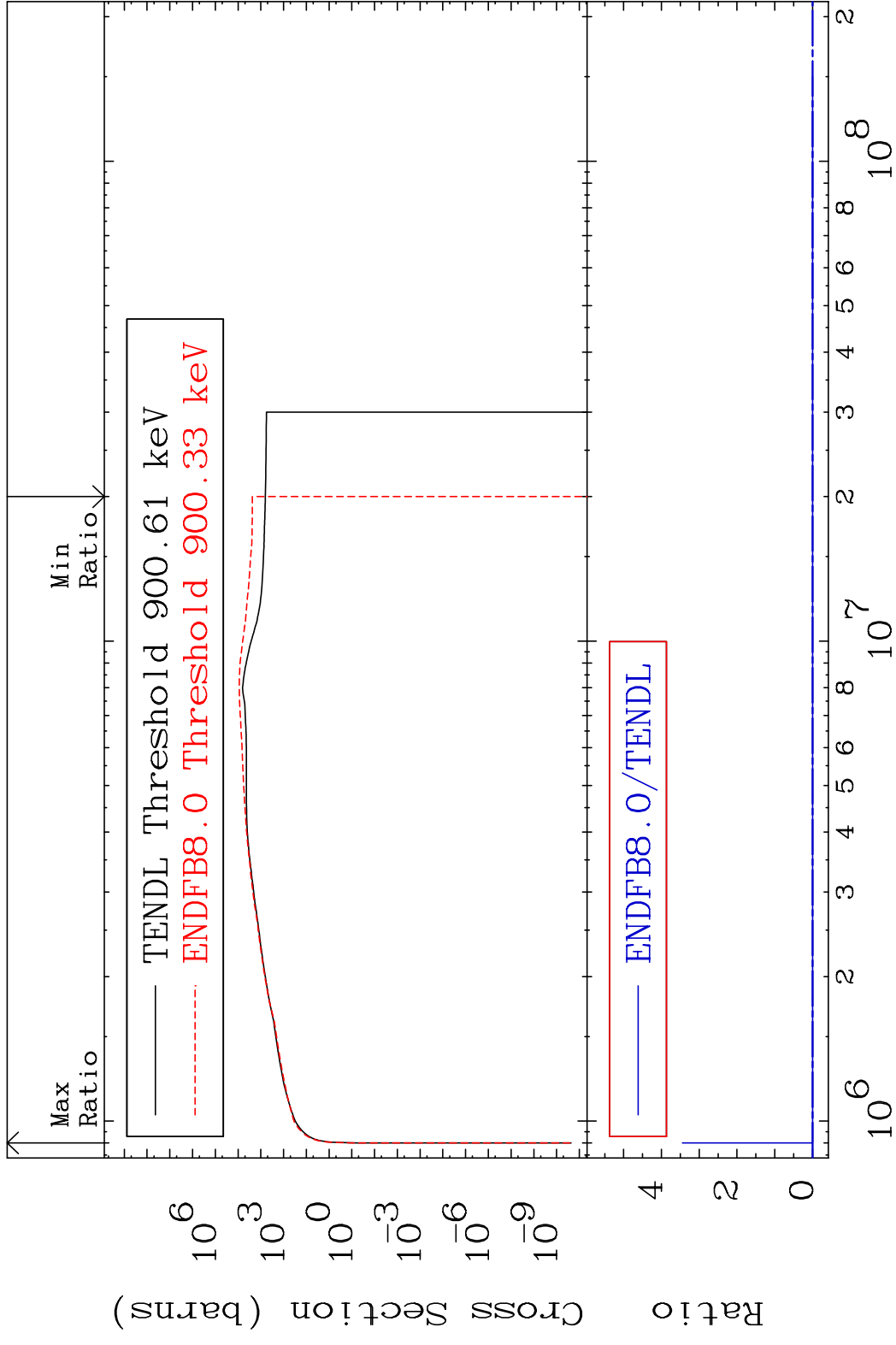
Dpa elastic (mt2)

83-Bi-209

Cross Section -100.0 To 1912. %



MAT 8325 Dpa inelastic (mt51-91) 83-Bi-209
 Cross Section -100.0 To 9999. %



52 Incident Energy (eV) 83-Bi-209

MAT 8325 Dpa disappearance (mt102 -120) 83-Bi-209
 Cross Section -100.0 To 9999. %

