

Program Complot  
(Version 2018-1)

by

Dermott E. Cullen  
(Present Contact Information)

Dermott E. Cullen  
1466 Hudson Way  
Livermore, CA 94550

U.S.A.

Tele: 925-443-1911

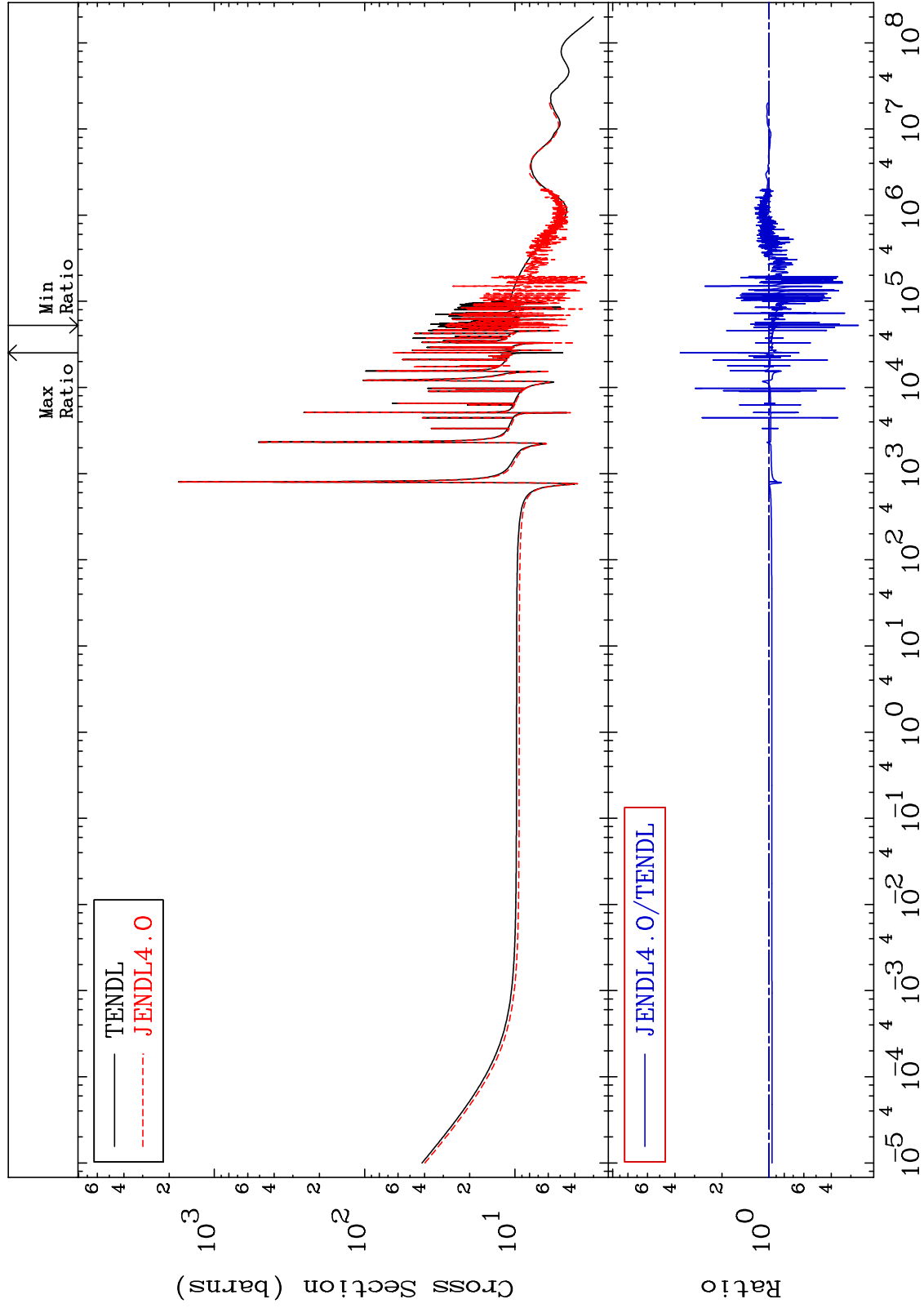
E.Mail: [redcullen1@comcast.net](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

MAT 8325

Total  
Cross Section

83-Bi-209  
-73.23 To 268.9 %



1

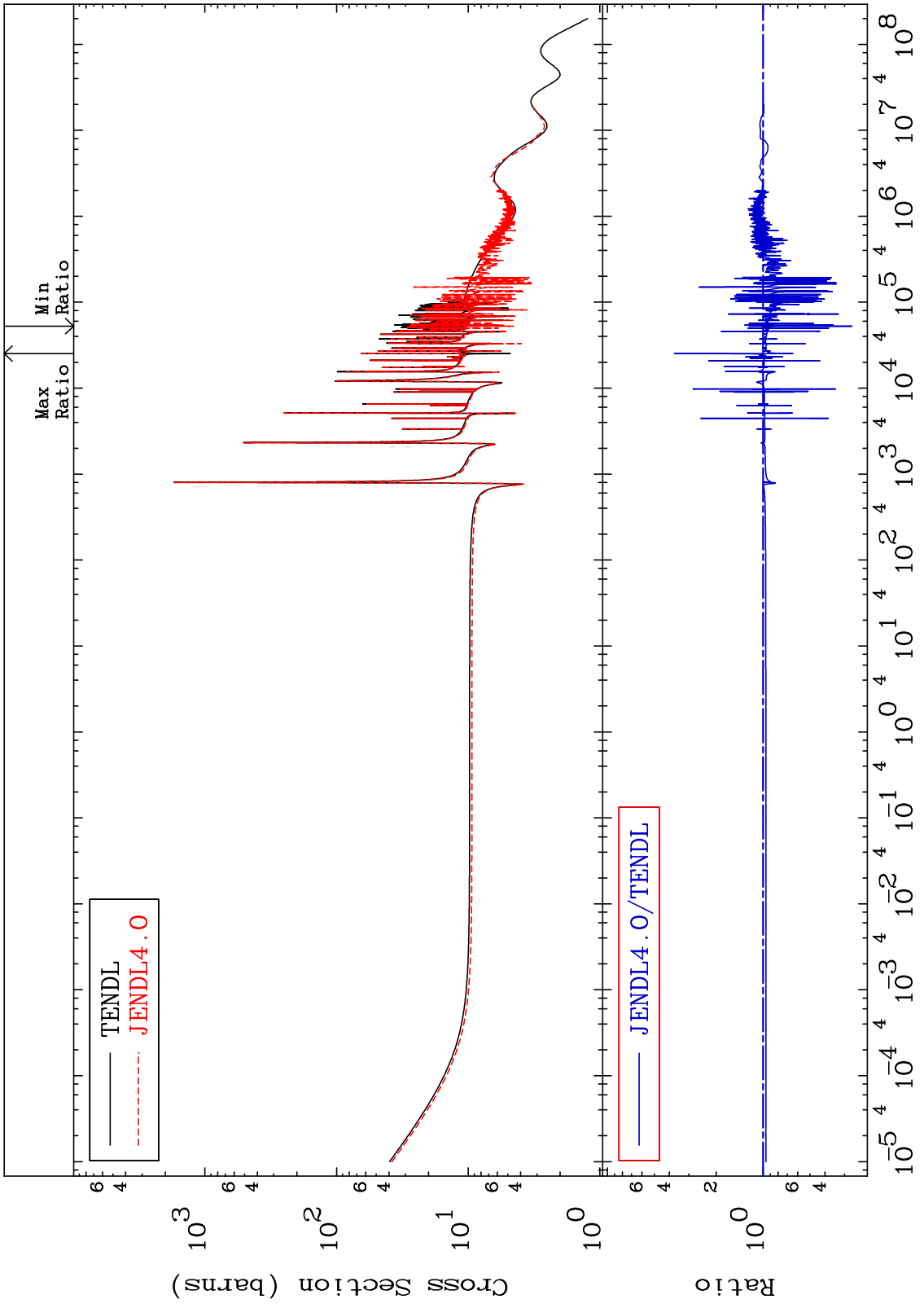
Incident Energy (eV)

83-Bi-209

MAT 8325

Elastic  
Cross Section

83-Bi-209  
-73.22 To 270.1 %



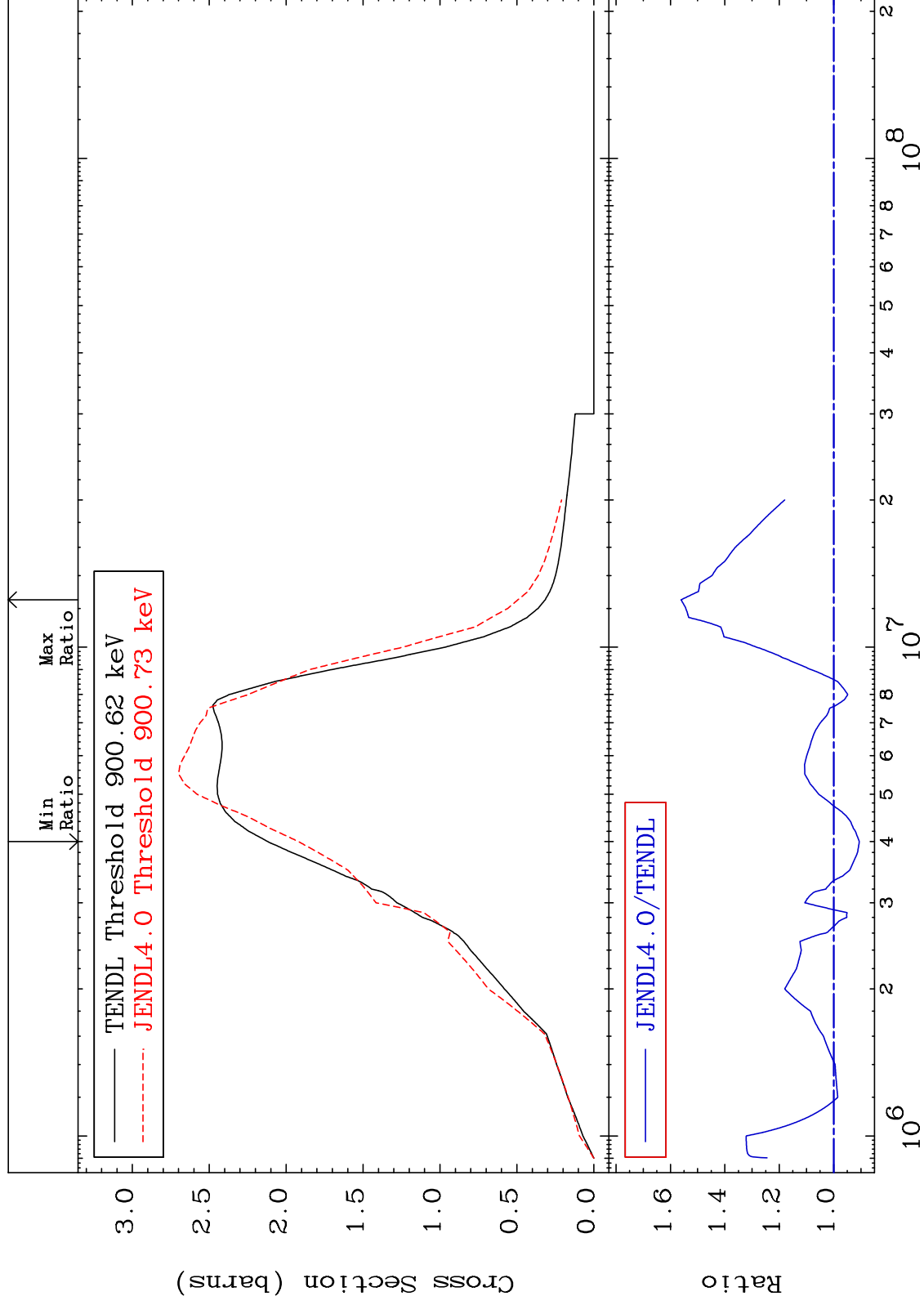
Incident Energy (eV)

83-Bi-209

MAT 8325

Inelastic  
Cross Section

83-Bi-209  
-9.414 To 56.09 %



Incident Energy (eV)

83-Bi-209

3

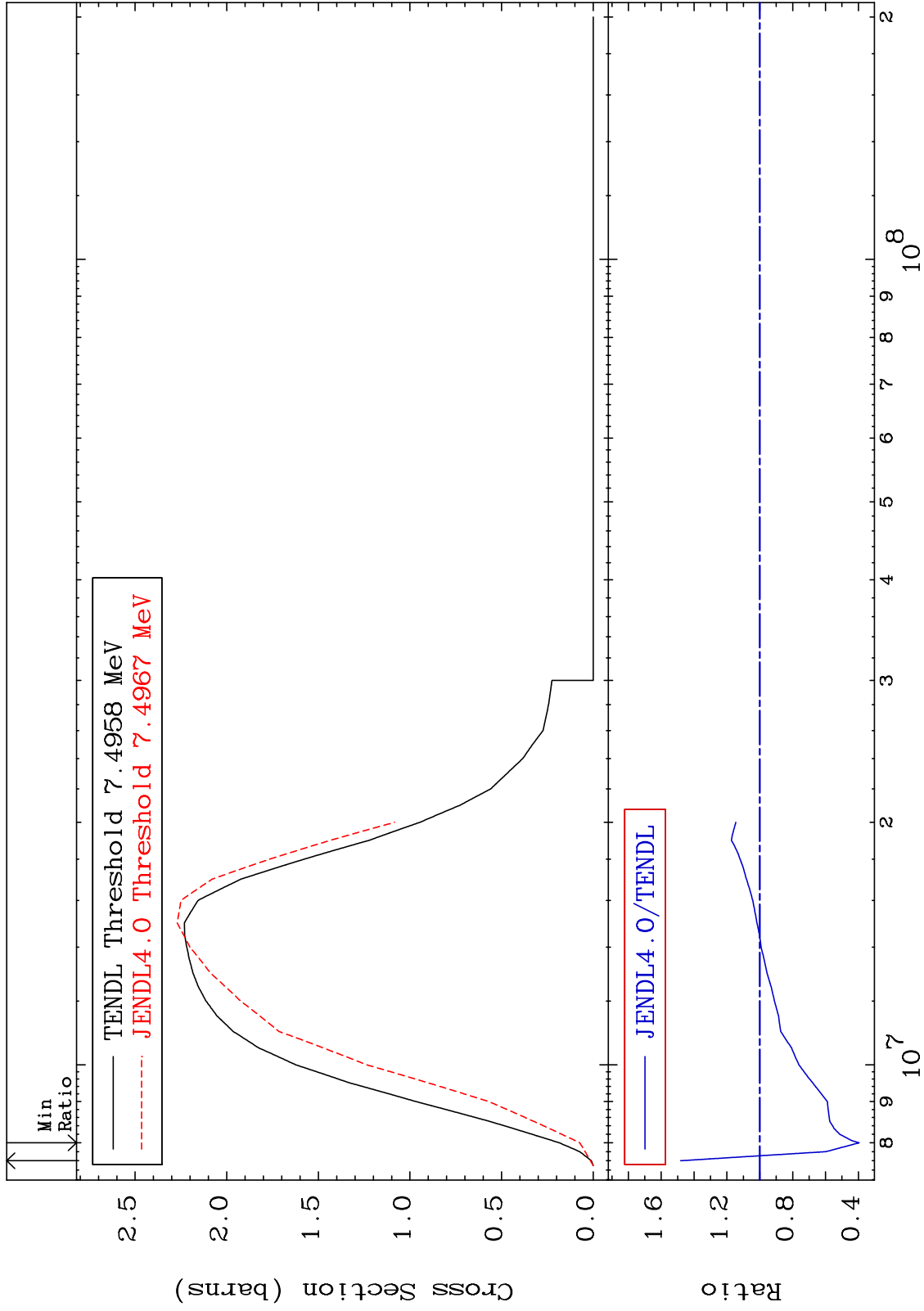
MAT 8325

(n,2n)

83-Bi-209

Cross Section

-60.47 To 48.19 %



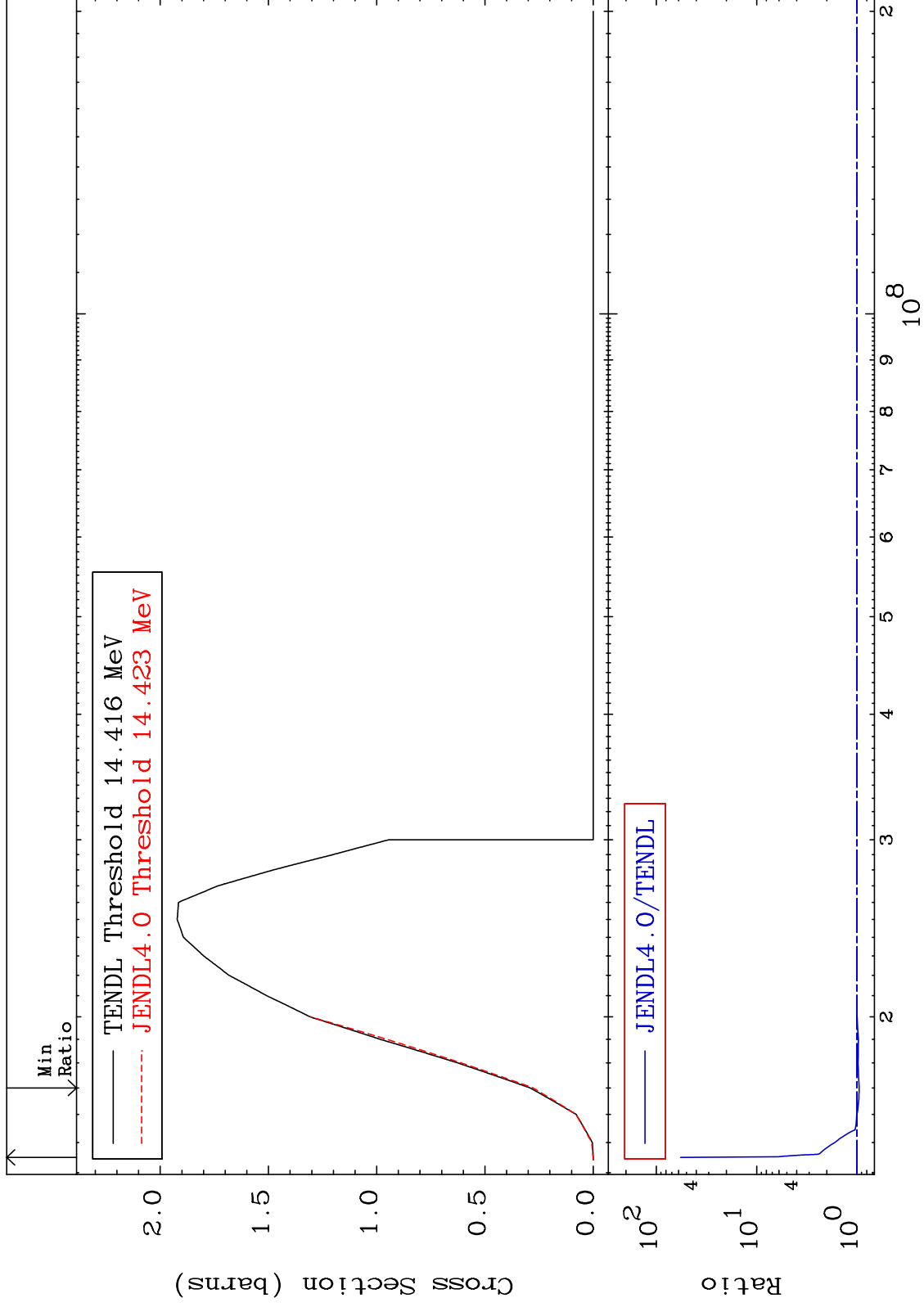
MAT 8325

(n,3n)

83-Bi-209

Cross Section

-4.821 To 5621. %



Incident Energy (eV)

