

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

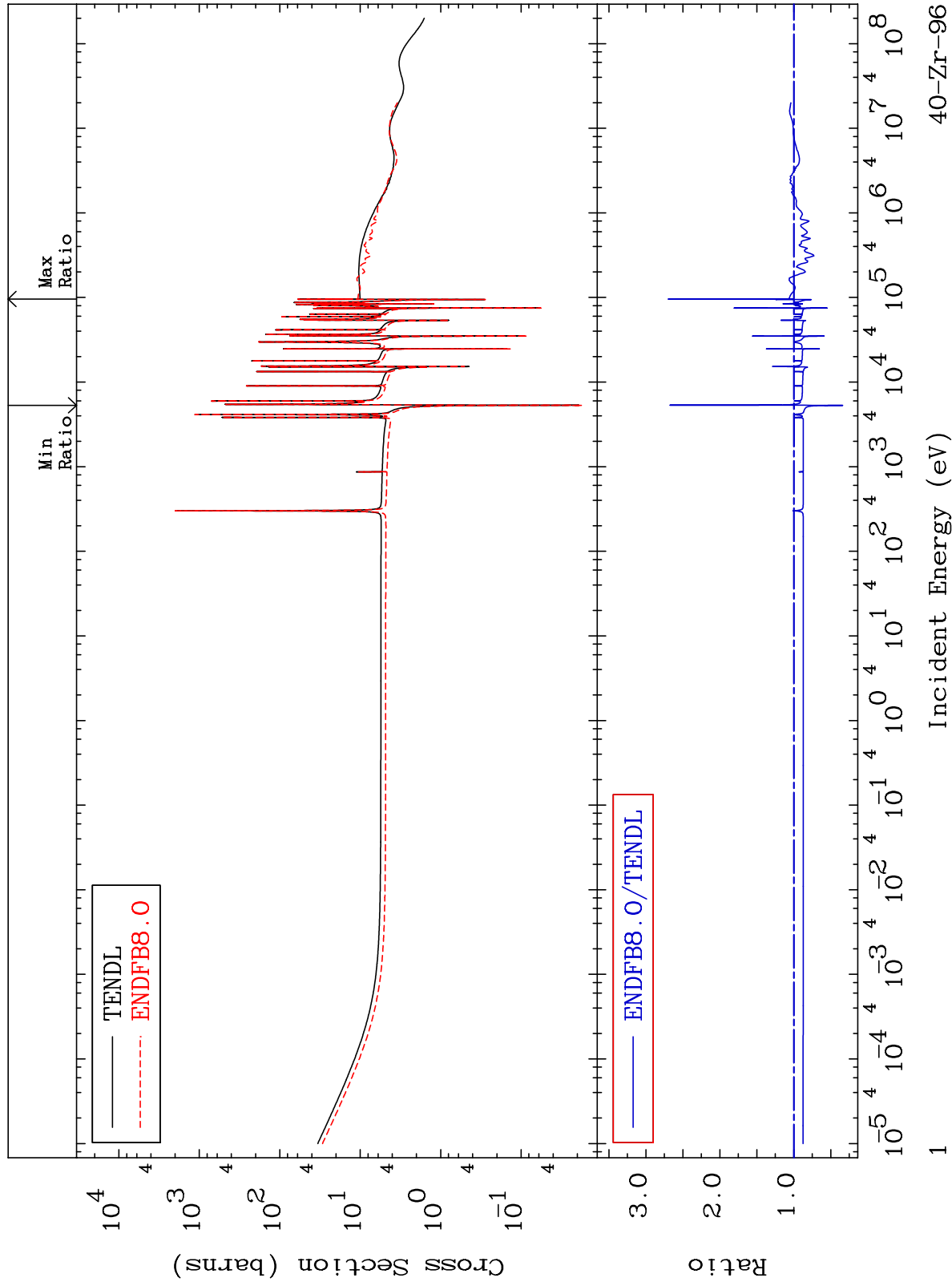
MAT 4043

Total

40-Zr-96

Cross Section