83-Bi-209

5

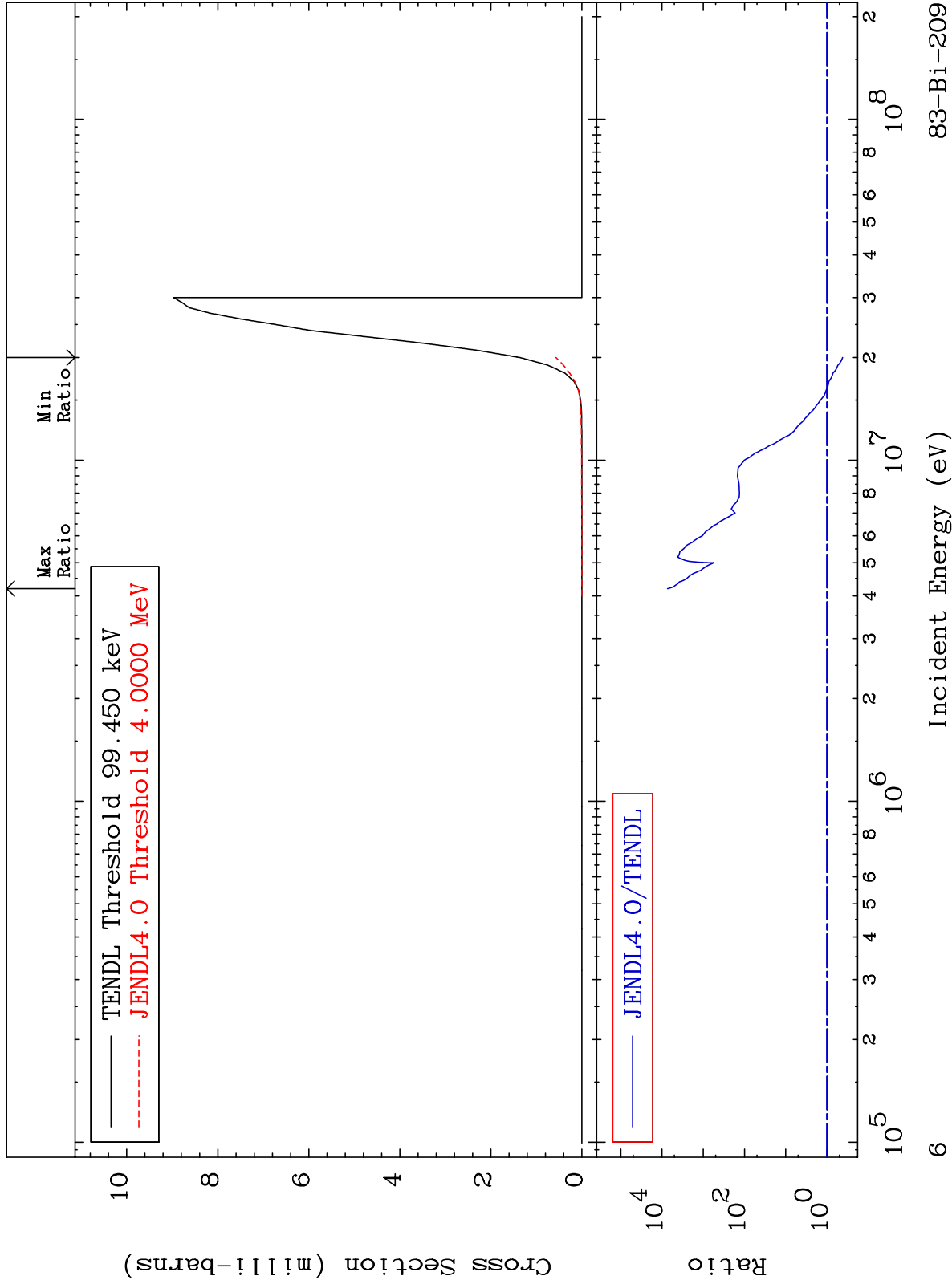
MAT 8325

(n,n')  $\alpha$

83-Bi-209

Cross Section

-58.24 To 9999. %



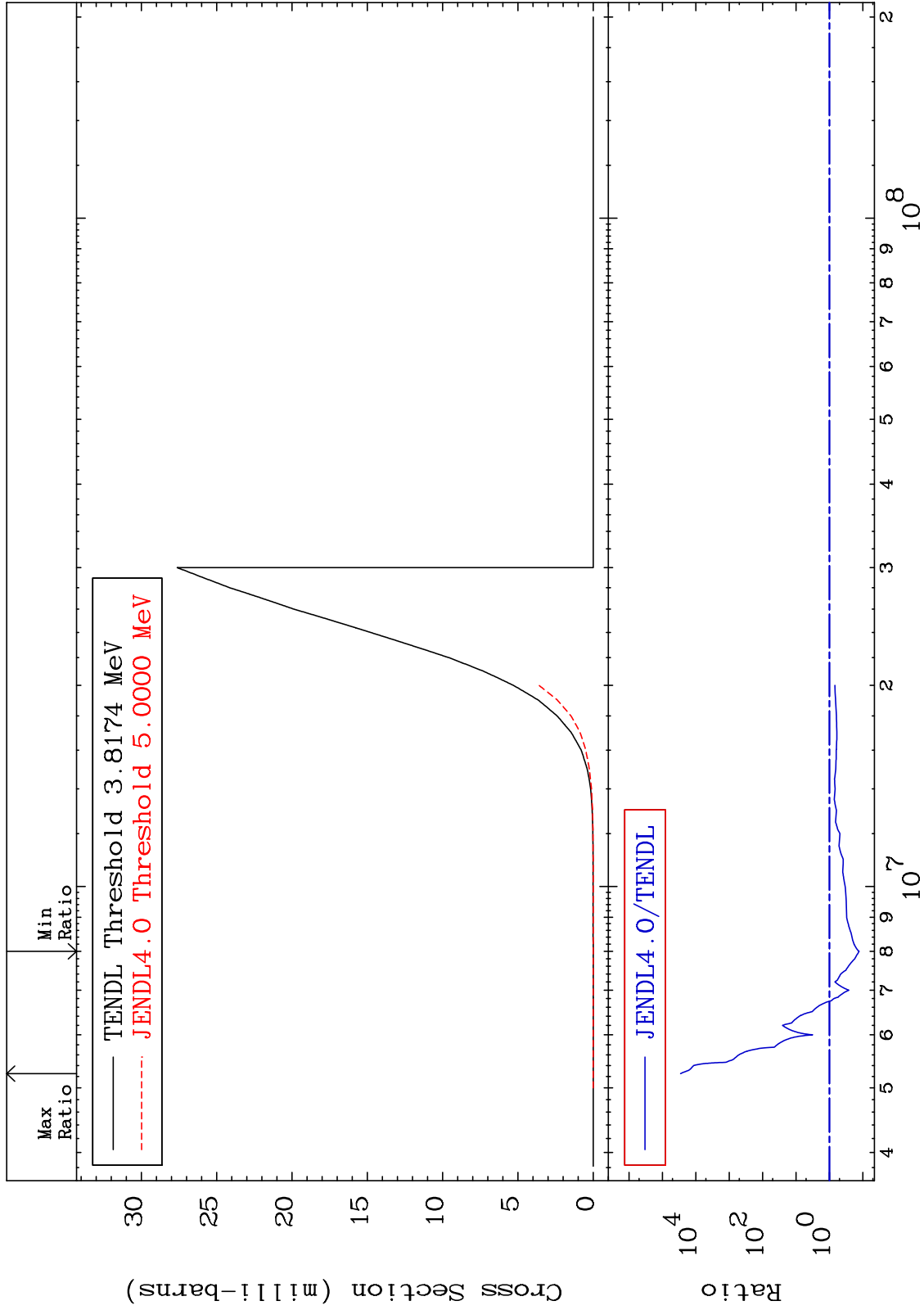
MAT 8325

(n,n') p

83-Bi-209

Cross Section

-87.18 To 9999. %

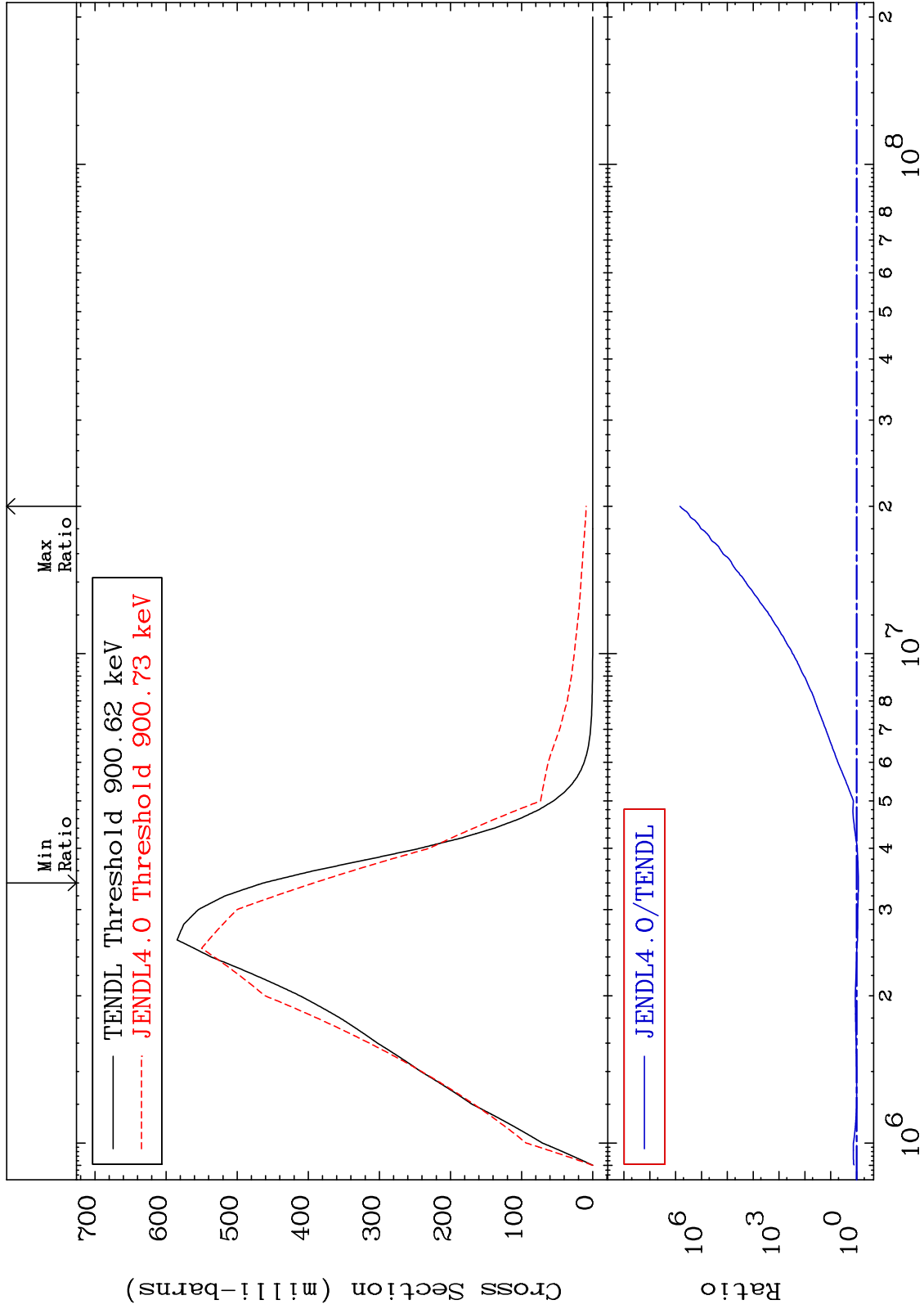




MAT 8325

MT= 51 (n,n') Level  
Cross Section

83-Bi-209  
-15.29 To 9999. %

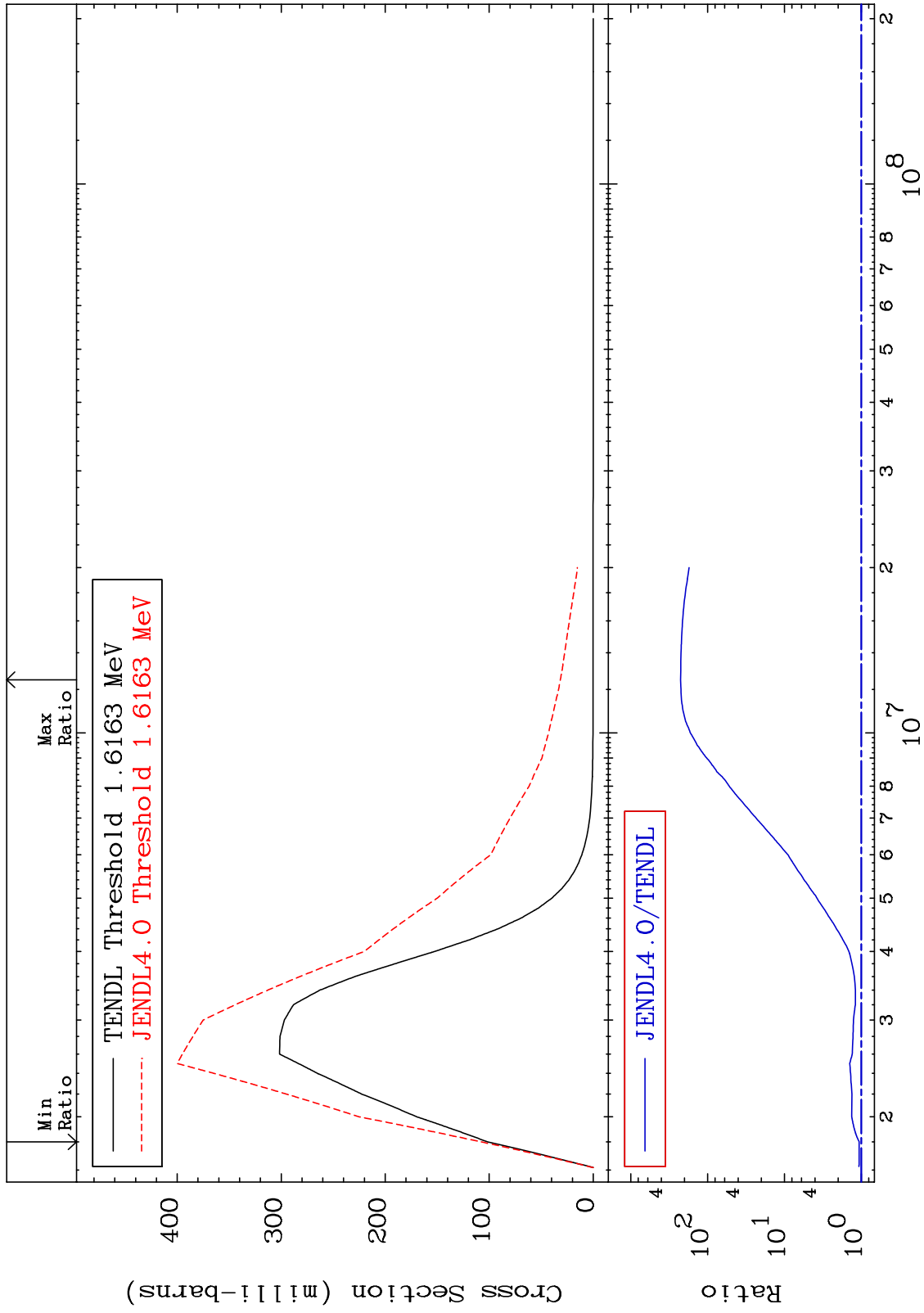


8 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup> Incident Energy (eV) 83-Bi-209

MAT 8325

MT= 52 (n,n') Level  
Cross Section

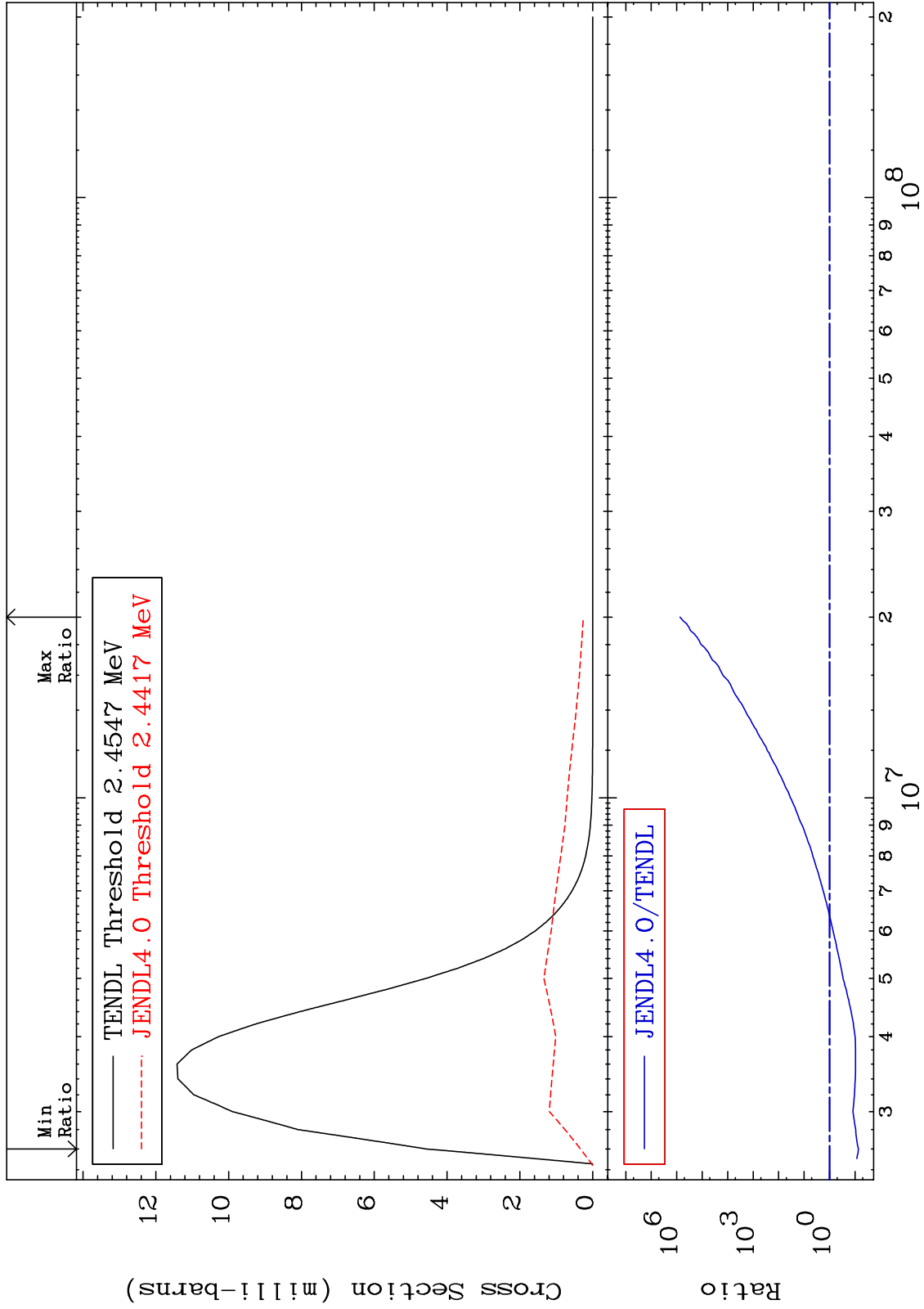
83-Bi-209  
6.321 To 9999. %



MAT 8325

MT= 53 (n,n') Level  
Cross Section

83-Bi-209  
-92.62 To 9999. %

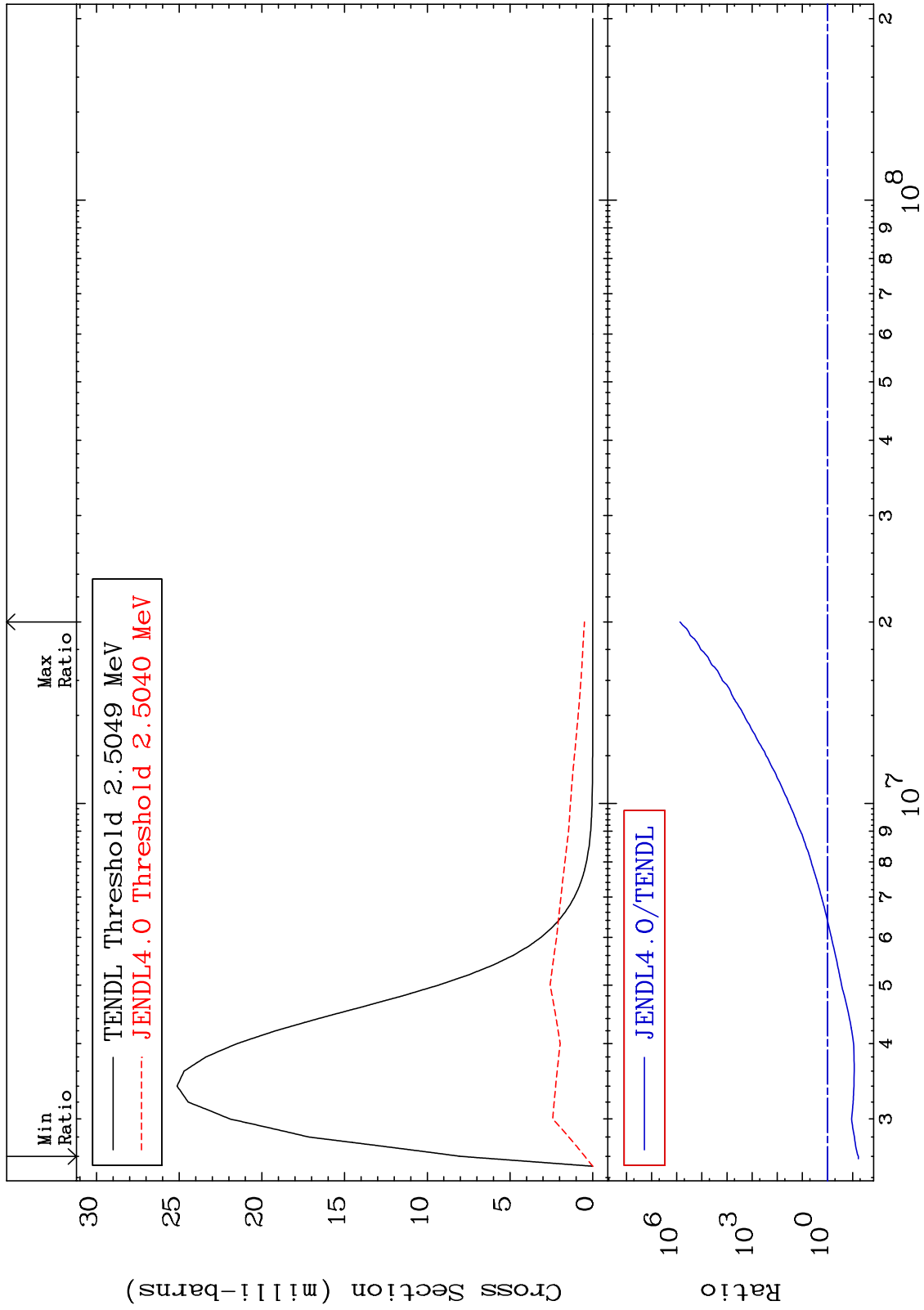


10

Incident Energy (eV)

83-Bi-209

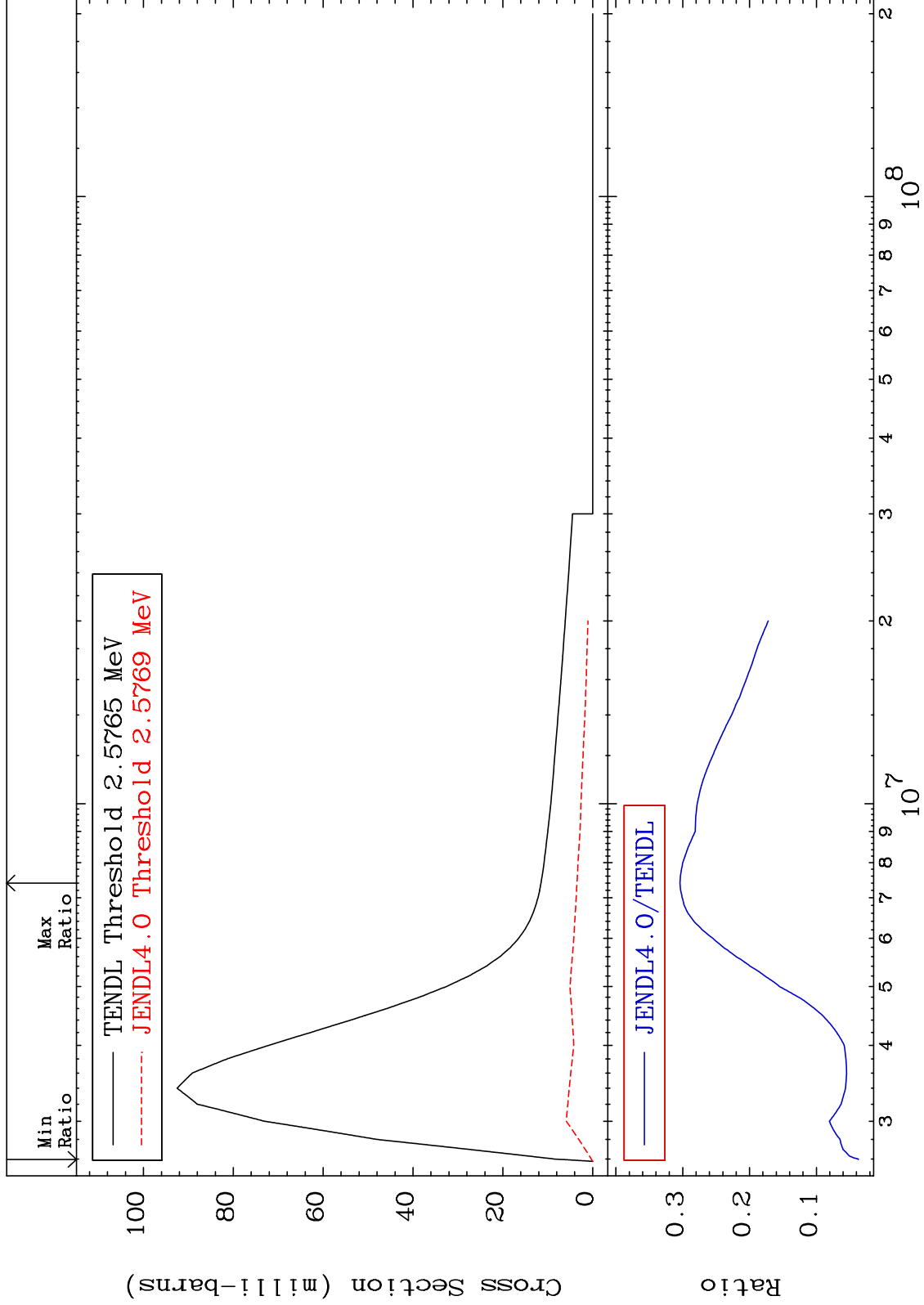
MAT 8325      MT= 54 (n,n') Level Cross Section      83-Bi-209  
 -94.10 To 9999. %



MAT 8325

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

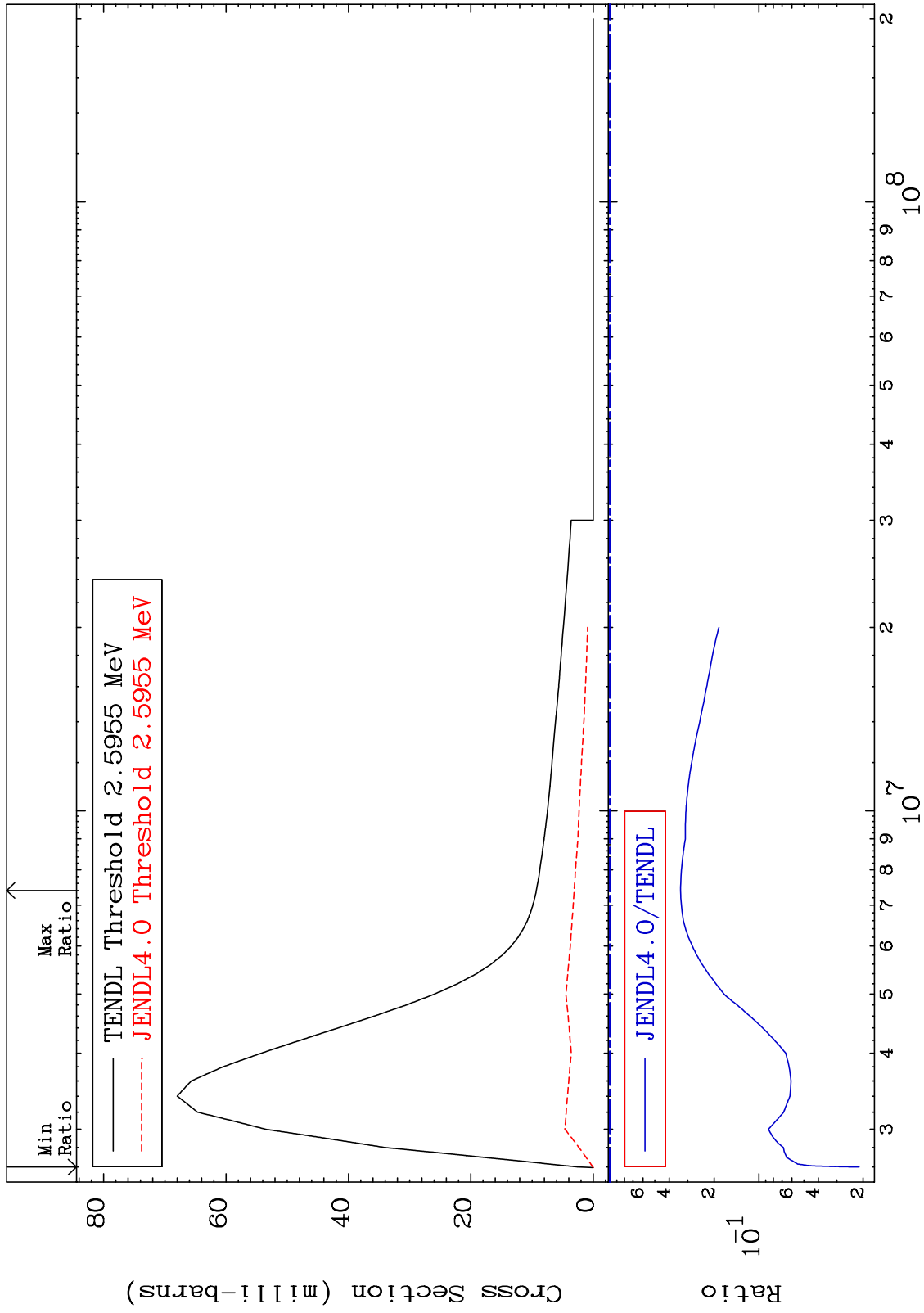
83-Bi-209  
-96.29 To -69.60%



MAT 8325

MT= 56 (n,n') Level  
Cross Section

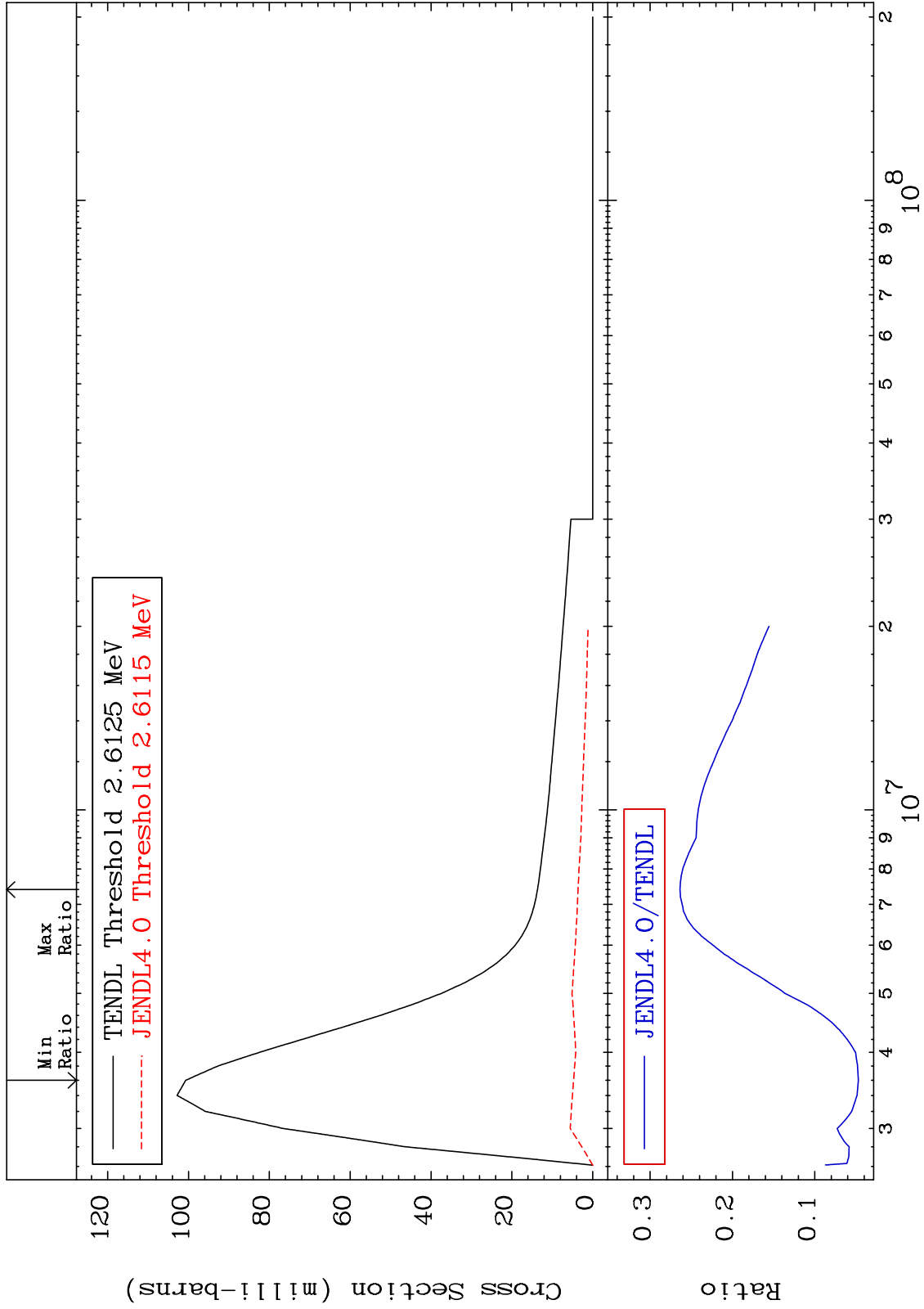
83-Bi-209  
-97.88 To -66.47%



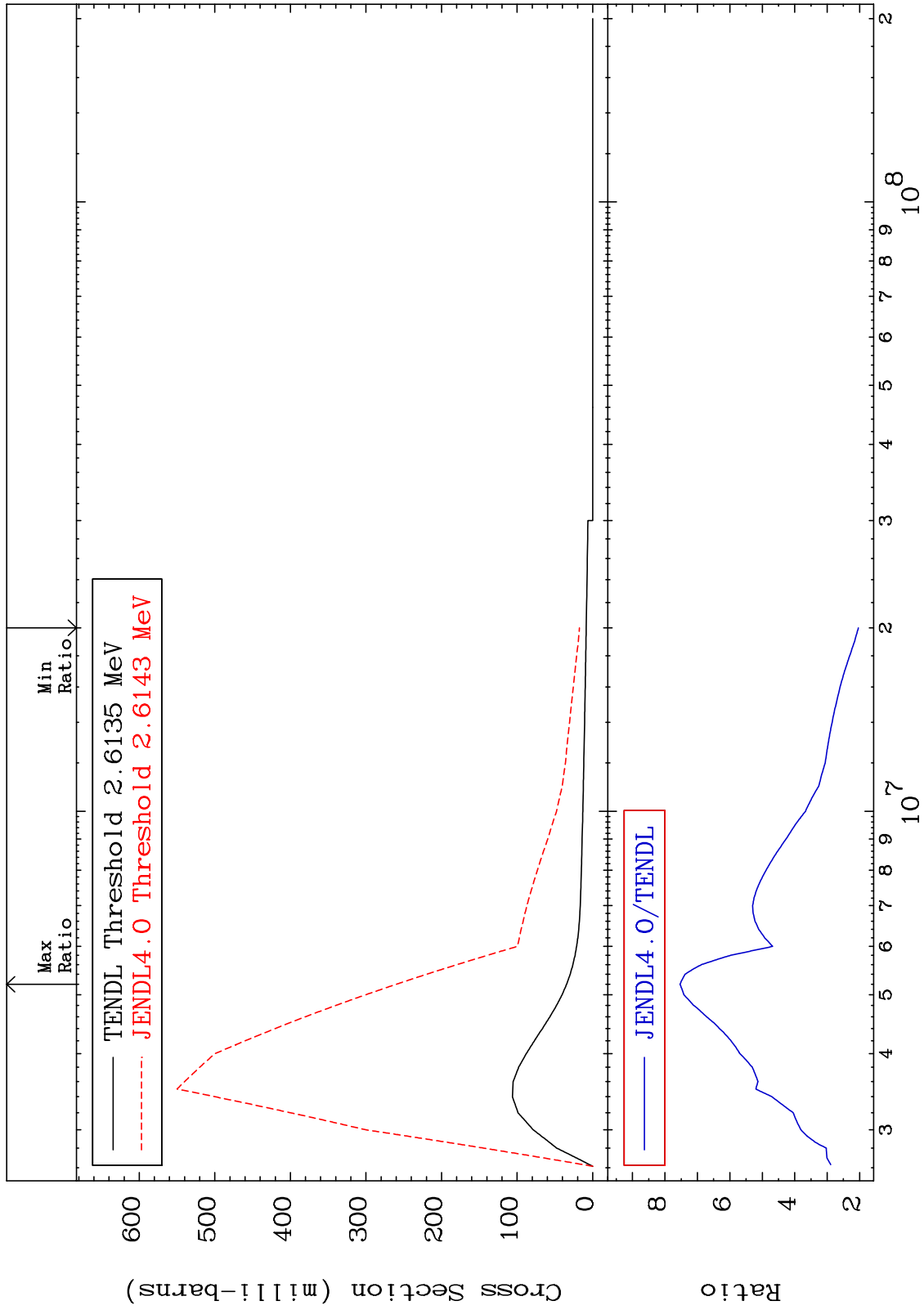
MAT 8325

MT= 57 (n,n') Level  
Cross Section

83-Bi-209  
-95.30 To -73.63%



MAT 8325 MT= 58 (n,n') Level Cross Section 83-Bi-209 103.8 To 653.5 %

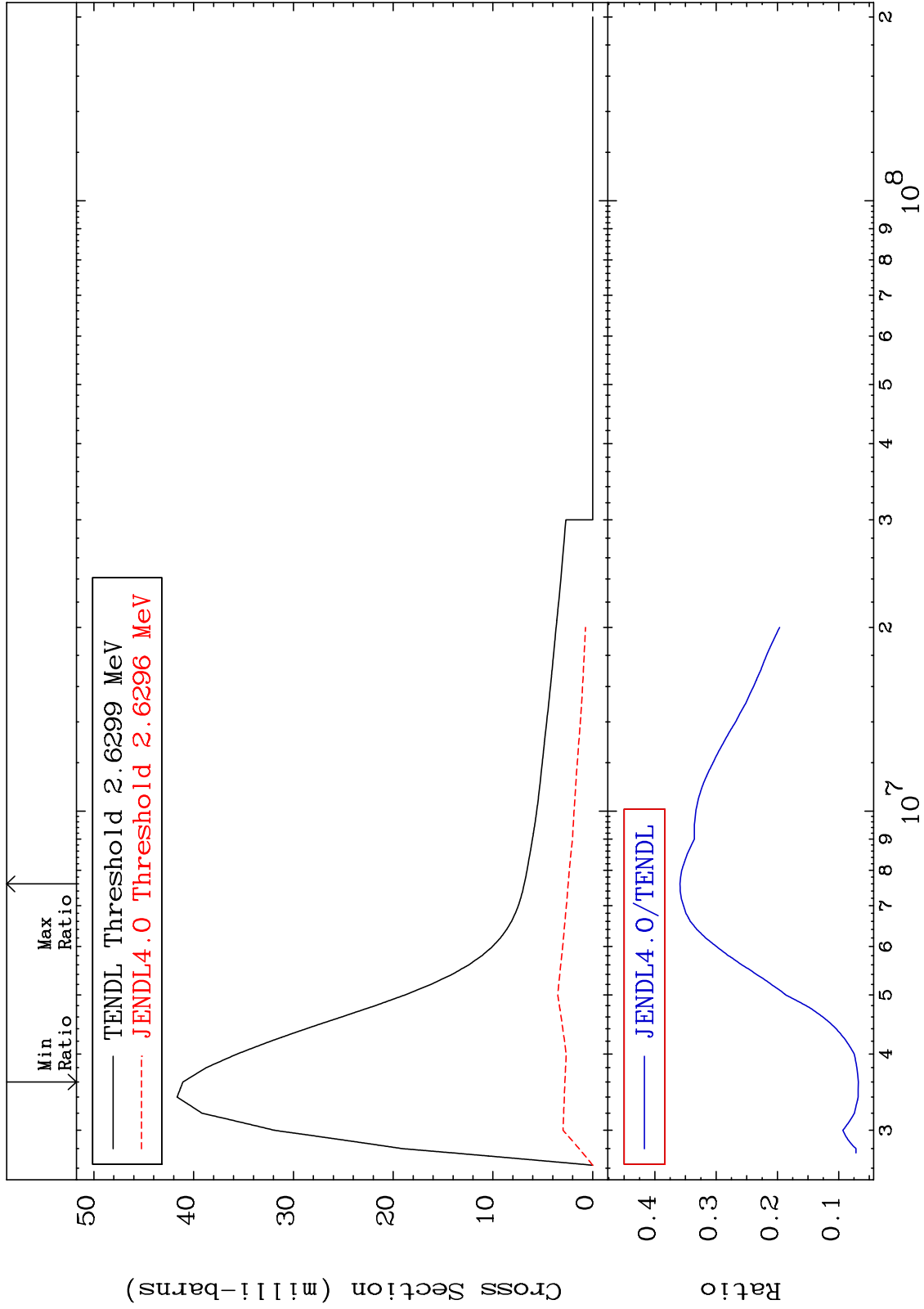




MAT 8325

MT= 59 (n, n') Level  
Cross Section

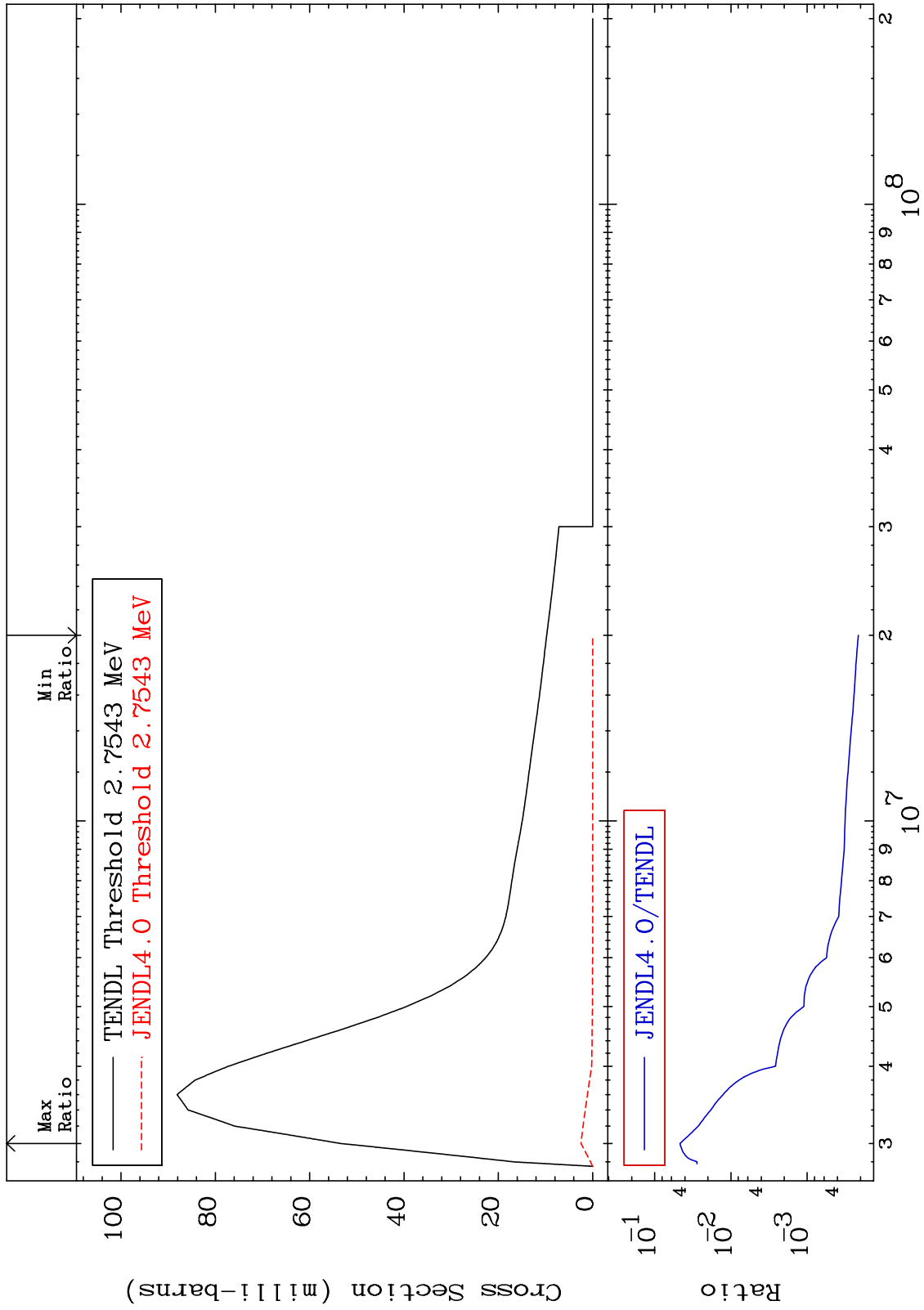
83-Bi-209  
-93.22 To -64.11%



MAT 8325

MT= 60 (n,n') Level  
Cross Section

83-Bi-209  
-99.98 To -95.35%

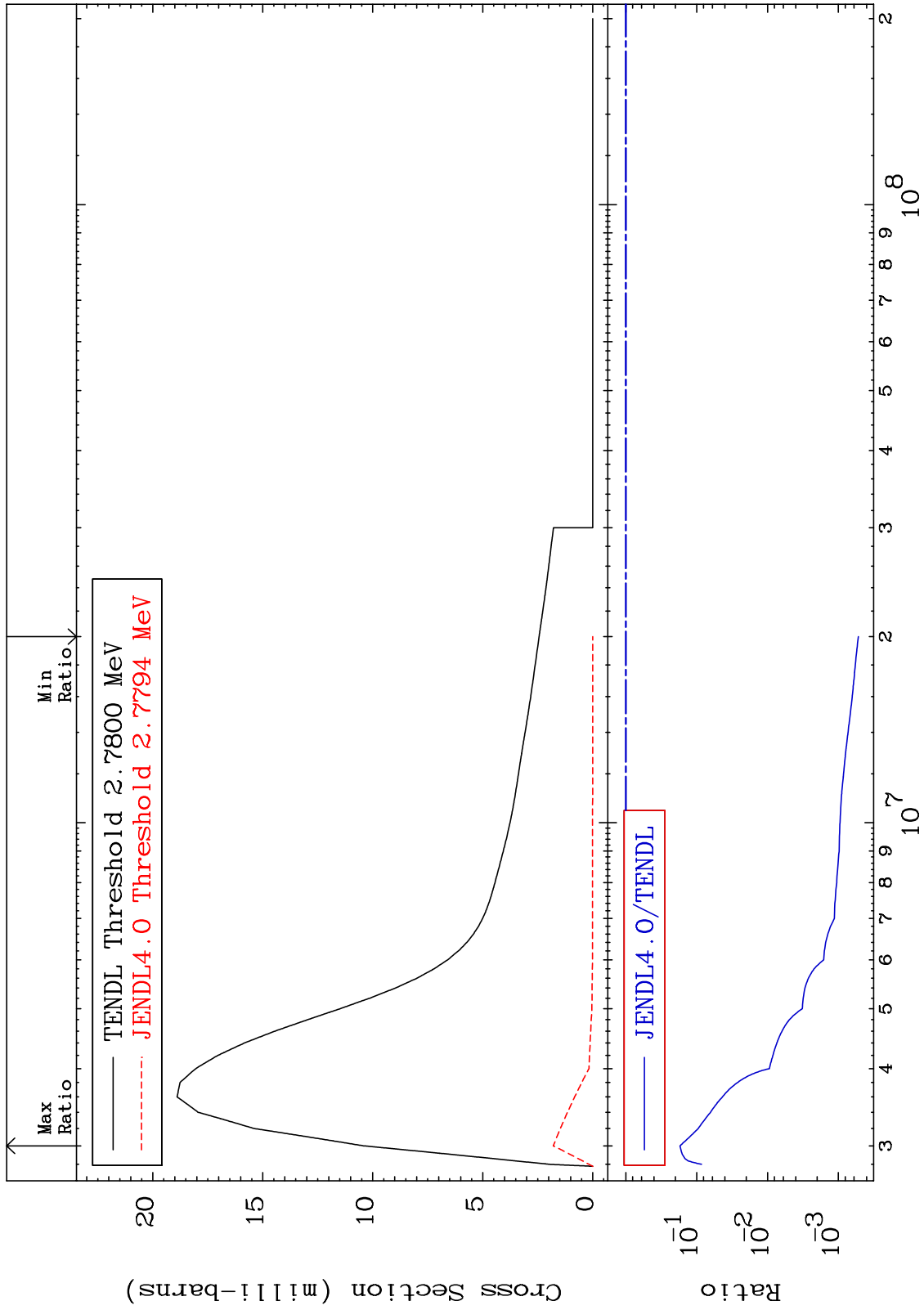


17

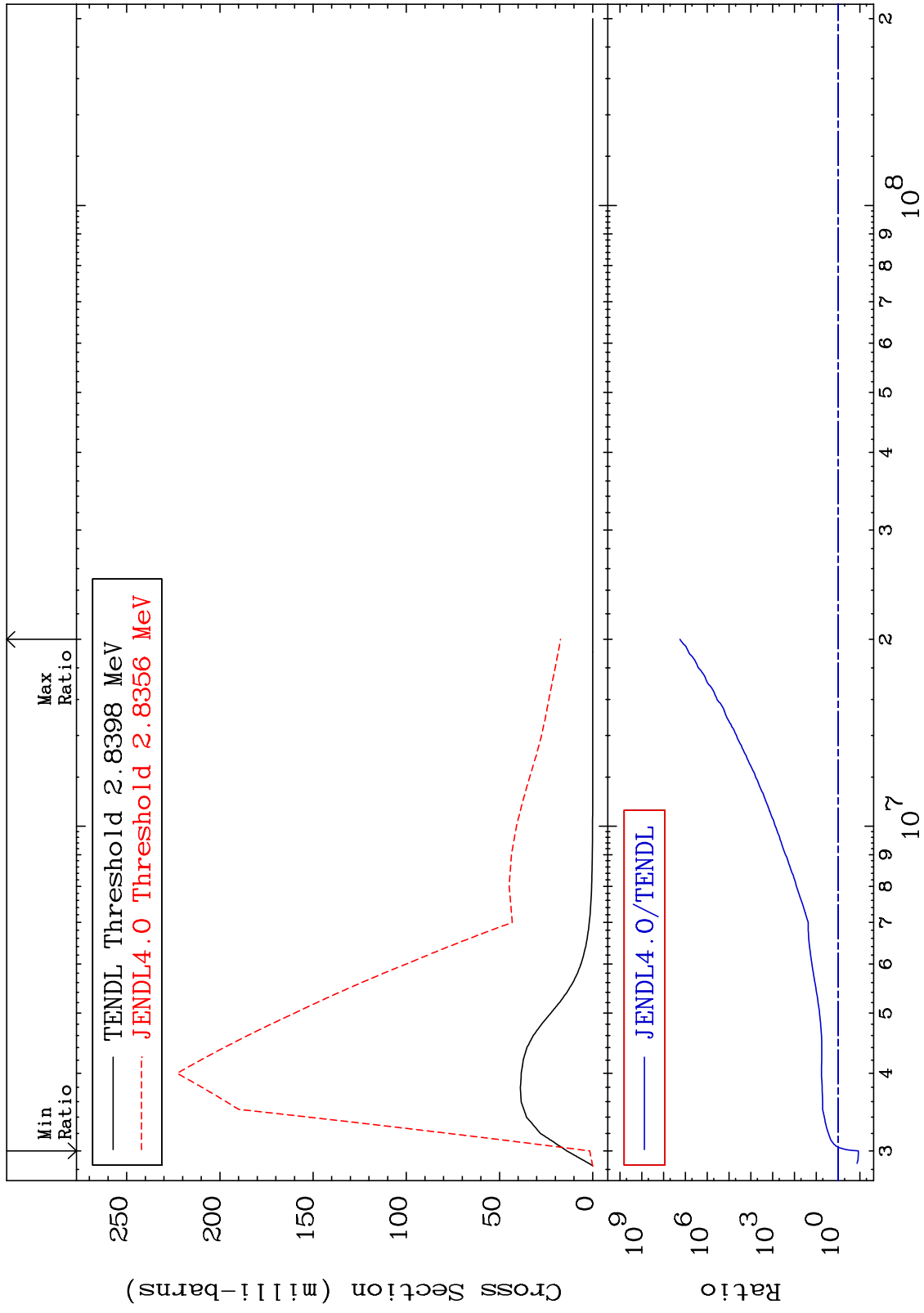
Incident Energy (eV)

83-Bi-209

MAT 8325 MT= 61 (n,n') Level Cross Section 83-Bi-209 -99.95 To -82.80%



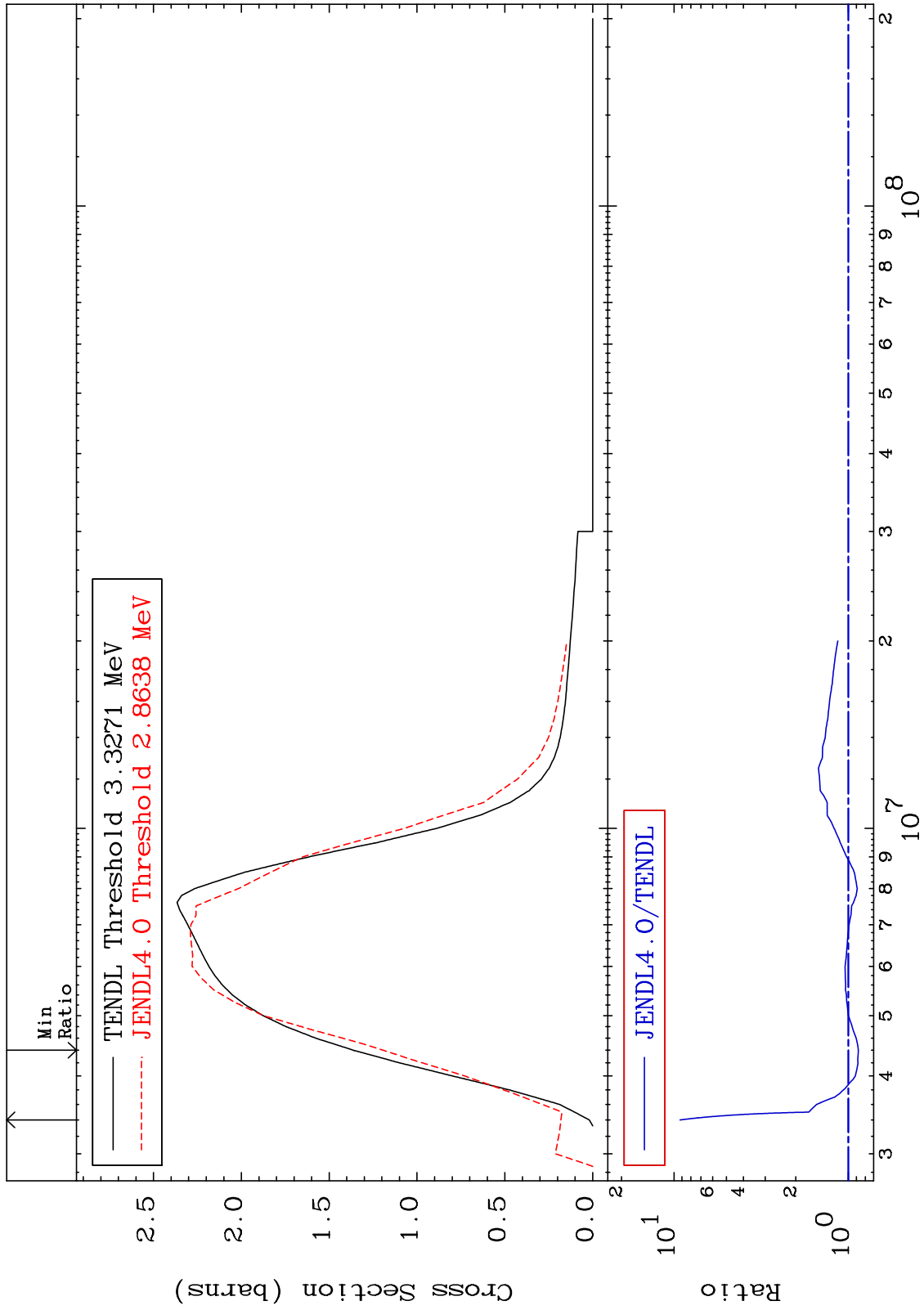
MAT 8325      MT= 62 (n,n') Level Cross Section      83-Bi-209  
 -88.25 To 9999. %