-66.31 To 170.1 %



40-Zr-96

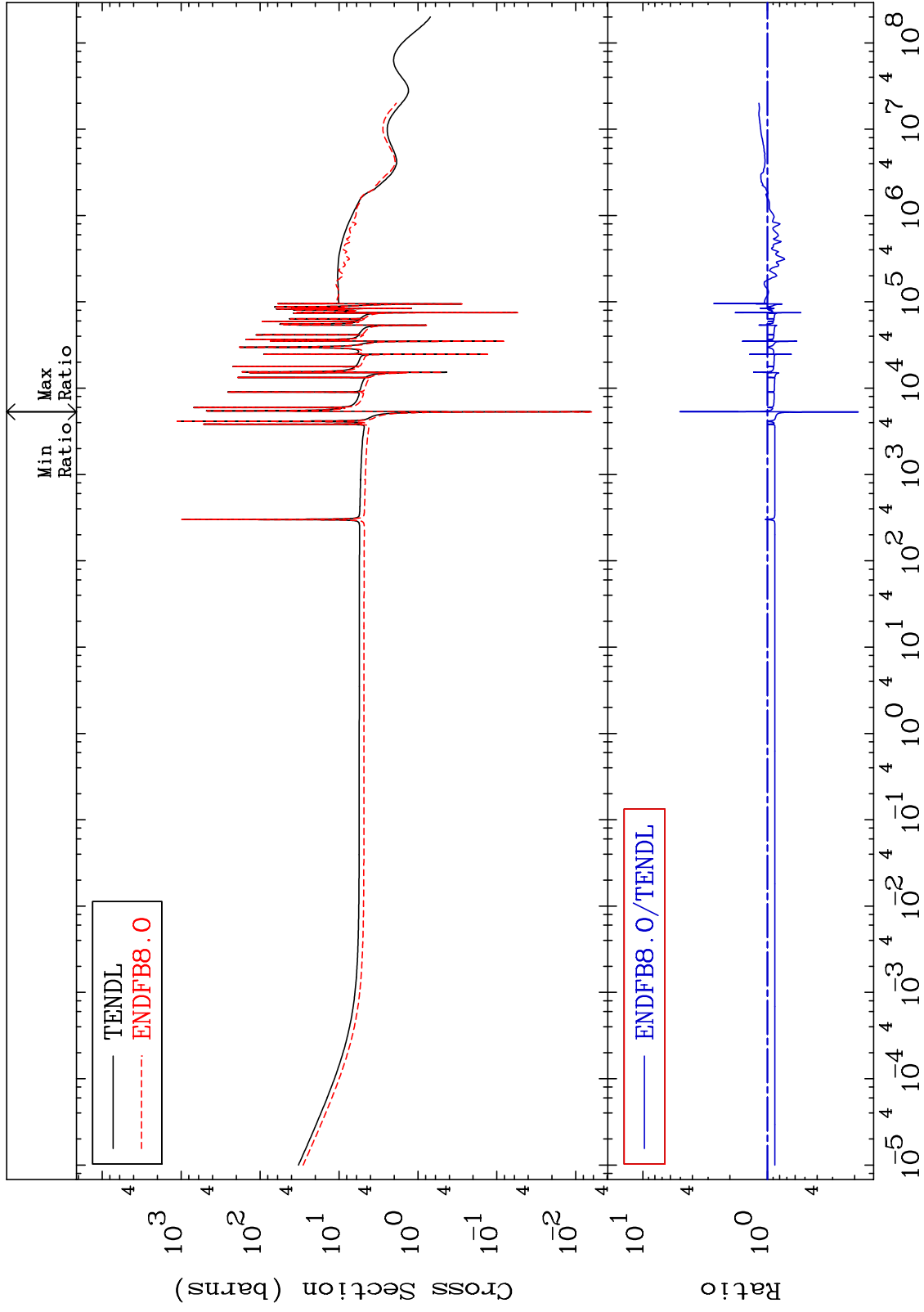
MAT 4043

Elastic

Cross Section

40-Zr-96

-81.36 To 402.9 %



Incident Energy (eV)