MAT 8325

(n, n') Continuum  
Cross Section

83-Bi-209  
-12.43 To 823.1 %



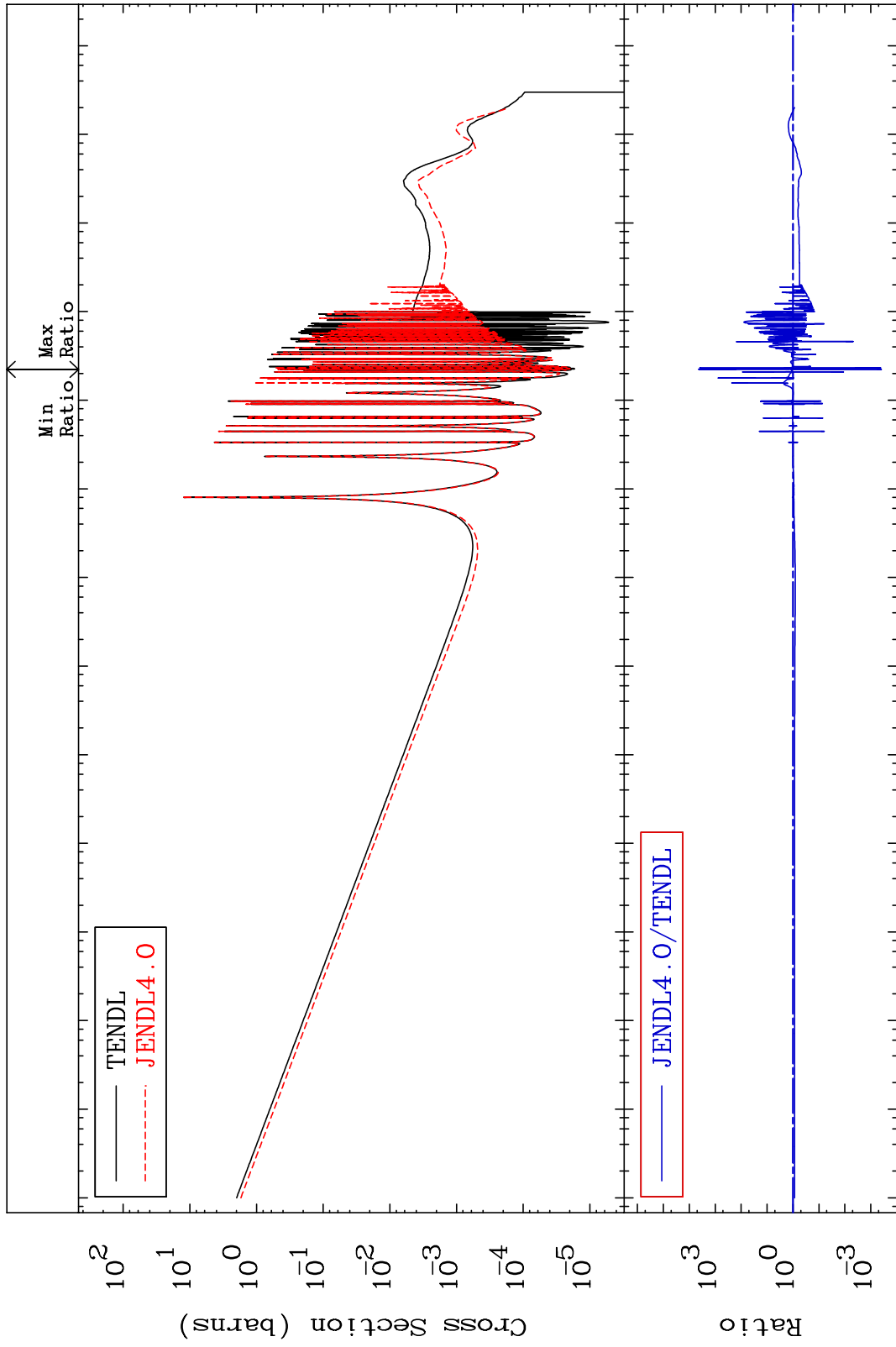
MAT 8325

(n,  $\gamma$ )

83-Bi-209

Cross Section

-99.96 To 9999. %

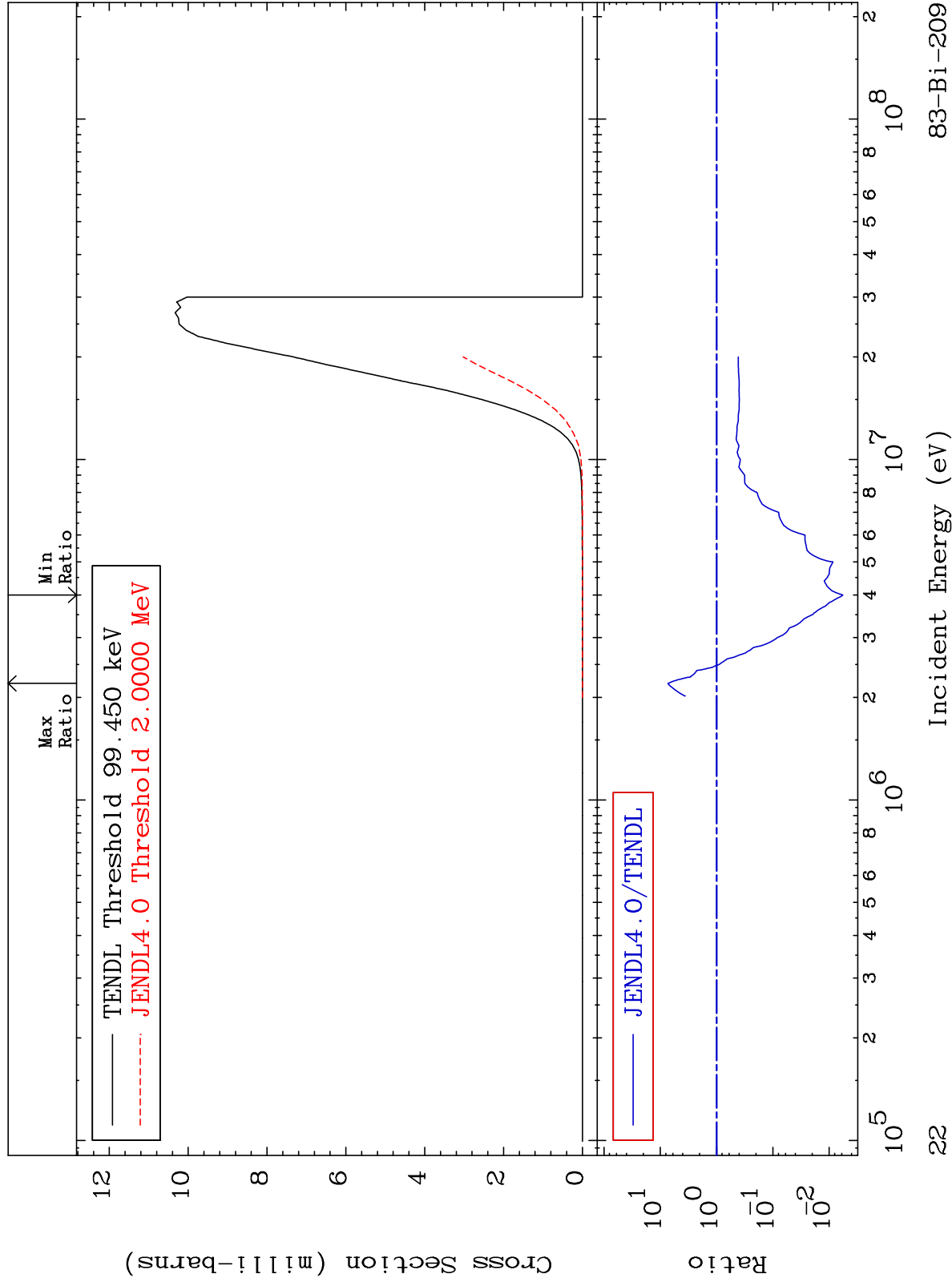


Incident Energy (eV)

MAT 8325

(n, p)  
Cross Section

83-Bi-209  
-99.43 To 630.1 %



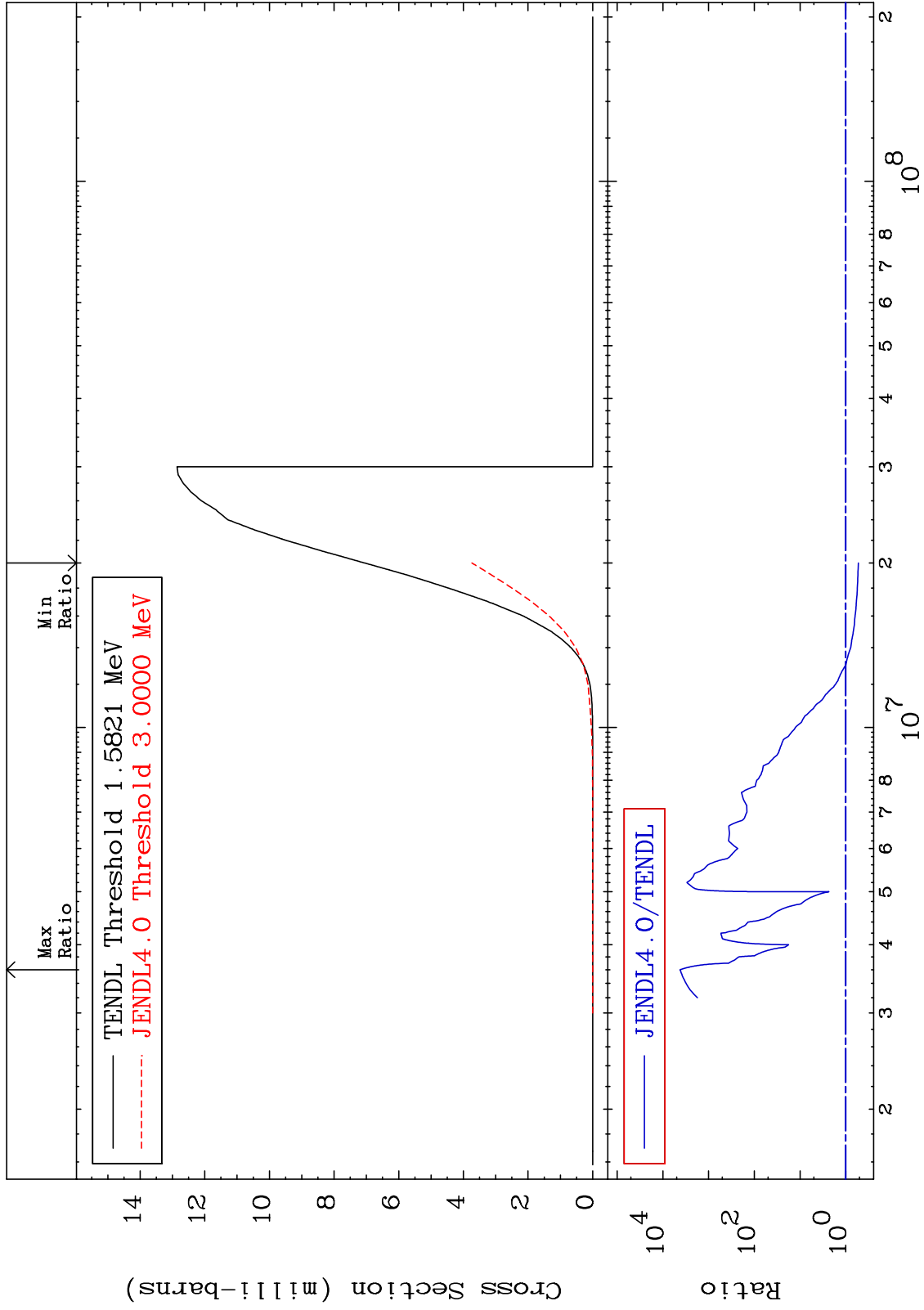
MAT 8325

(n, d)

83-Bi-209

Cross Section

-47.04 To 9999. %





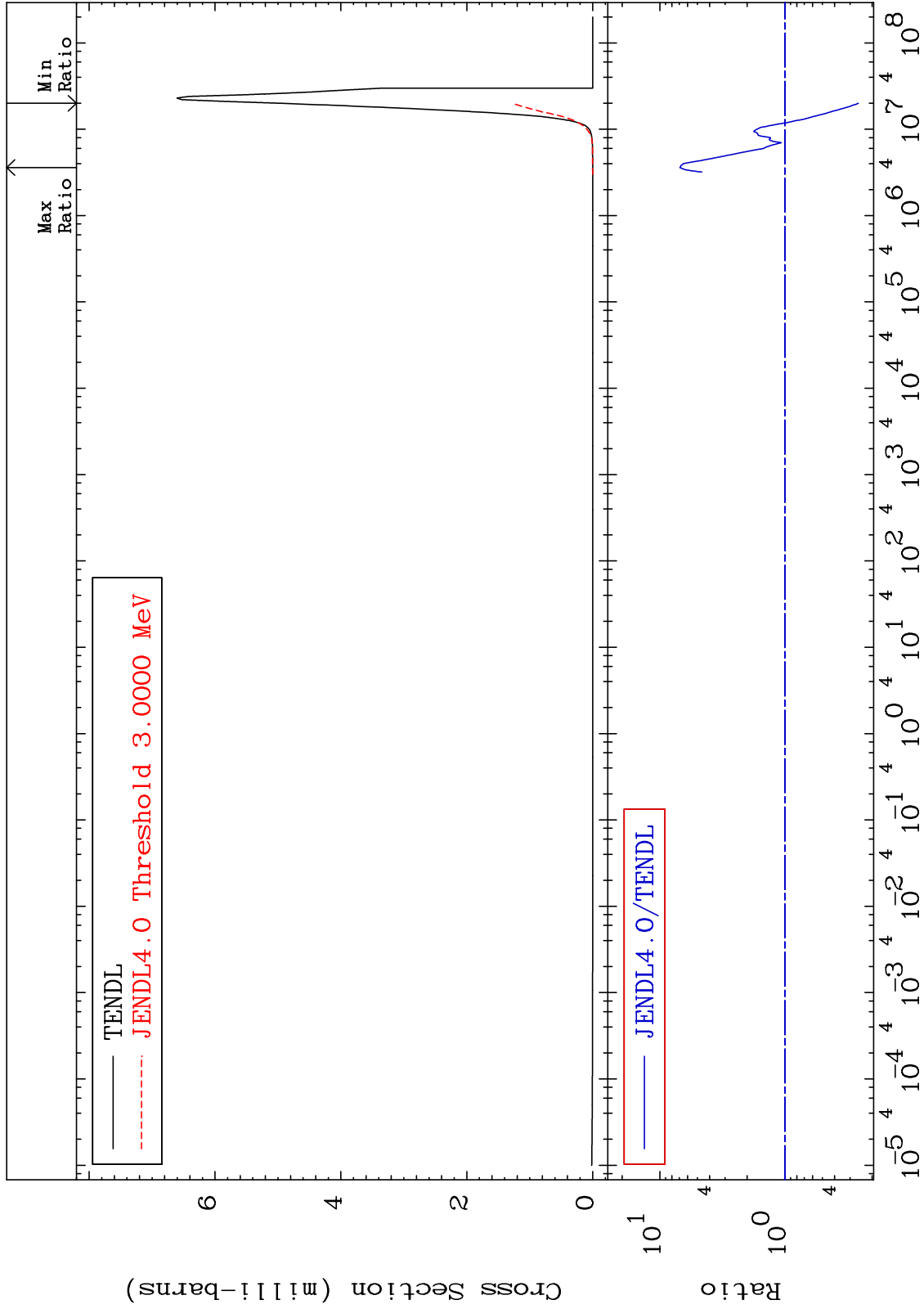
MAT 8325

(n,  $\alpha$ )

83-Bi-209

Cross Section

-74.23 To 589.6 %



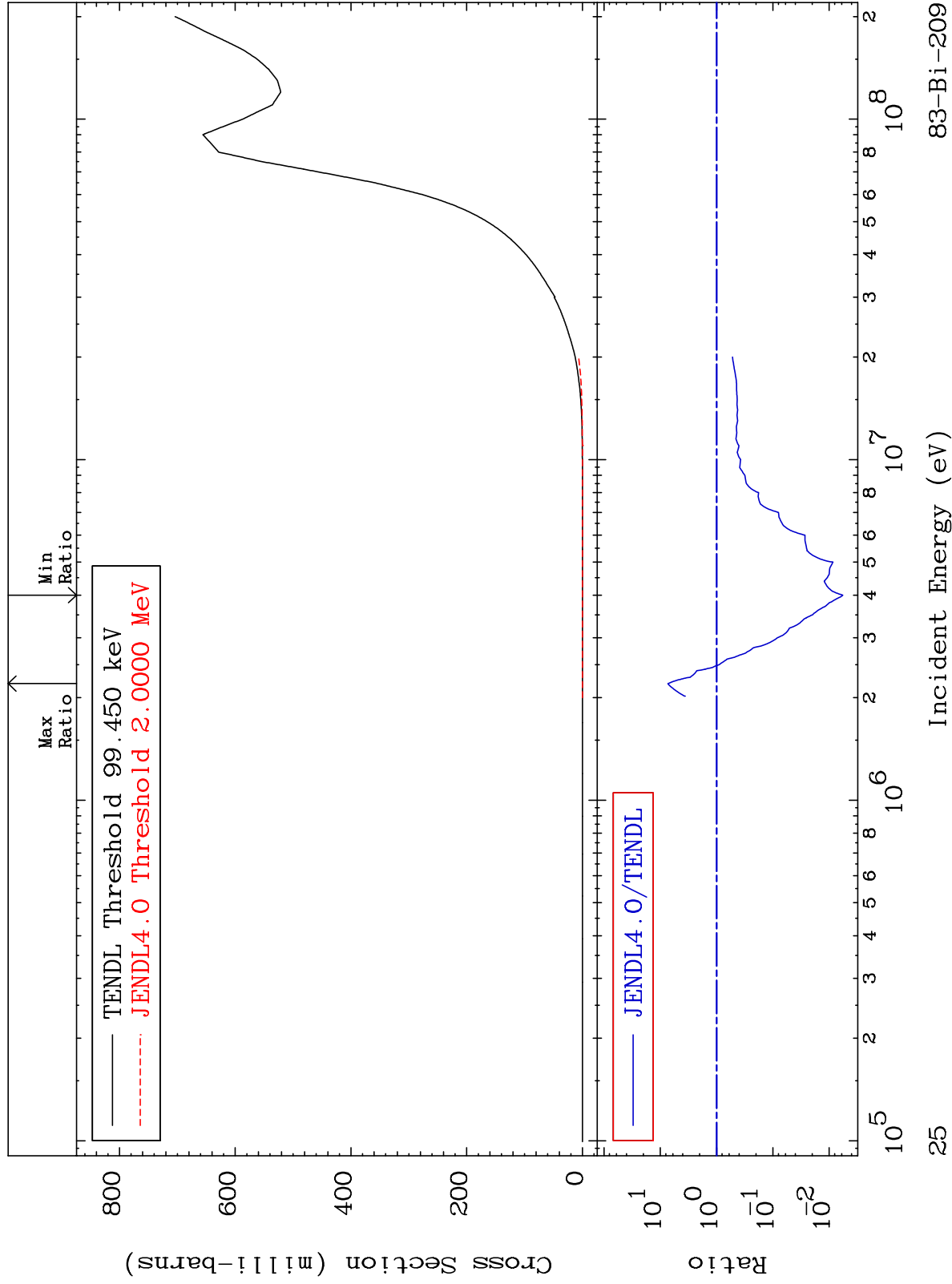
24

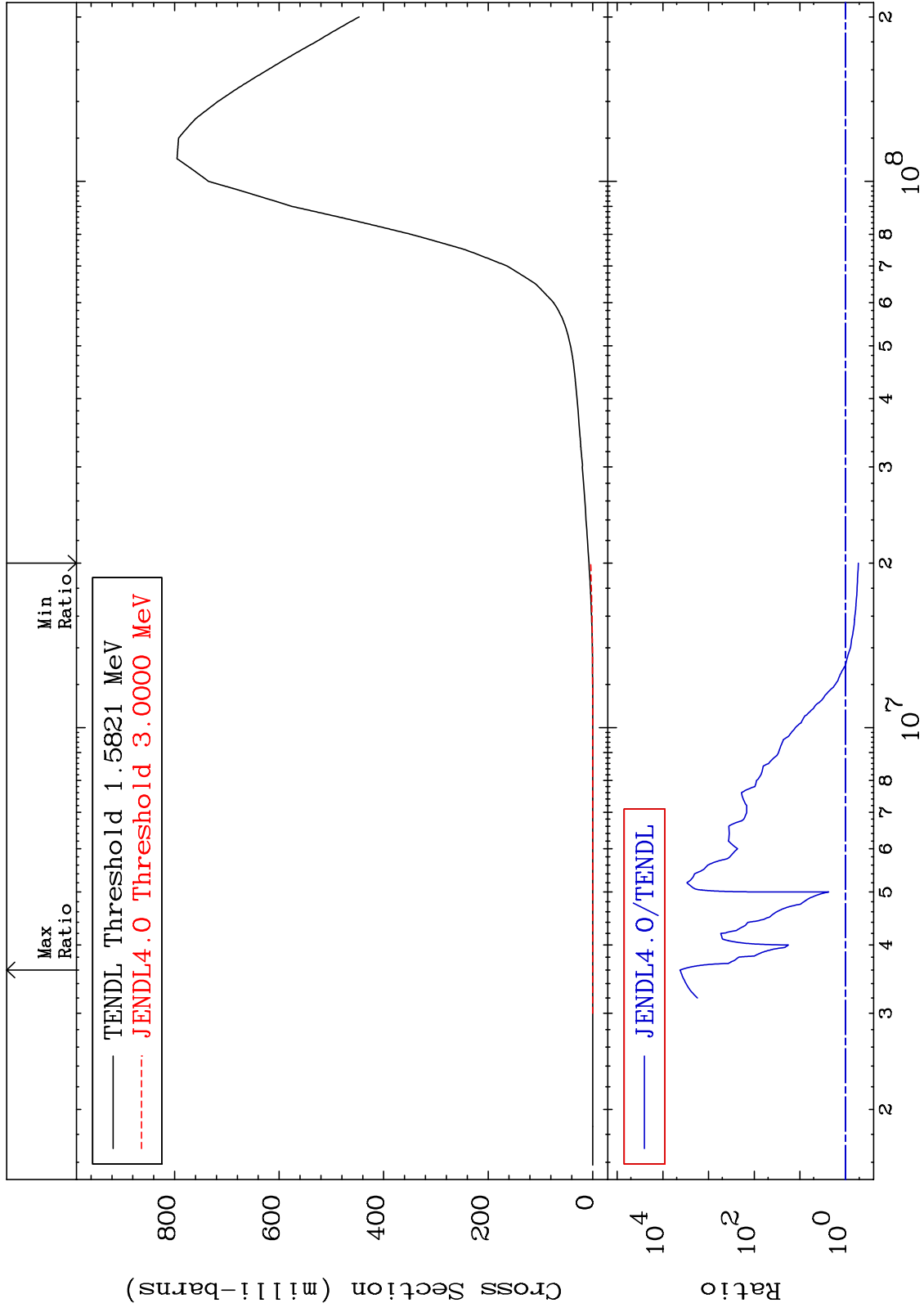
83-Bi-209

MAT 8325

Hydrogen Production  
Cross Section

83-Bi-209  
-99.43 To 630.1 %

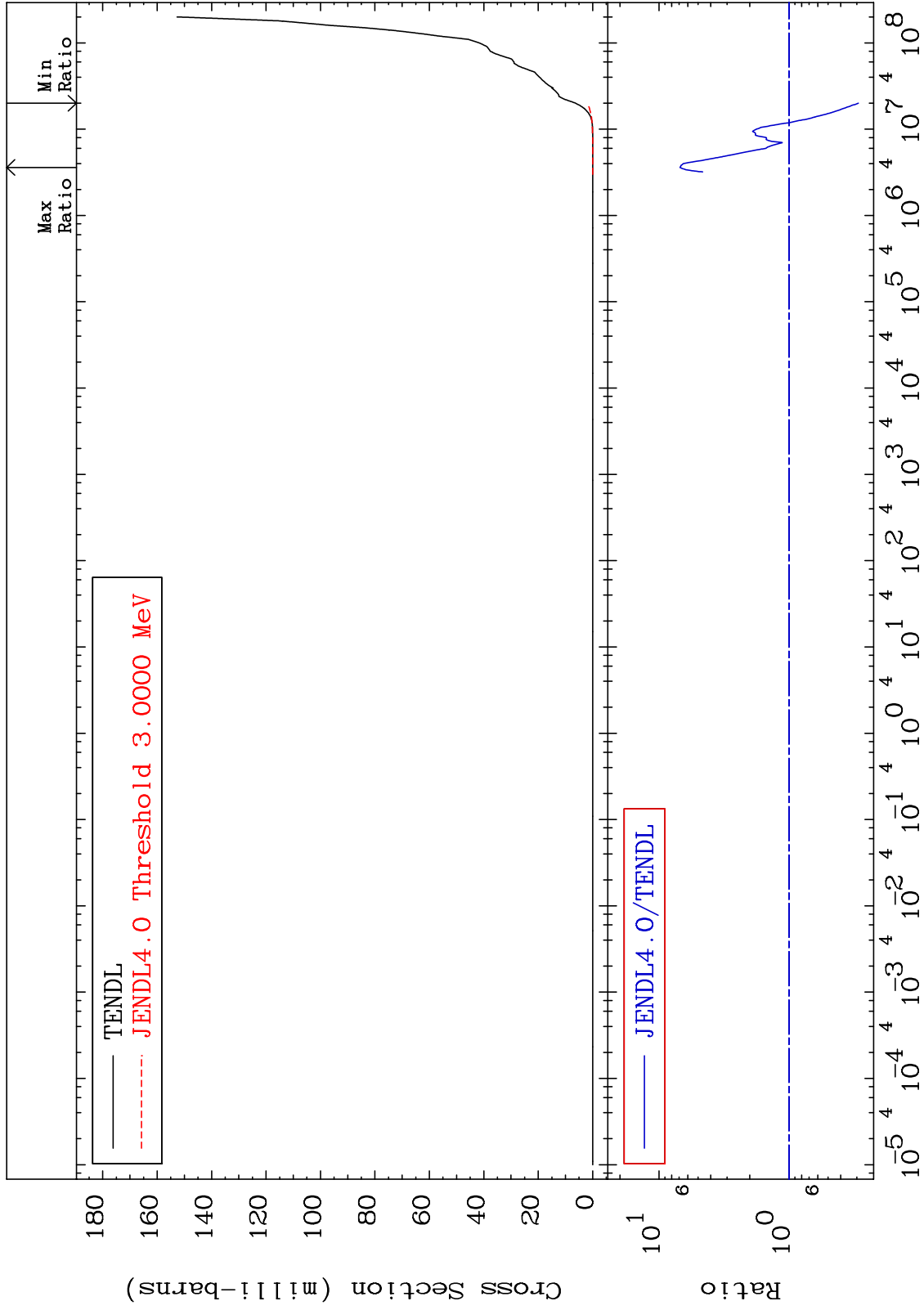




MAT 8325

He-4 Production  
Cross Section

83-Bi-209  
-70.80 To 589.6 %



27

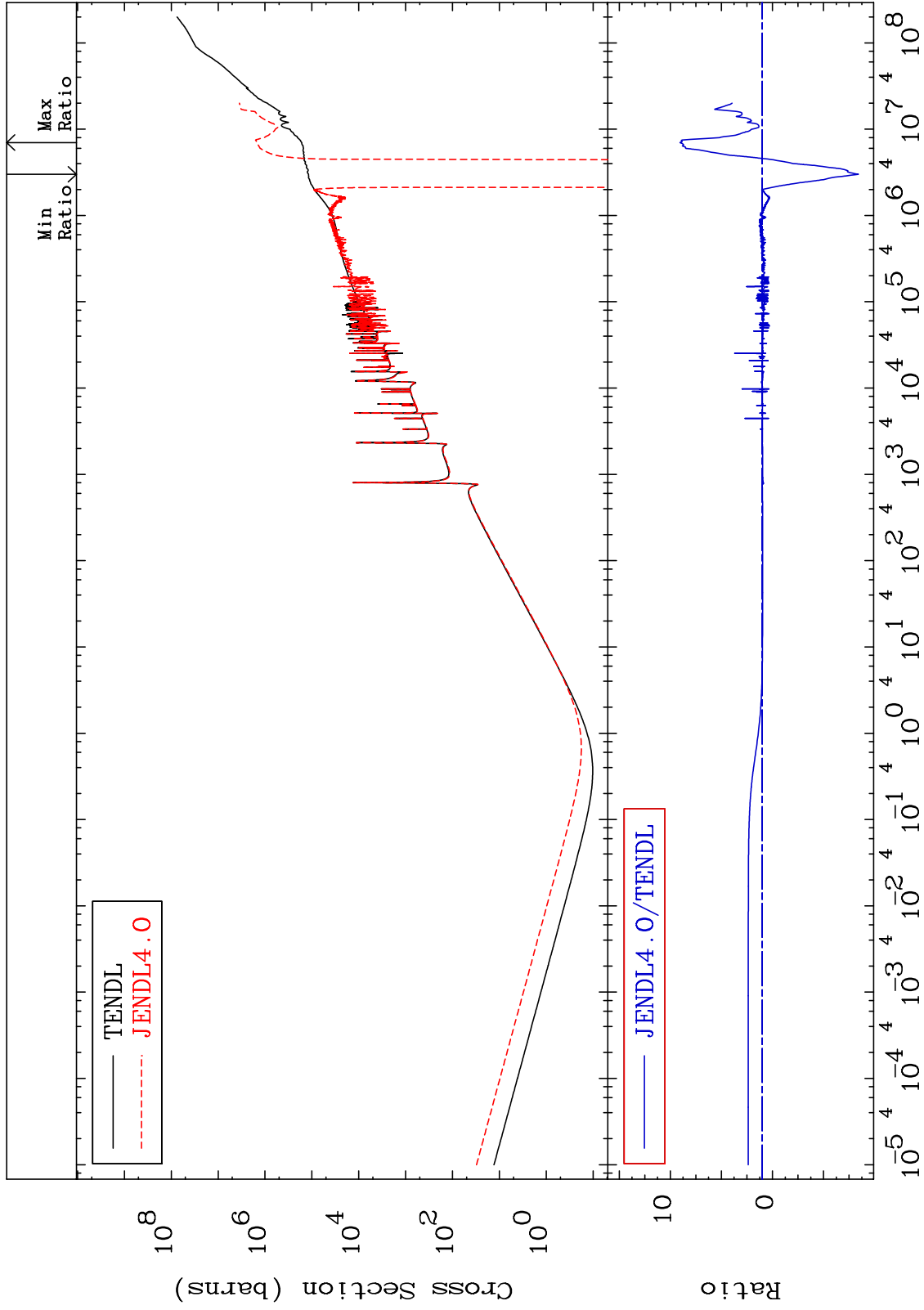
Incident Energy (eV)

83-Bi-209

MAT 8325

Kerma total (eV-barns)  
Cross Section

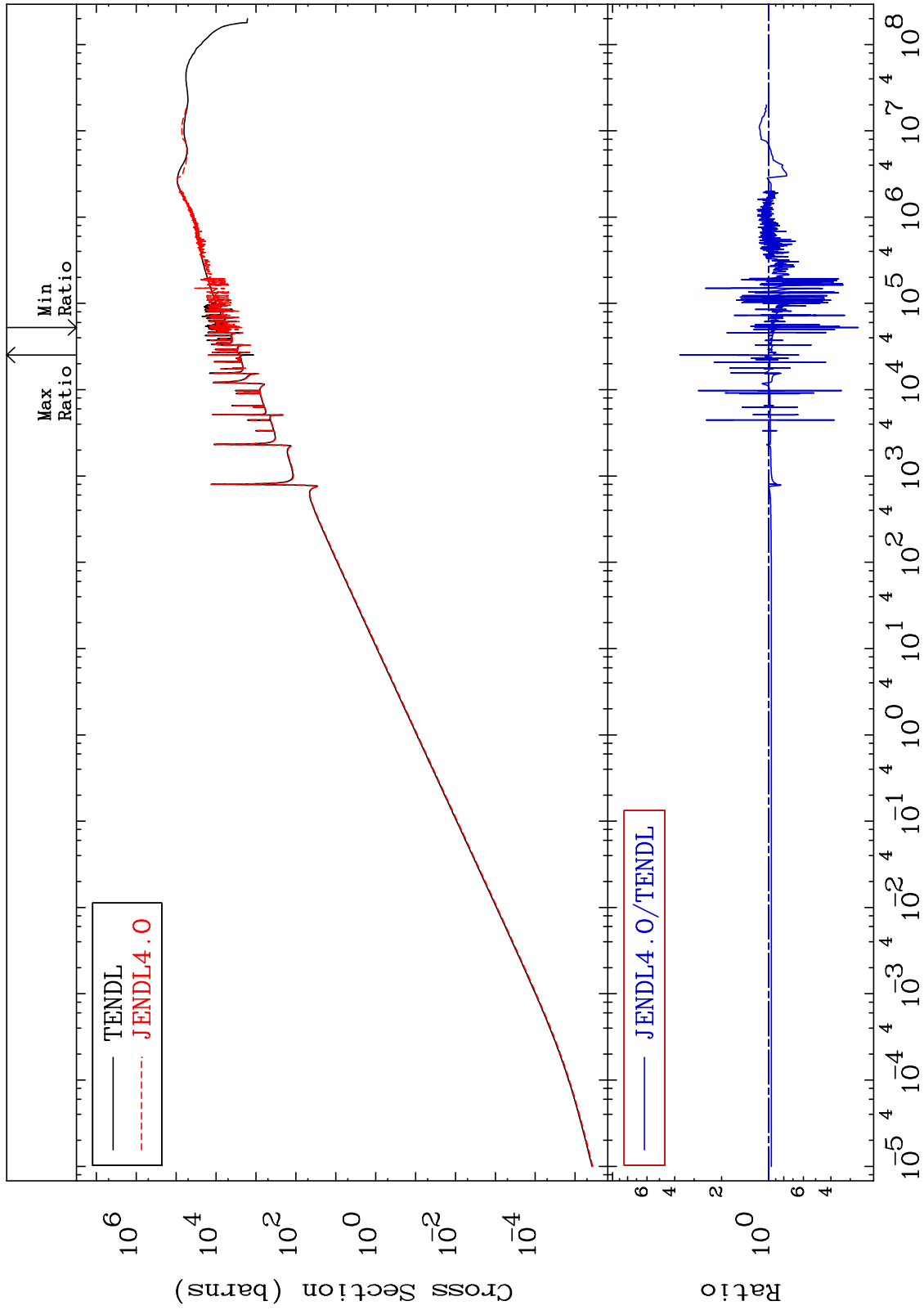
83-Bi-209  
-941.6 To 804.9 %



MAT 8325

Kerma elastic  
Cross Section

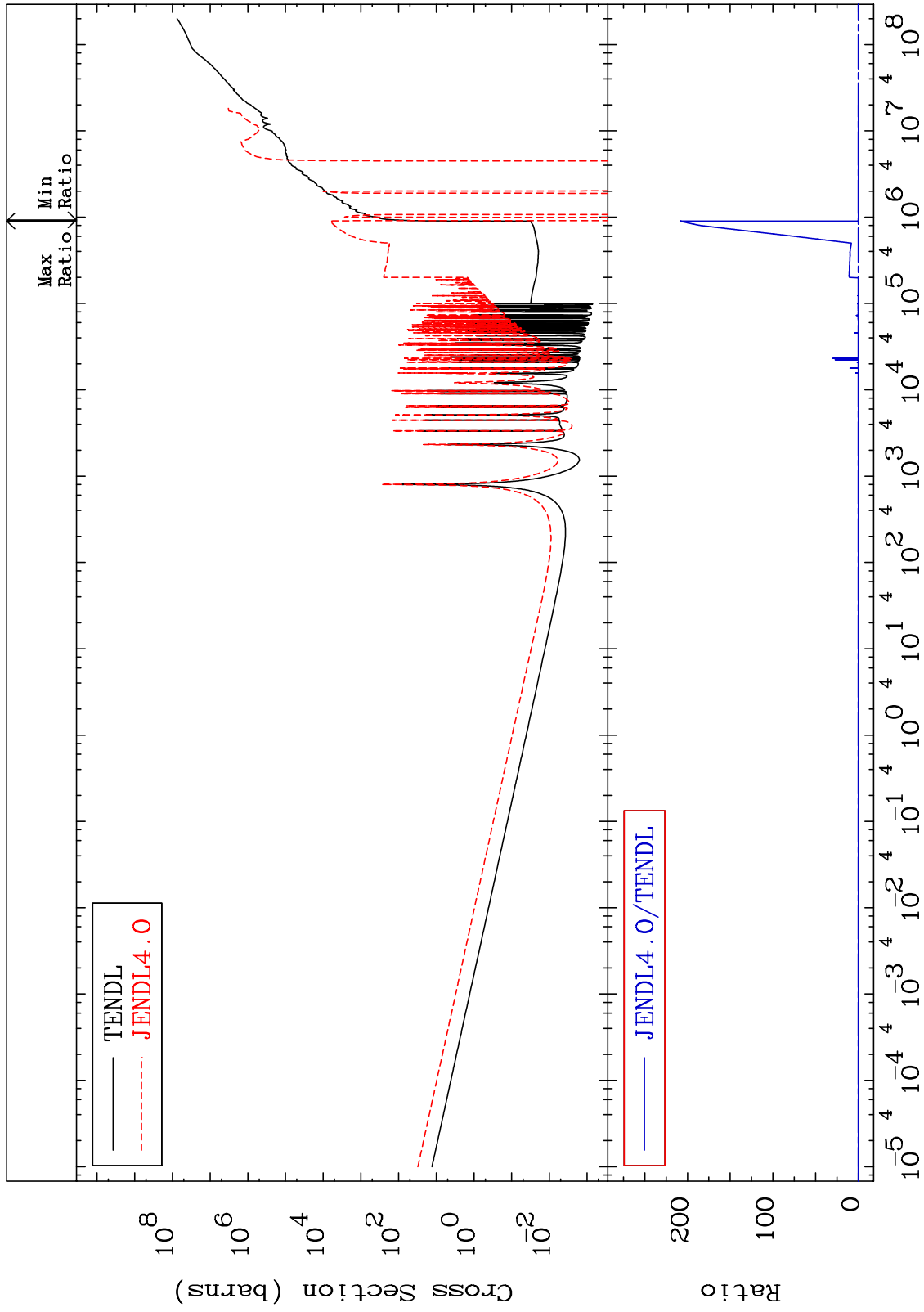
83-Bi-209  
-73.37 To 269.4 %



MAT 8325

Kerma non-elastic (all but mt2)  
Cross Section

83-Bi-209  
-5237. To 9999. %



30

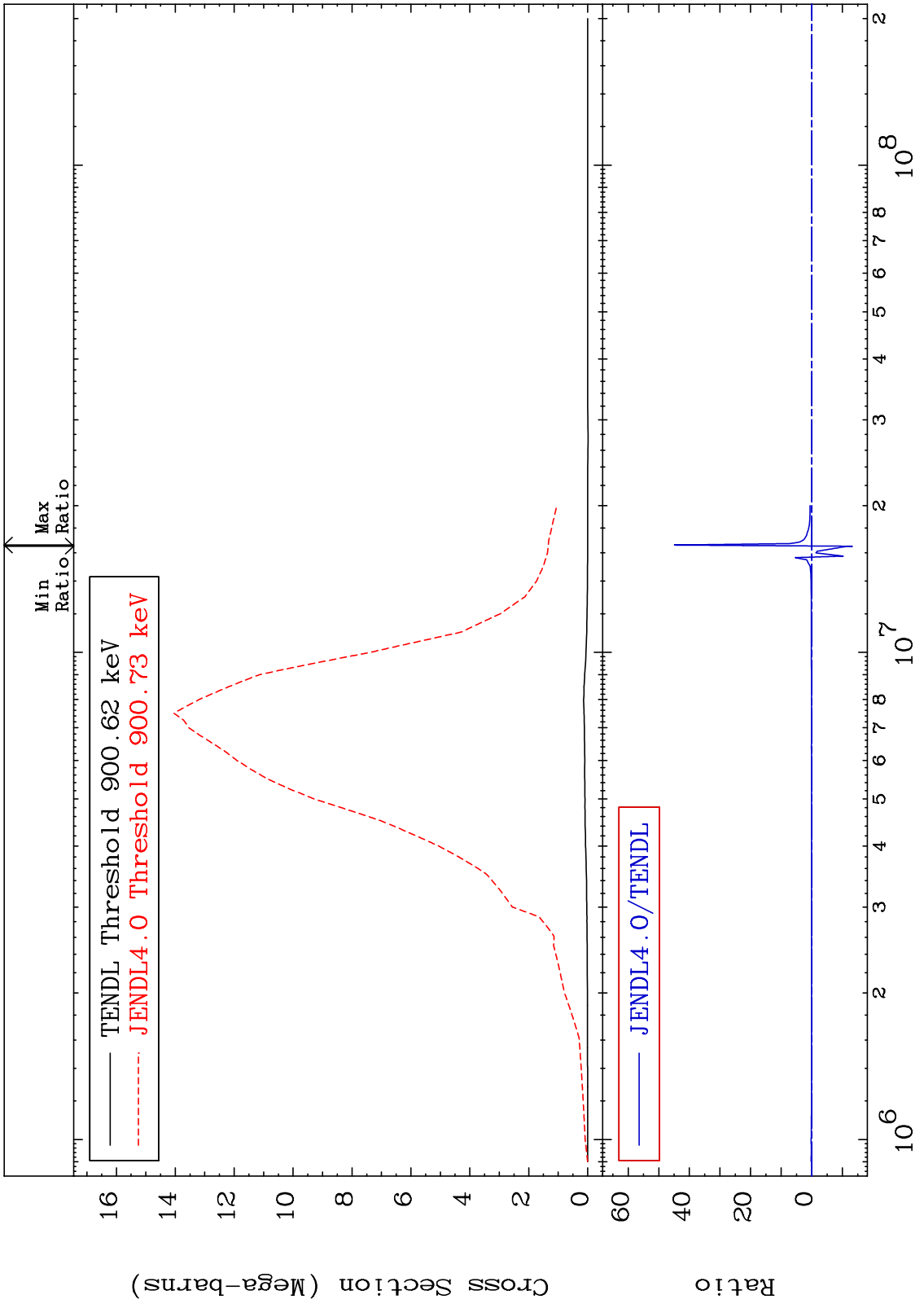
Incident Energy (eV)

83-Bi-209

MAT 8325

Kerma inelastic (mt51-91)  
Cross Section

83-Bi-209  
-9999. To 9999. %



31

Incident Energy (eV)

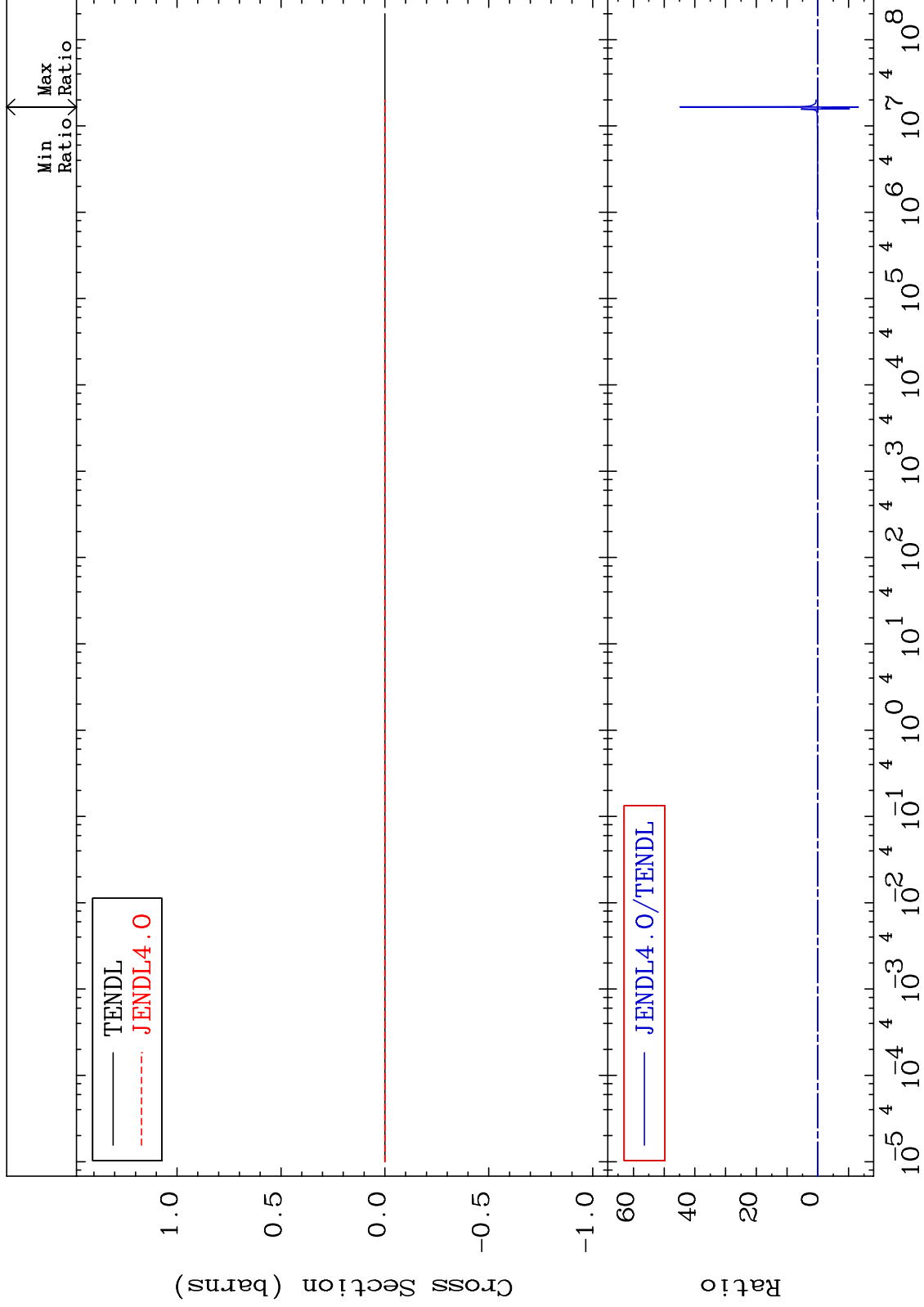
83-Bi-209



MAT 8325

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

83-Bi-209  
-9999. To 9999. %



32

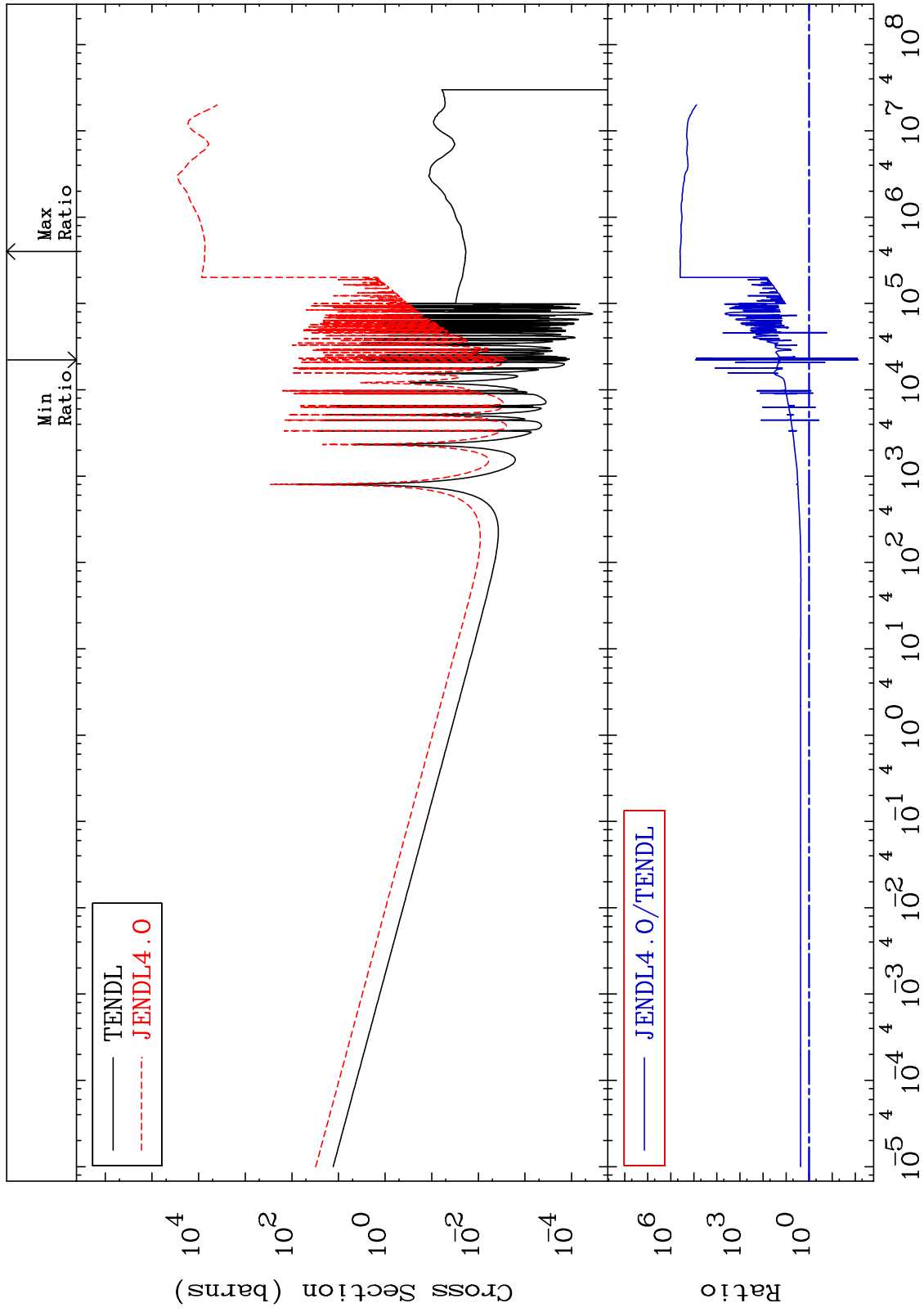
Incident Energy (eV)

83-Bi-209

MAT 8325

Kerma capture (mt102)  
Cross Section

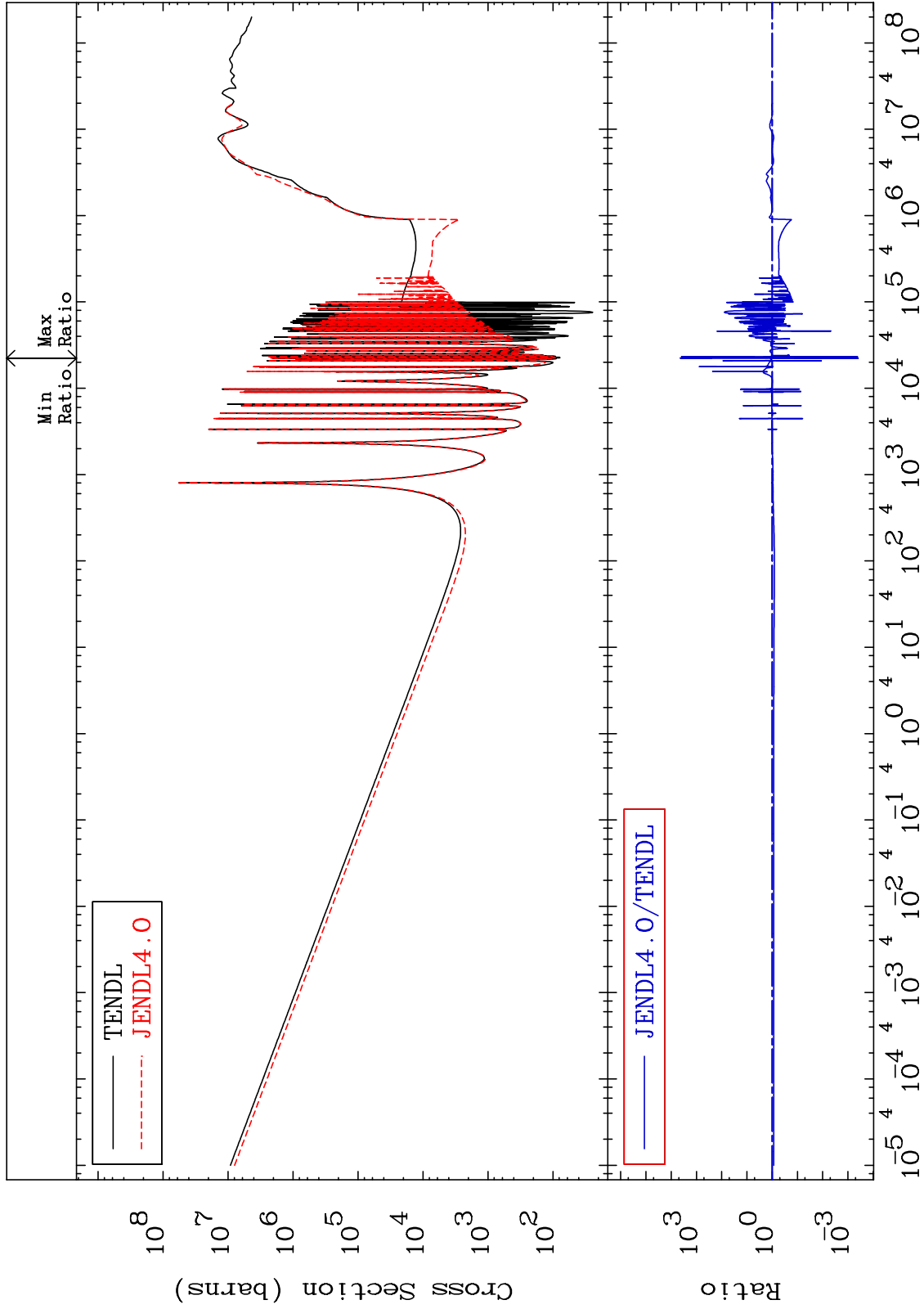
83-Bi-209  
-99.27 To 9999. %



MAT 8325

Total photon (eV-barns)  
Cross Section

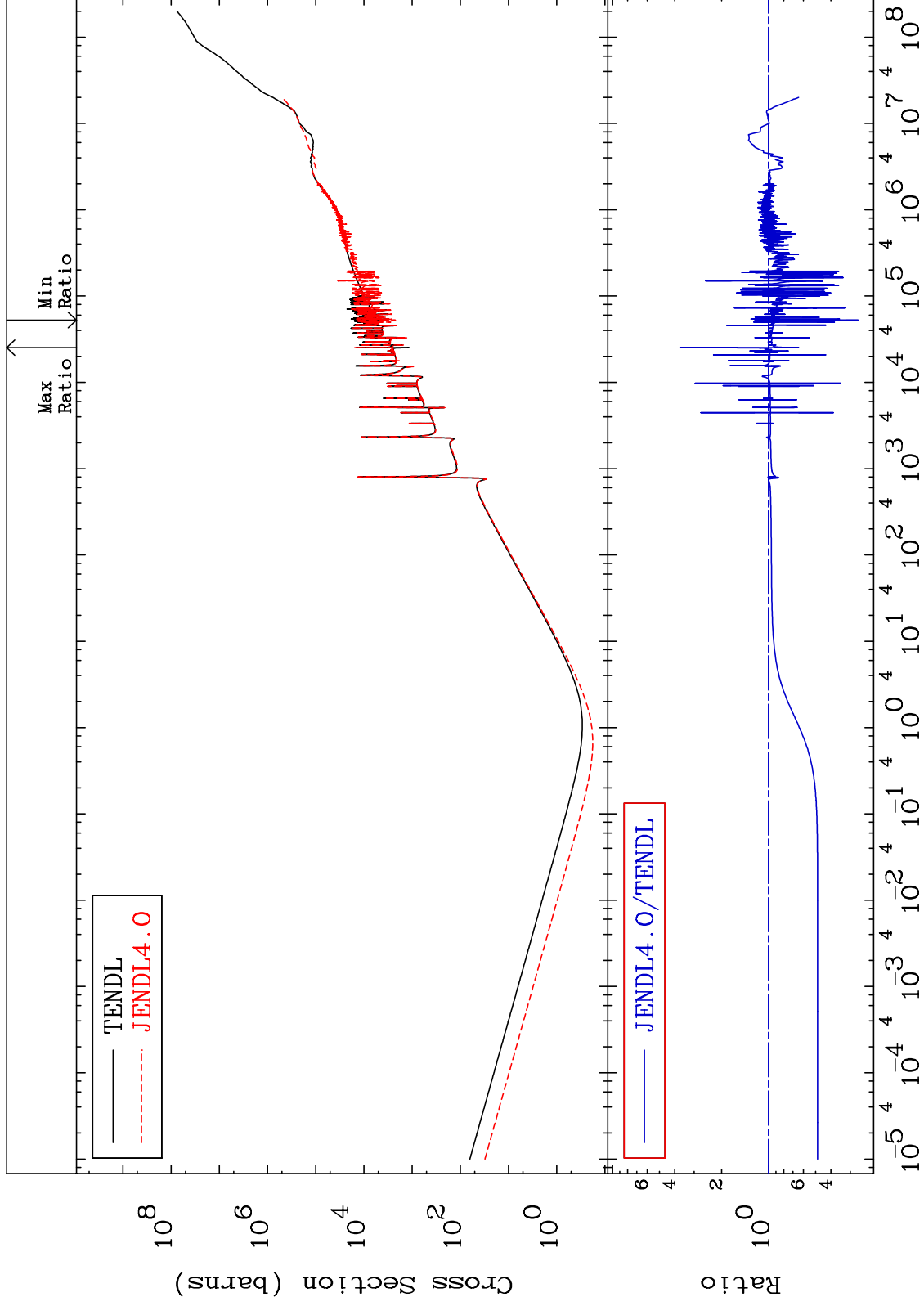
83-Bi-209  
-99.96 To 9999. %



MAT 8325

Total kinematic kerma (high limit)  
Cross Section

83-Bi-209  
-73.35 To 269.6 %



35

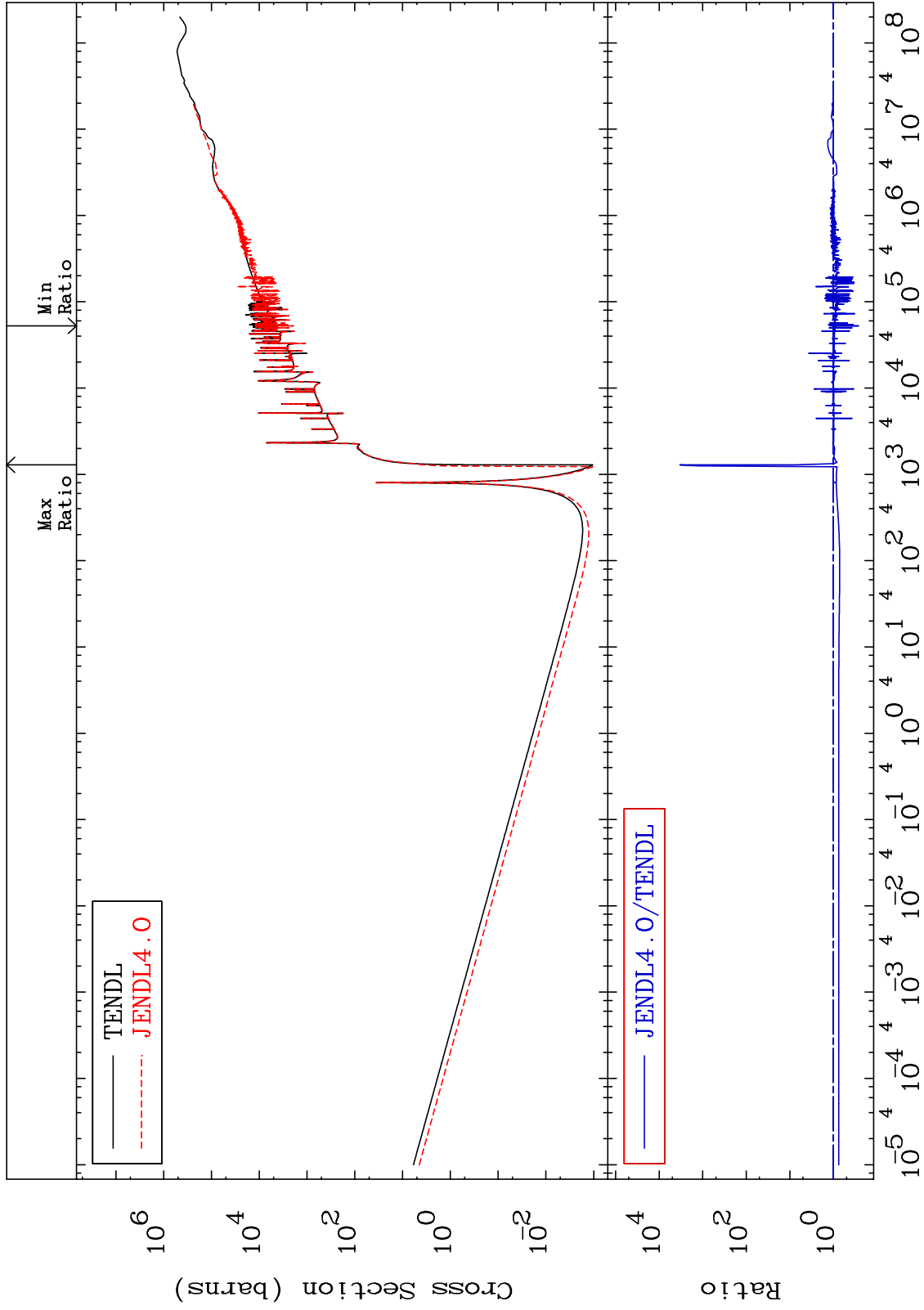
Incident Energy (eV)

83-Bi-209

MAT 8325

Dpa total (eV-barns)  
Cross Section

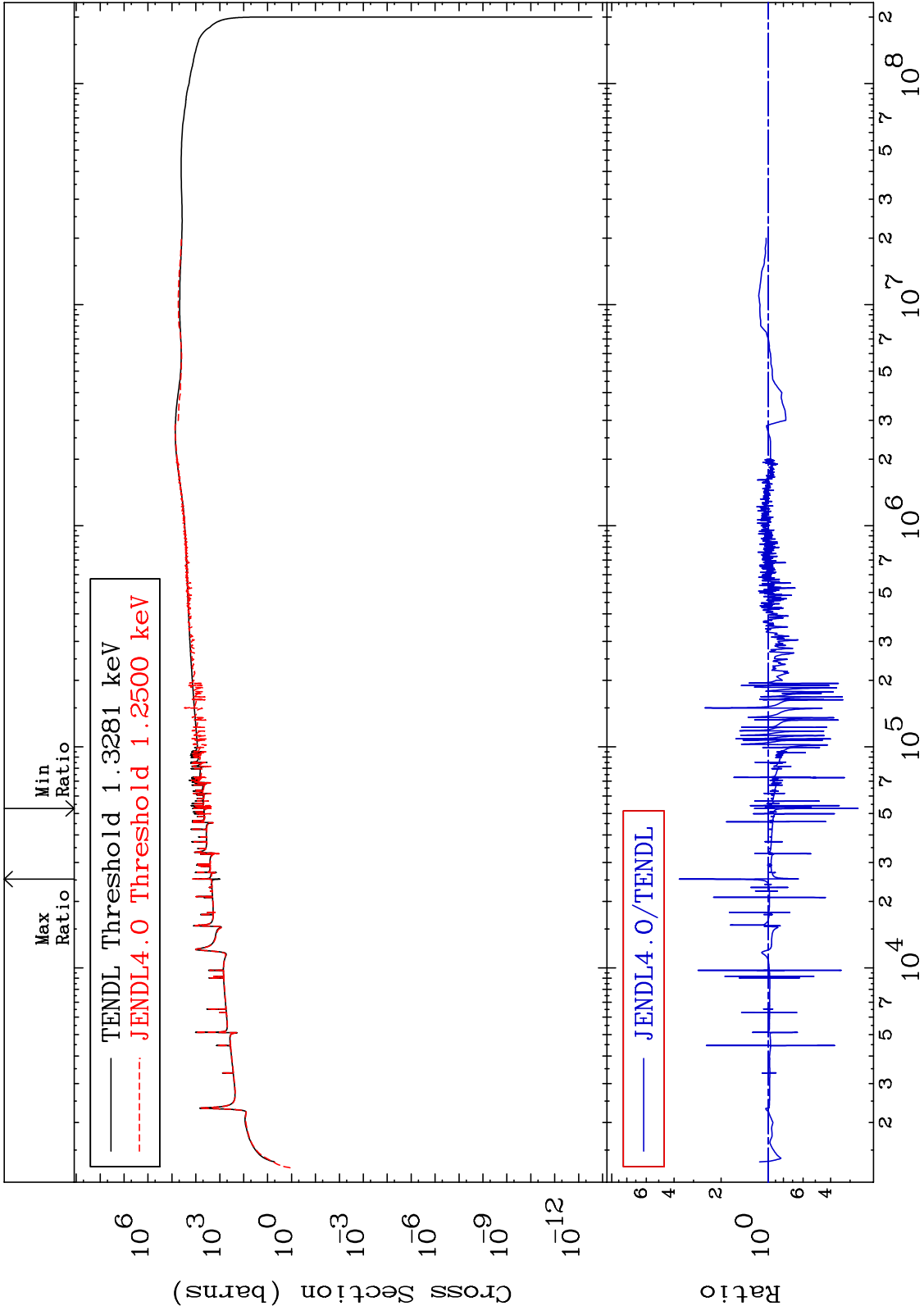
83-Bi-209  
-73.37 To 9999. %



MAT 8325

Dpa elastic (mt2)  
Cross Section

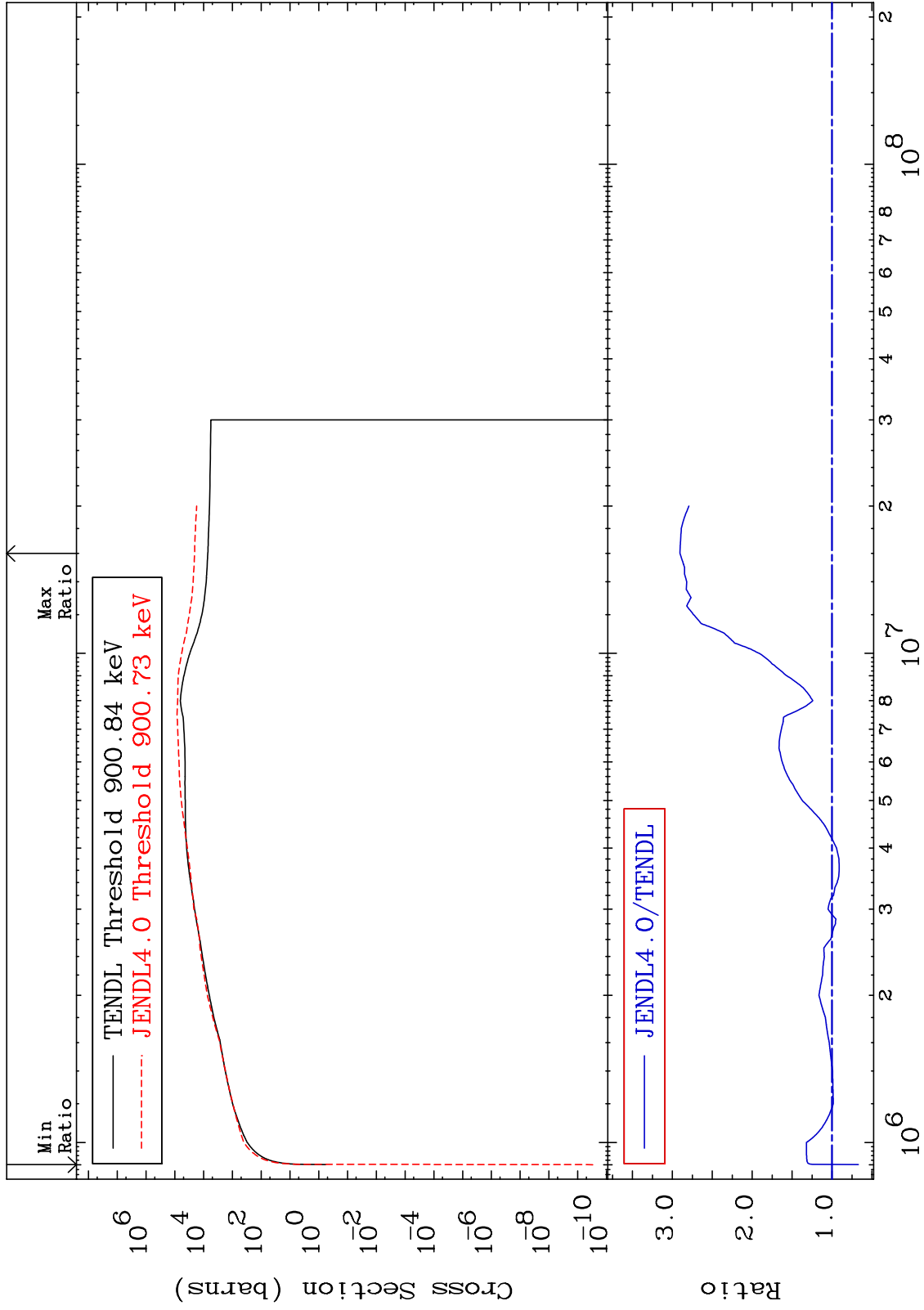
83-Bi-209  
-73.37 To 269.4 %



MAT 8325

Dpa inelastic (mt51-91)  
Cross Section

83-Bi-209  
-32.99 To 190.4 %



38

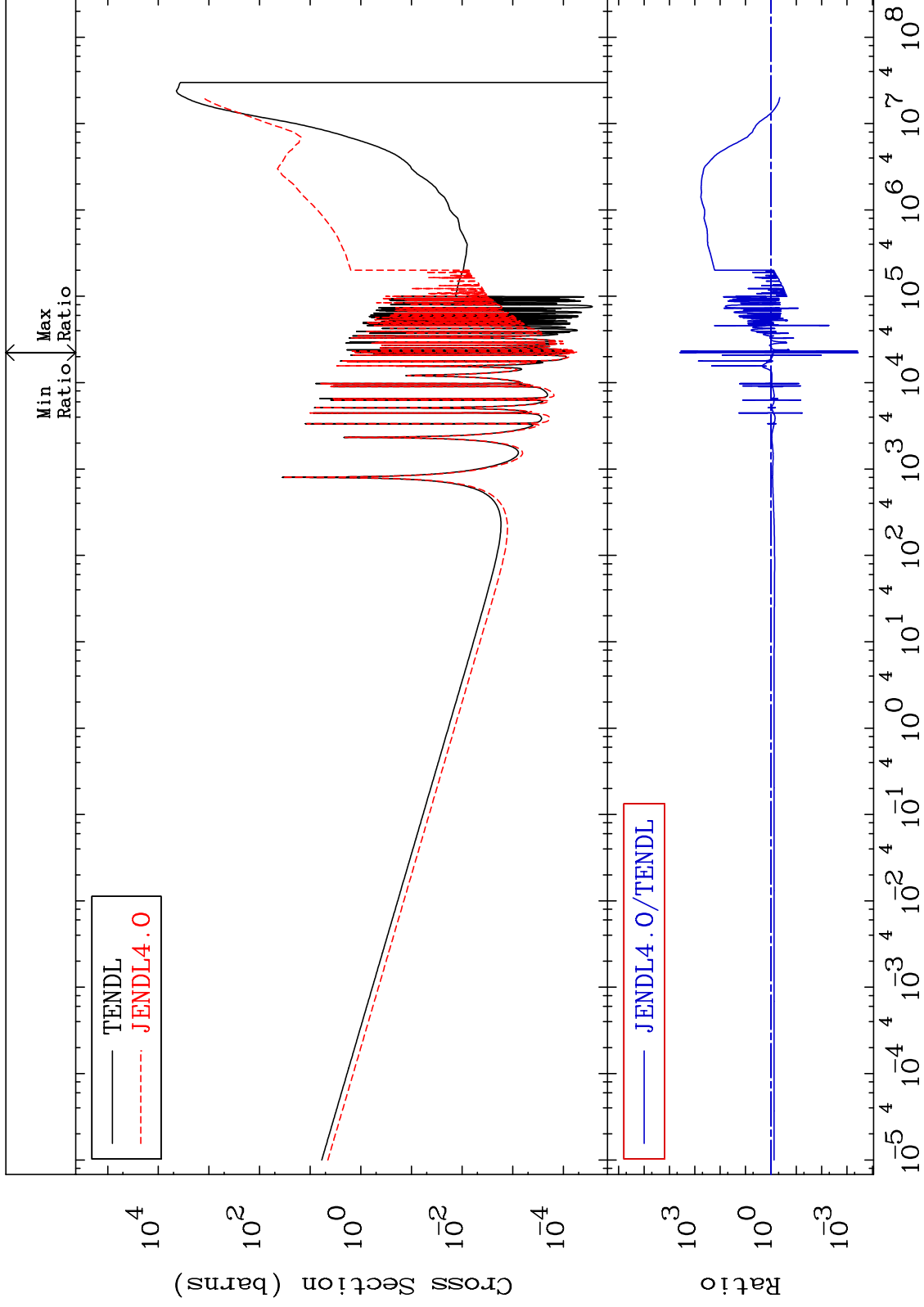
Incident Energy (eV)

83-Bi-209

MAT 8325

Dpa disappearance (mt102 -120)  
Cross Section

83-Bi-209  
-99.96 To 9999. %

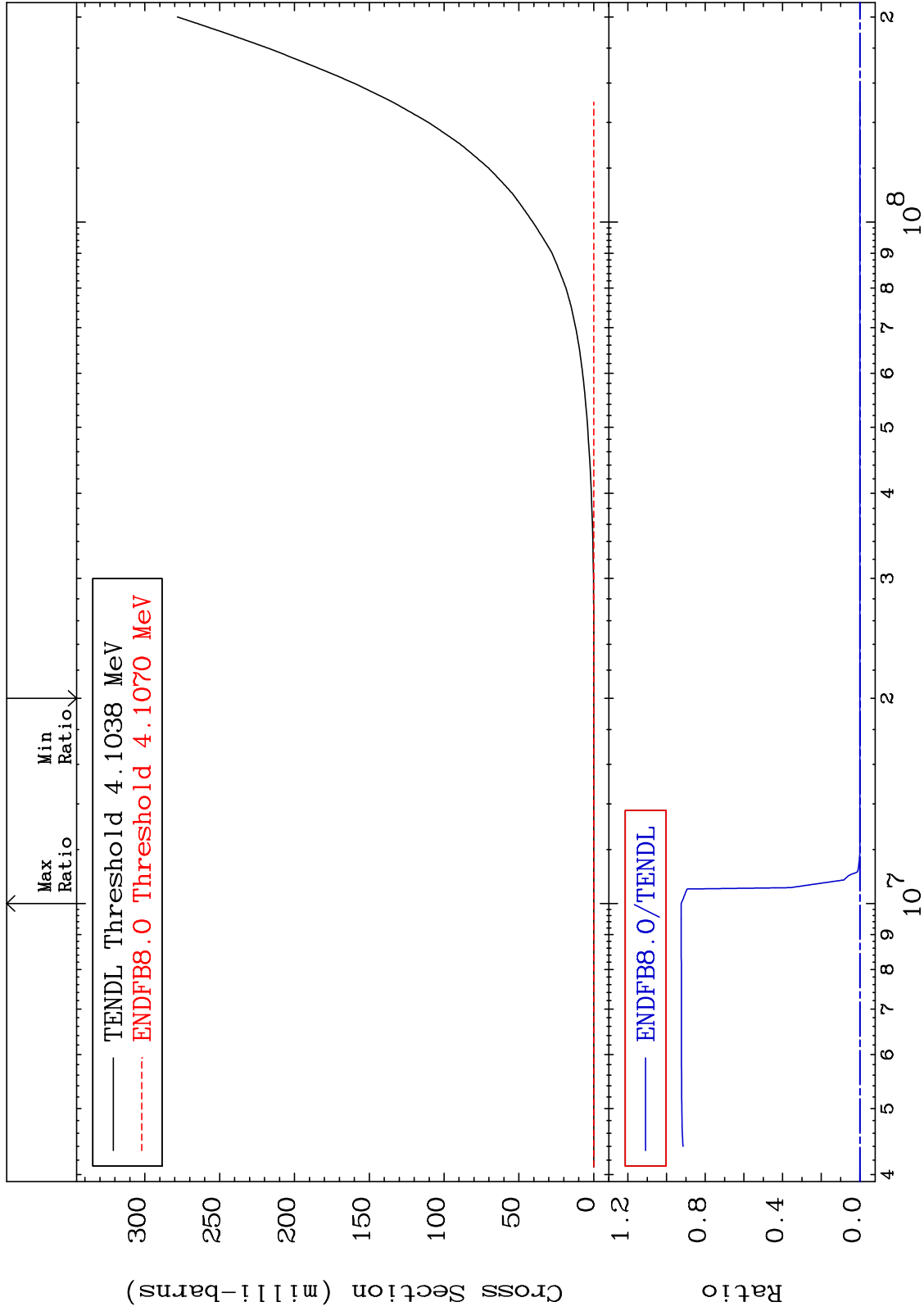




MAT 8325

He-3 Production  
Cross Section

83-Bi-209  
-100.0 To 9999. %



40

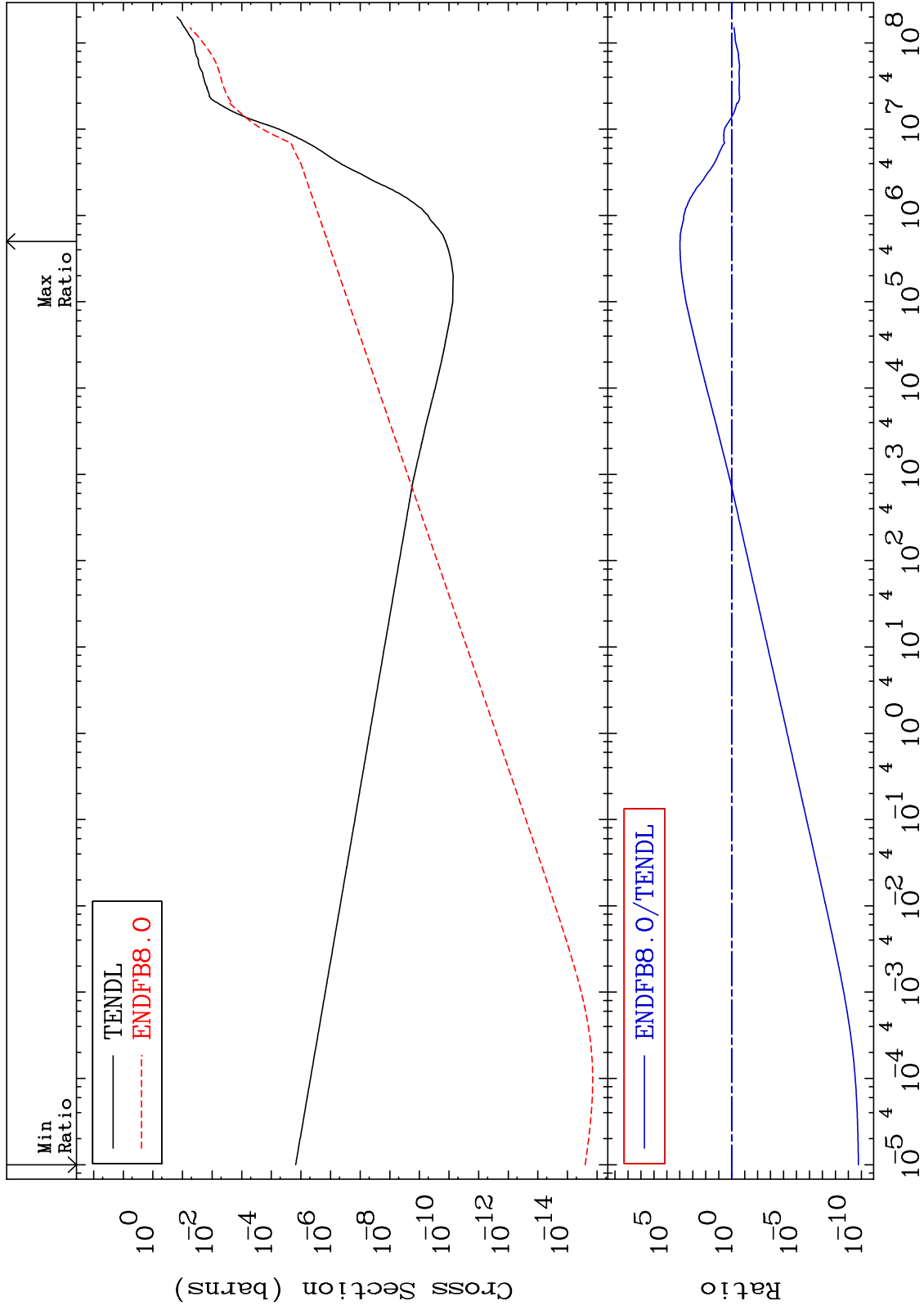
Incident Energy (eV)

83-Bi-209

MAT 8325

He-4 Production  
Cross Section

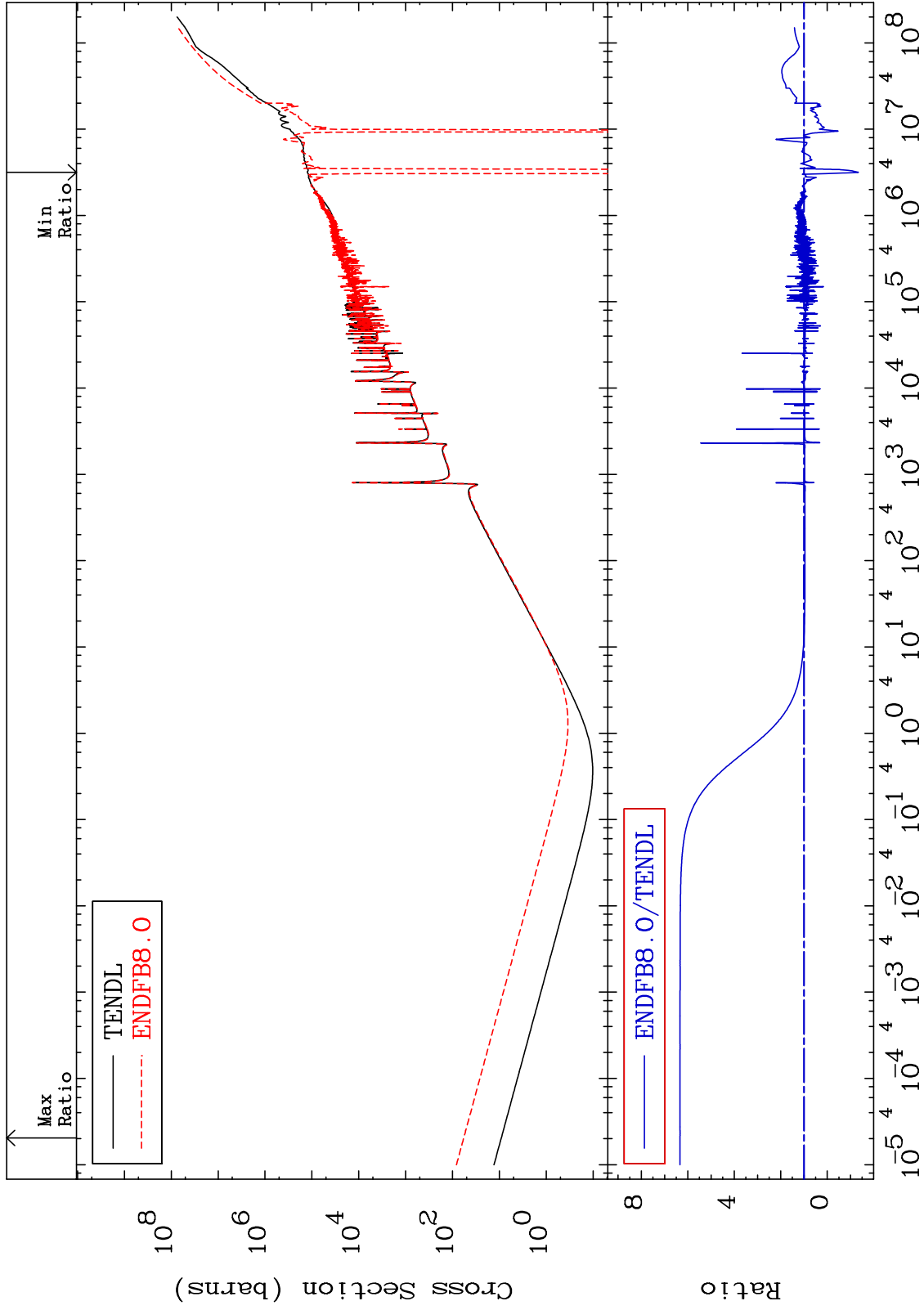
83-Bi-209  
-100.0 To 9999. %



MAT 8325

Kerma total (eV-barns)  
Cross Section

83-Bi-209  
-234.2 To 533.6 %



42

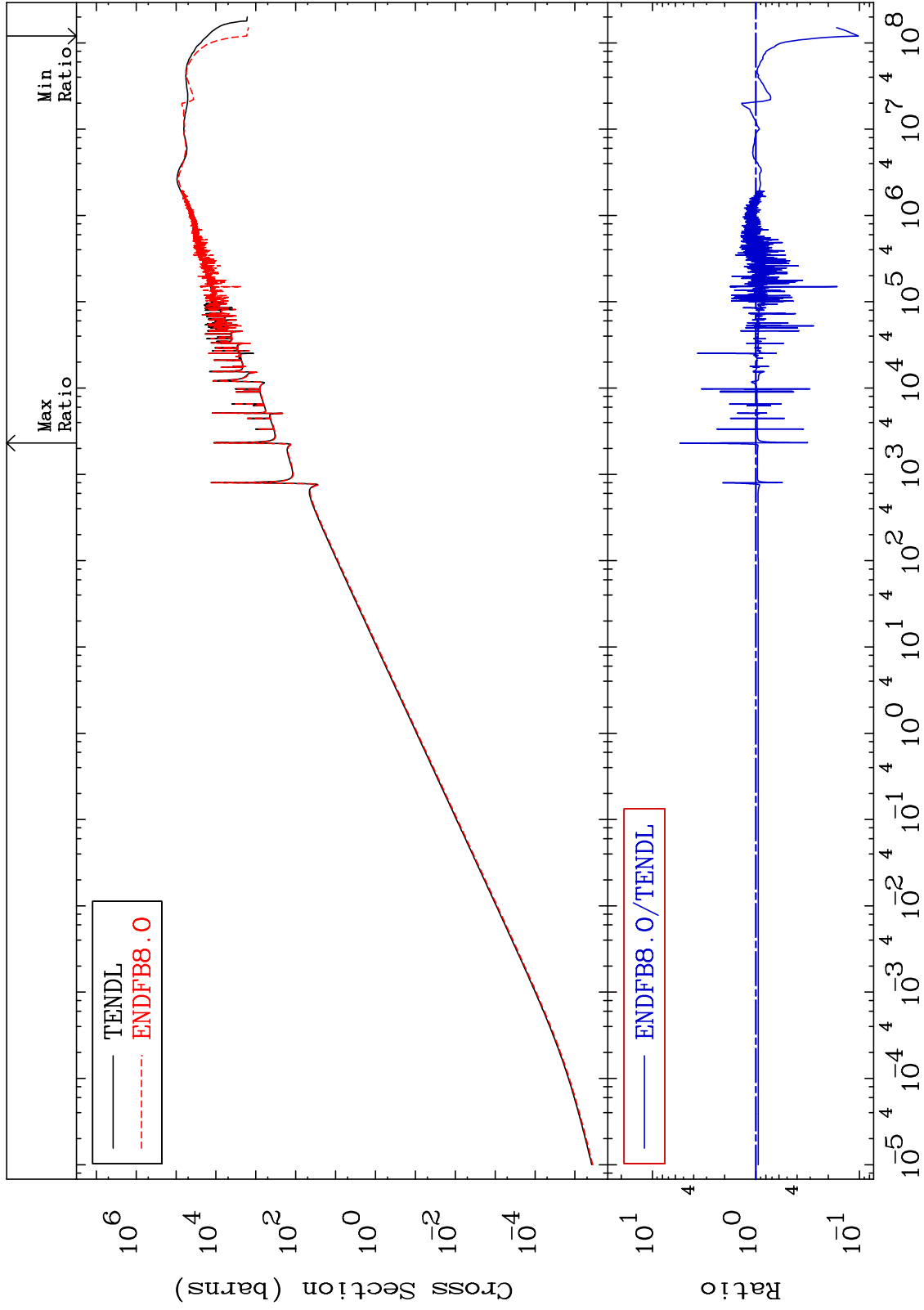
Incident Energy (eV)

83-Bi-209

MAT 8325

Kerma elastic  
Cross Section

83-Bi-209  
-89.74 To 440.8 %



Incident Energy (eV)

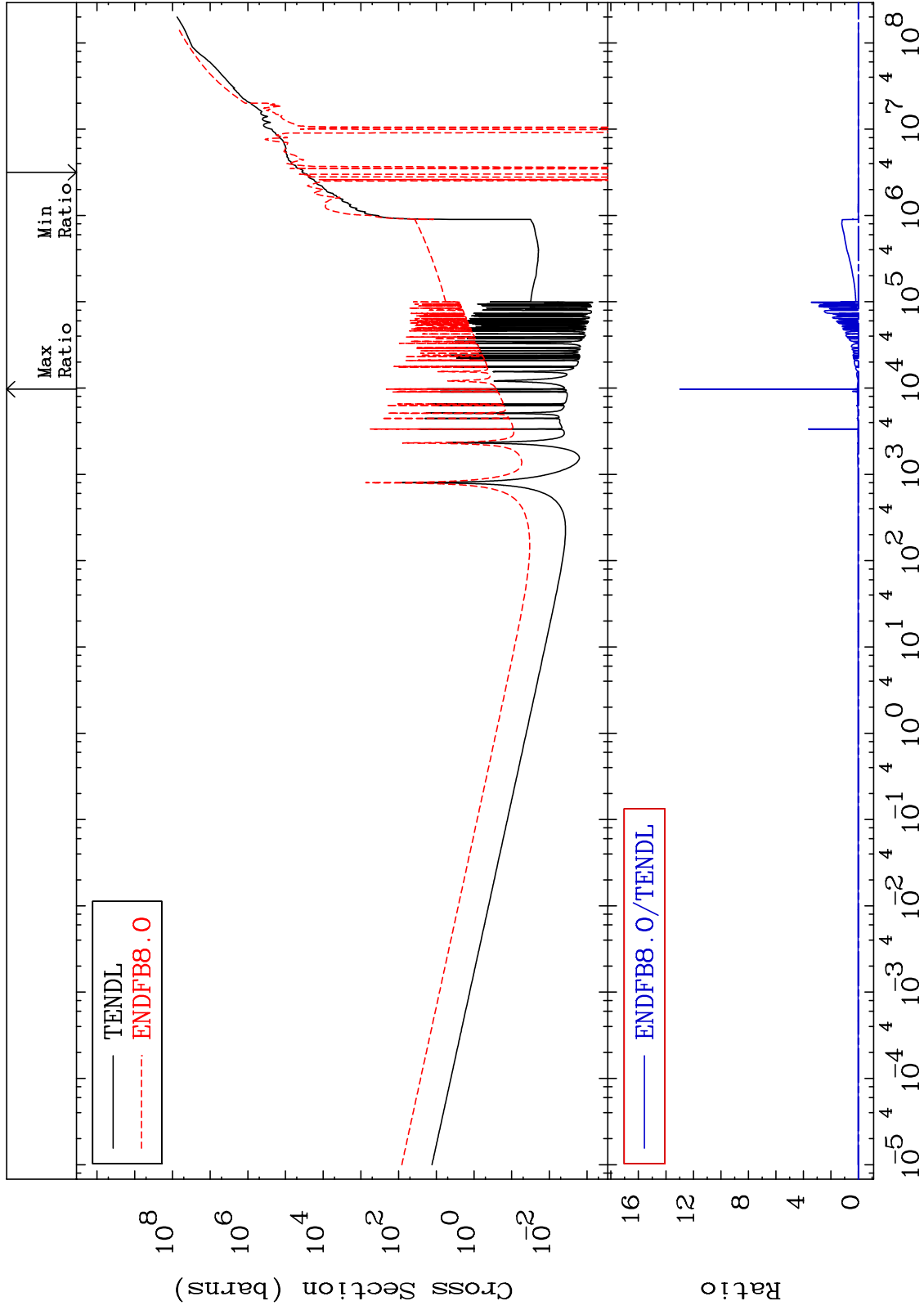
43

83-Bi-209

MAT 8325

Kerma non-elastic (all but mt2)  
Cross Section

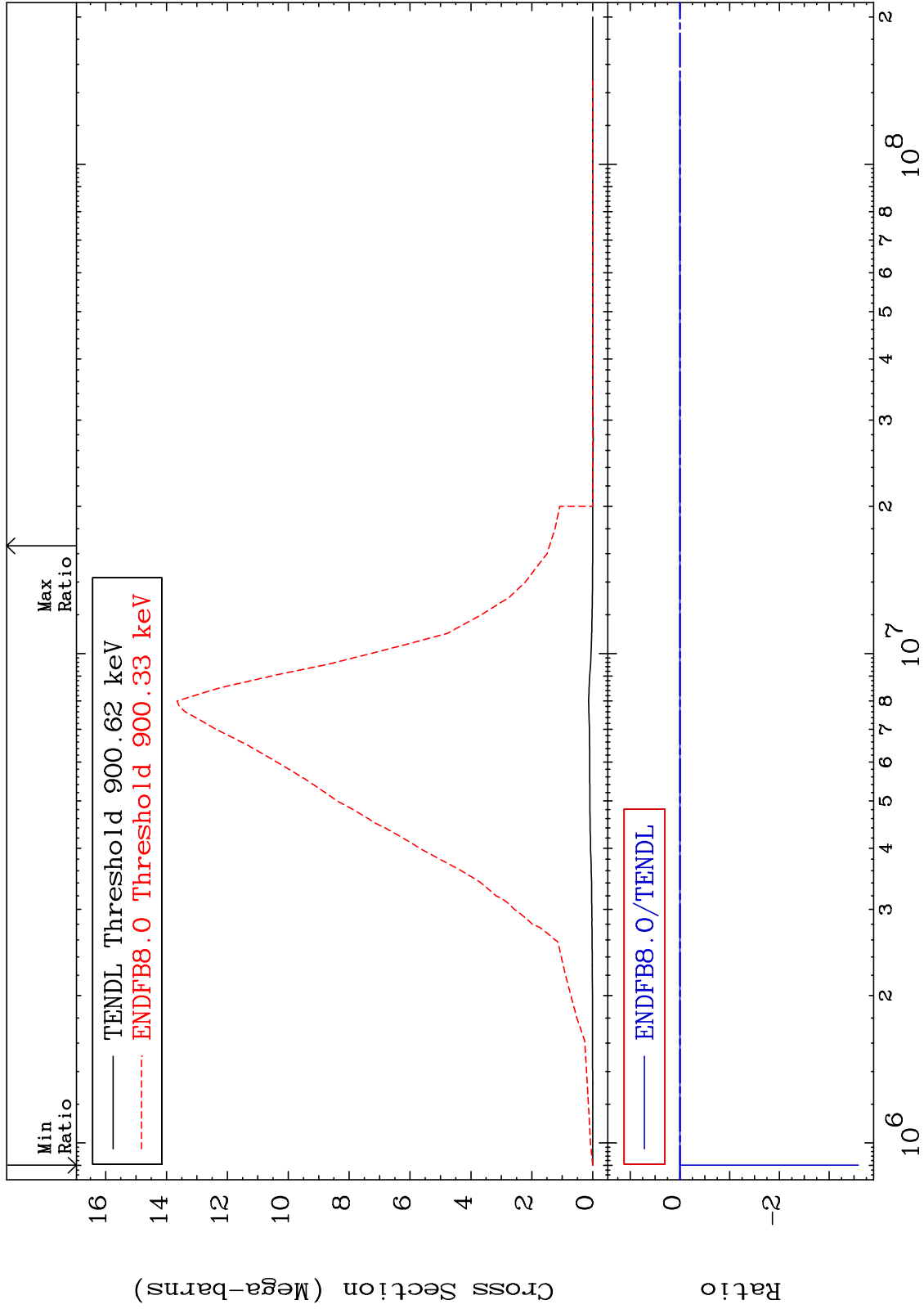
83-Bi-209  
-793.9 To 9999. %



MAT 8325

Kerma inelastic (mt51-91)  
Cross Section

83-Bi-209  
-9999. To 9999. %



45

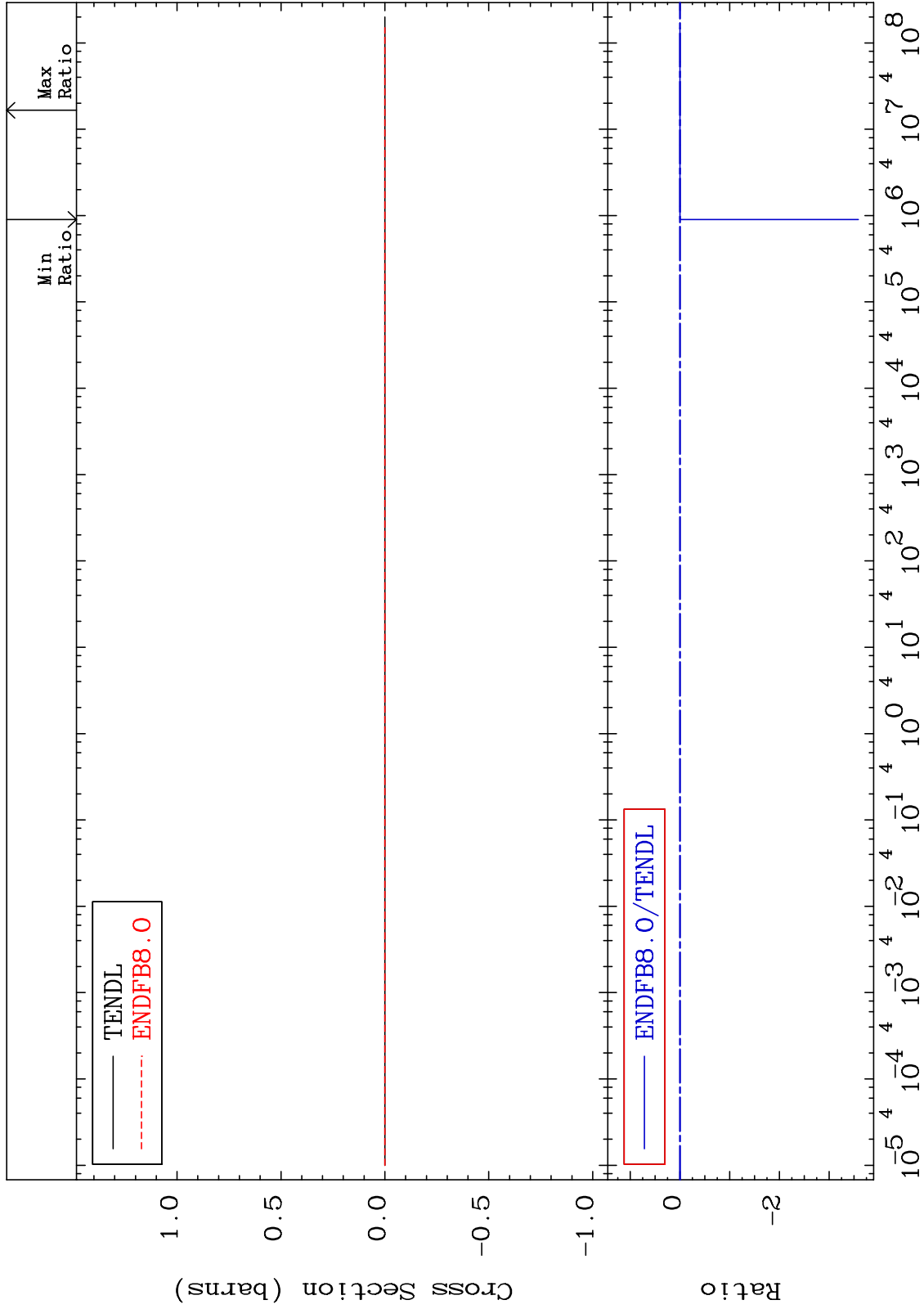
Incident Energy (eV)

83-Bi-209

MAT 8325

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

83-Bi-209  
-9999. To 9999. %



46

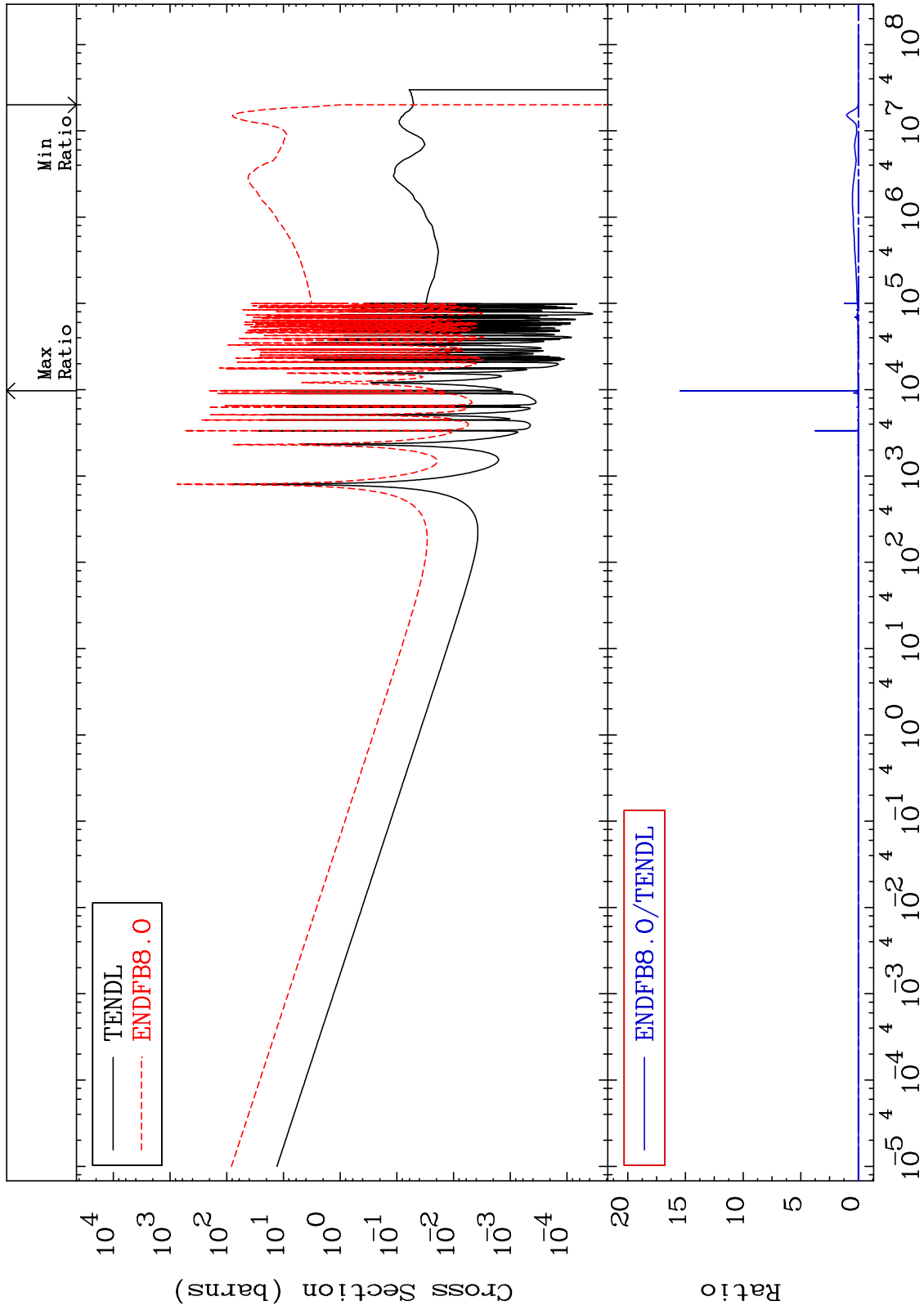
Incident Energy (eV)

83-Bi-209

MAT 8325

Kerma capture (mt102)  
Cross Section

83-Bi-209  
-100.0 To 9999. %



47

Incident Energy (eV)

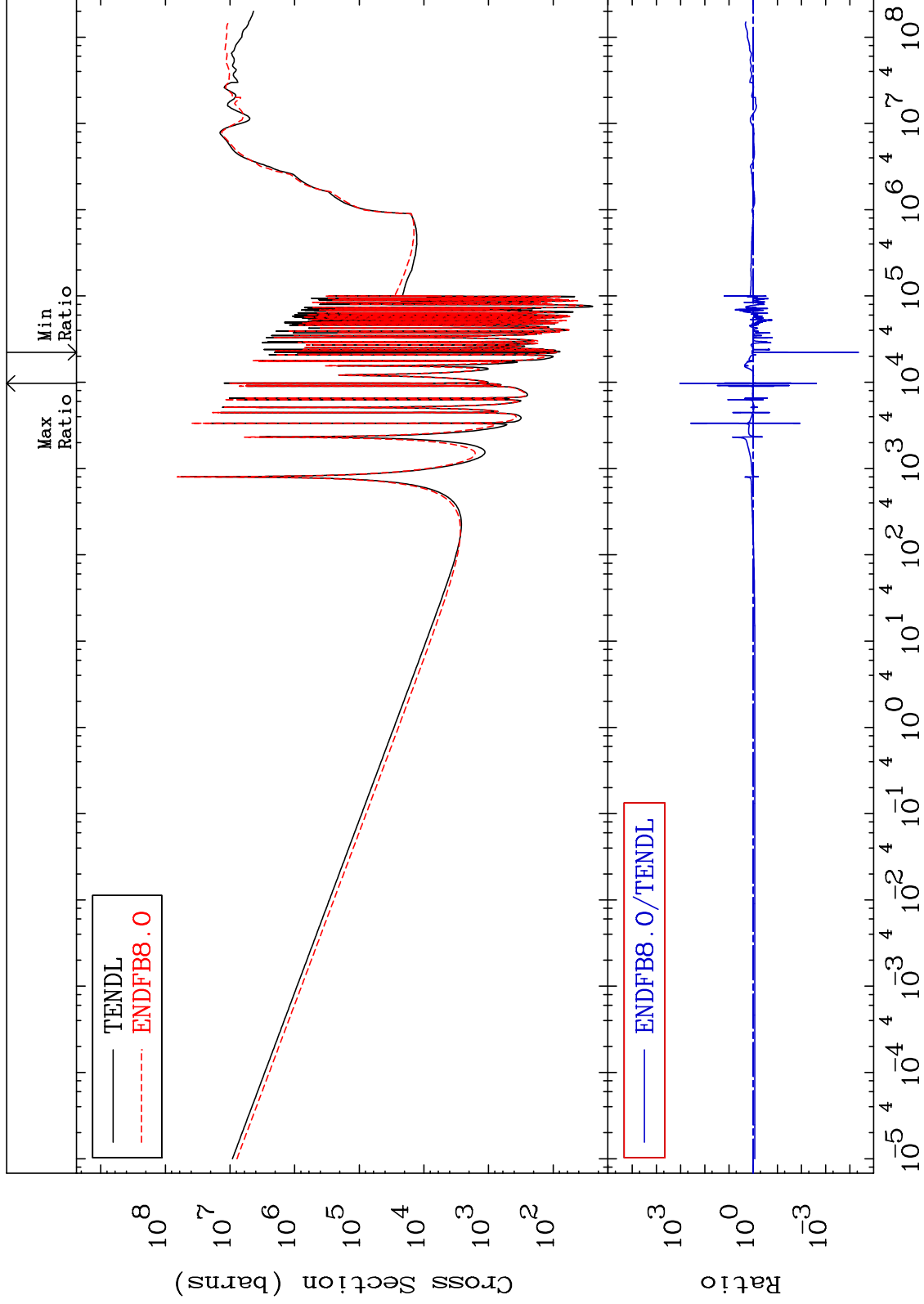
83-Bi-209



MAT 8325

Total photon (eV-barns)  
Cross Section

83-Bi-209  
-100.0 To 9999. %



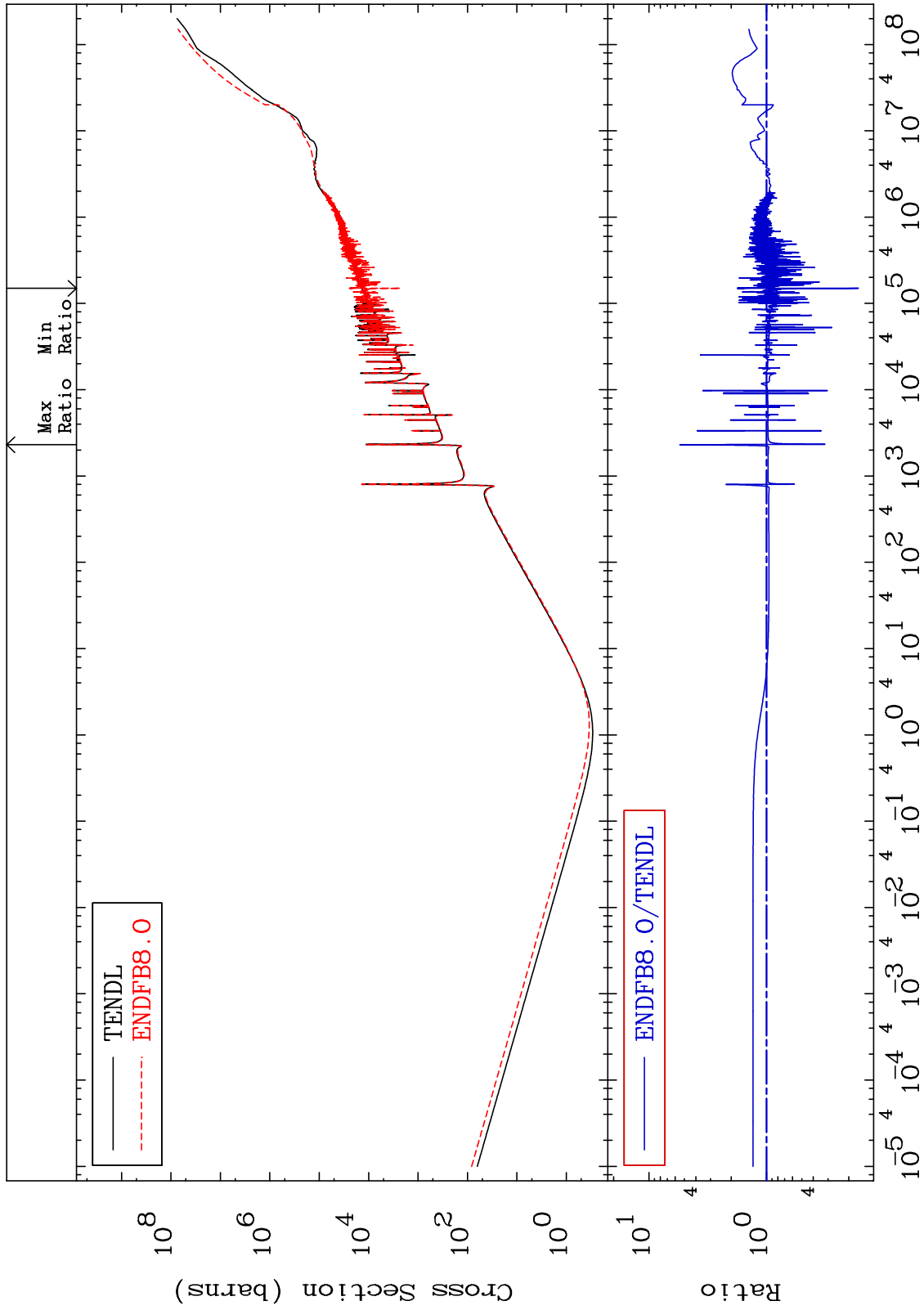
48

83-Bi-209

MAT 8325

Total kinematic kerma (high limit)  
Cross Section

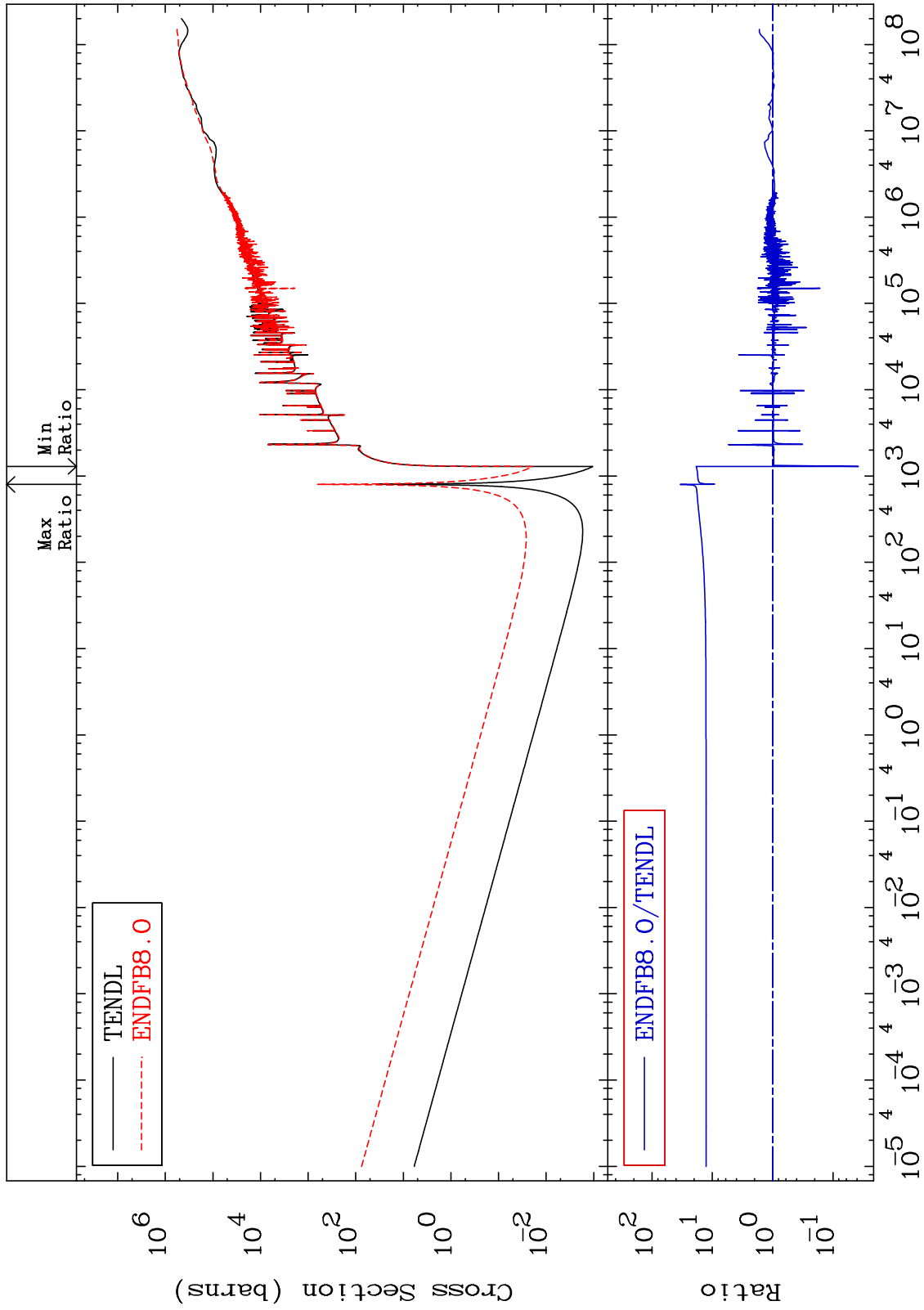
83-Bi-209  
-83.48 To 444.6 %



MAT 8325

Dpa total (eV-barns)  
Cross Section

83-Bi-209  
-96.21 To 3333. %



50

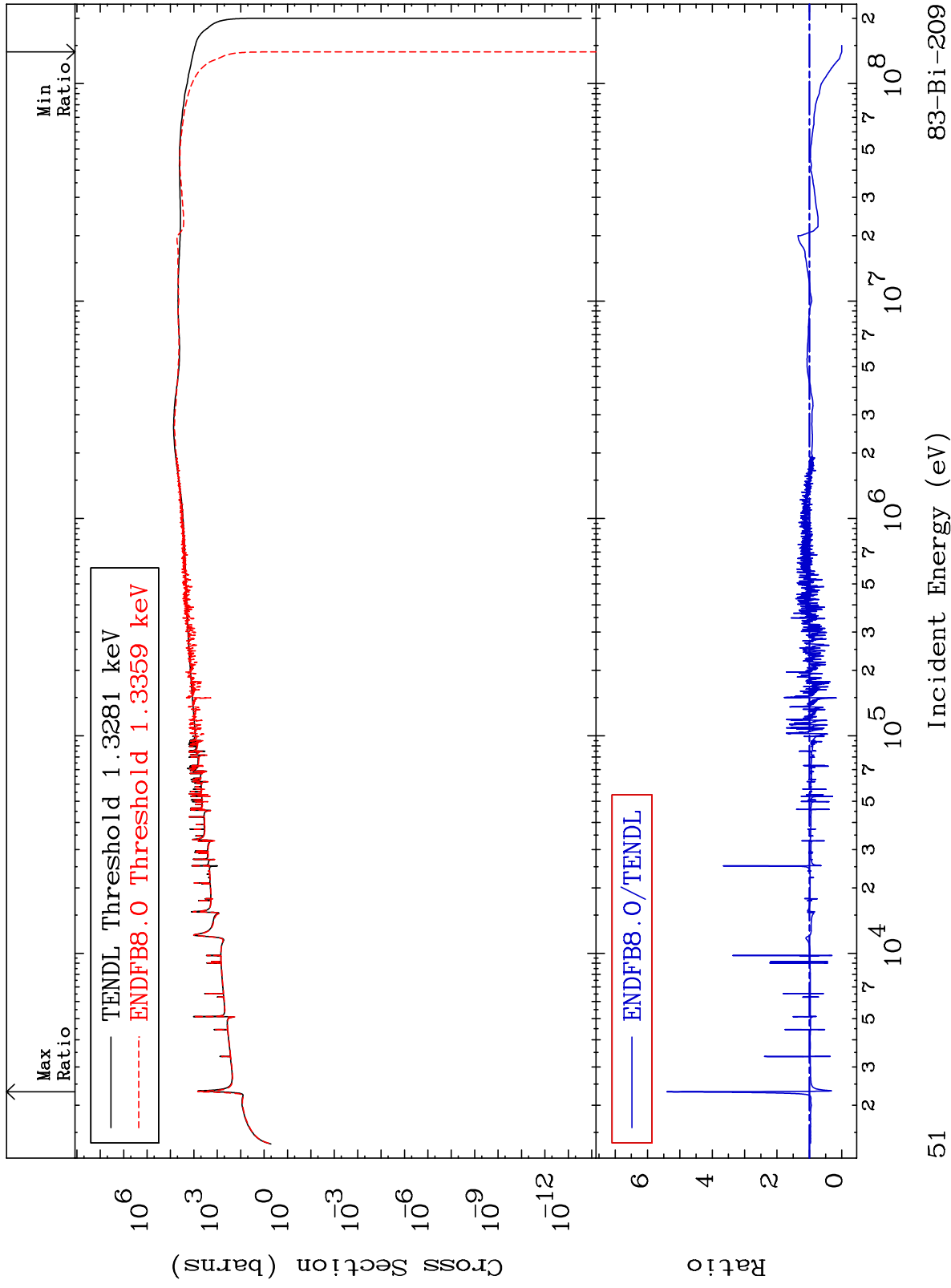
Incident Energy (eV)

83-Bi-209

MAT 8325

Dpa elastic (mt2)  
Cross Section

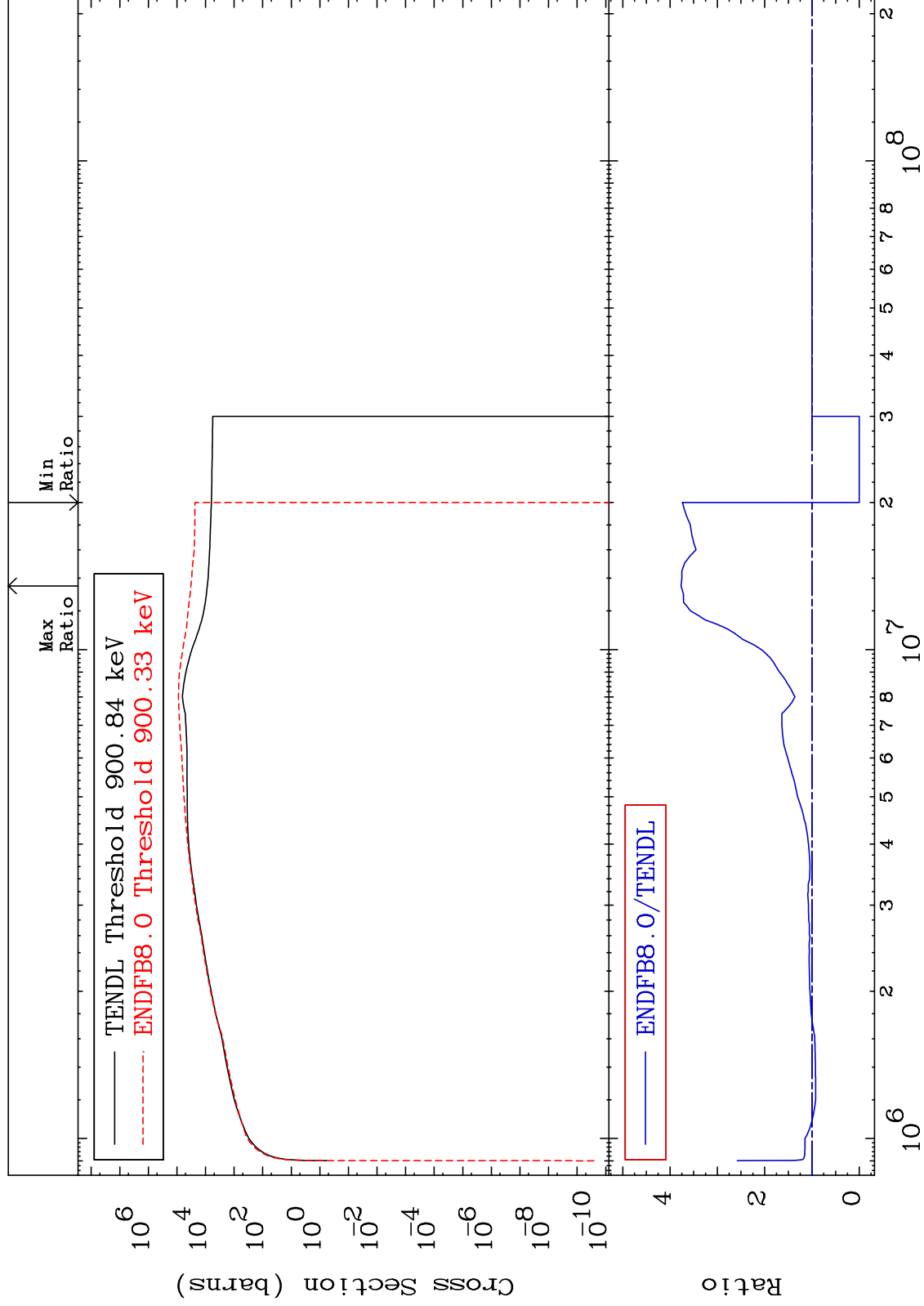
83-Bi-209  
-100.0 To 440.4 %



MAT 8325

Dpa inelastic (mt51-91)  
Cross Section

83-Bi-209  
-100.0 To 276.7 %



52

Incident Energy (eV)

83-Bi-209

MAT 8325

Dpa disappearance (mt102 -120)  
Cross Section

83-Bi-209  
-100.0 To 9999. %