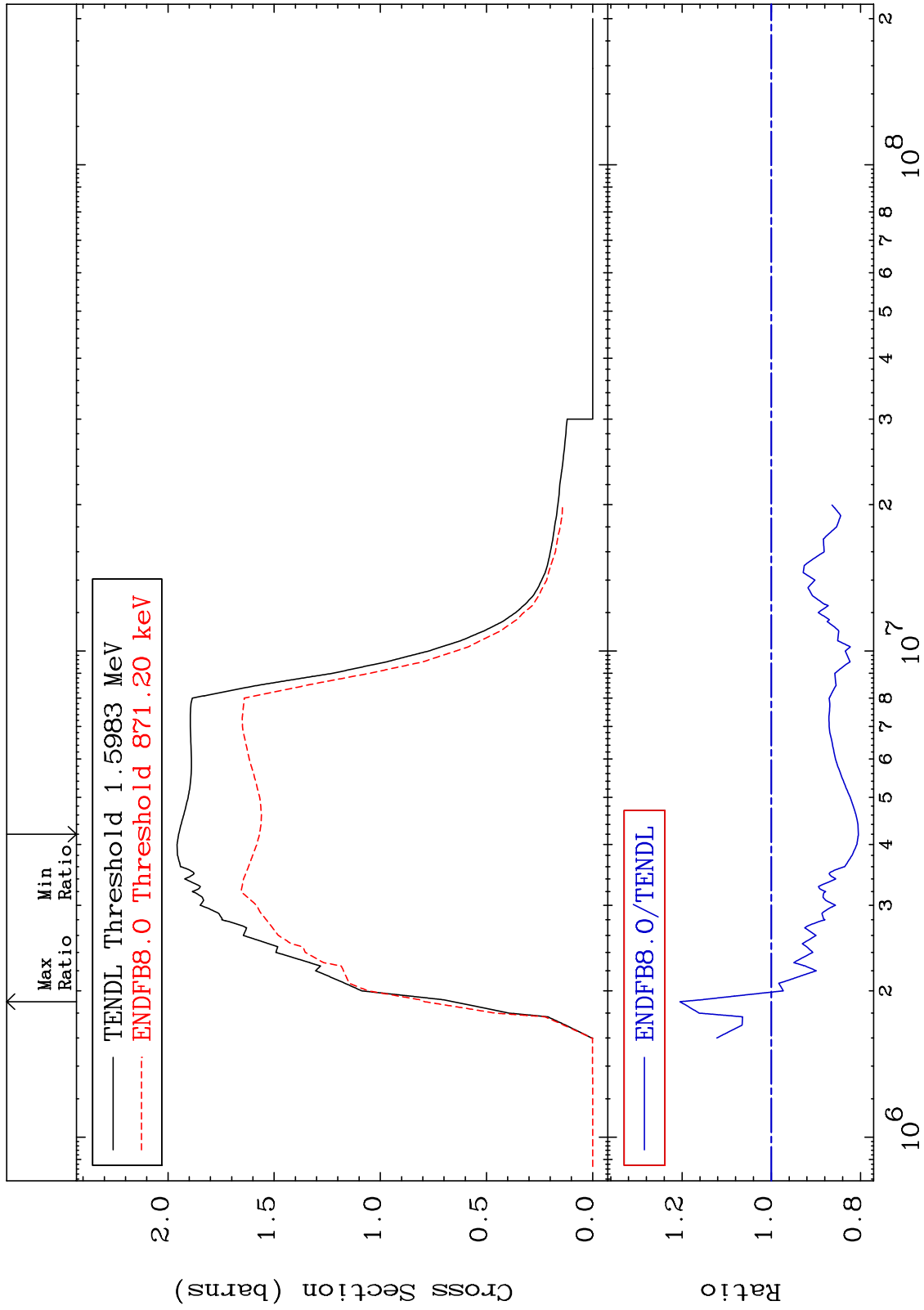
40-Zr-96

2

MAT 4043

Inelastic  
Cross Section

40-Zr-96  
-19.53 To 20.47 %



40-Zr-96

40-Zr-96

3

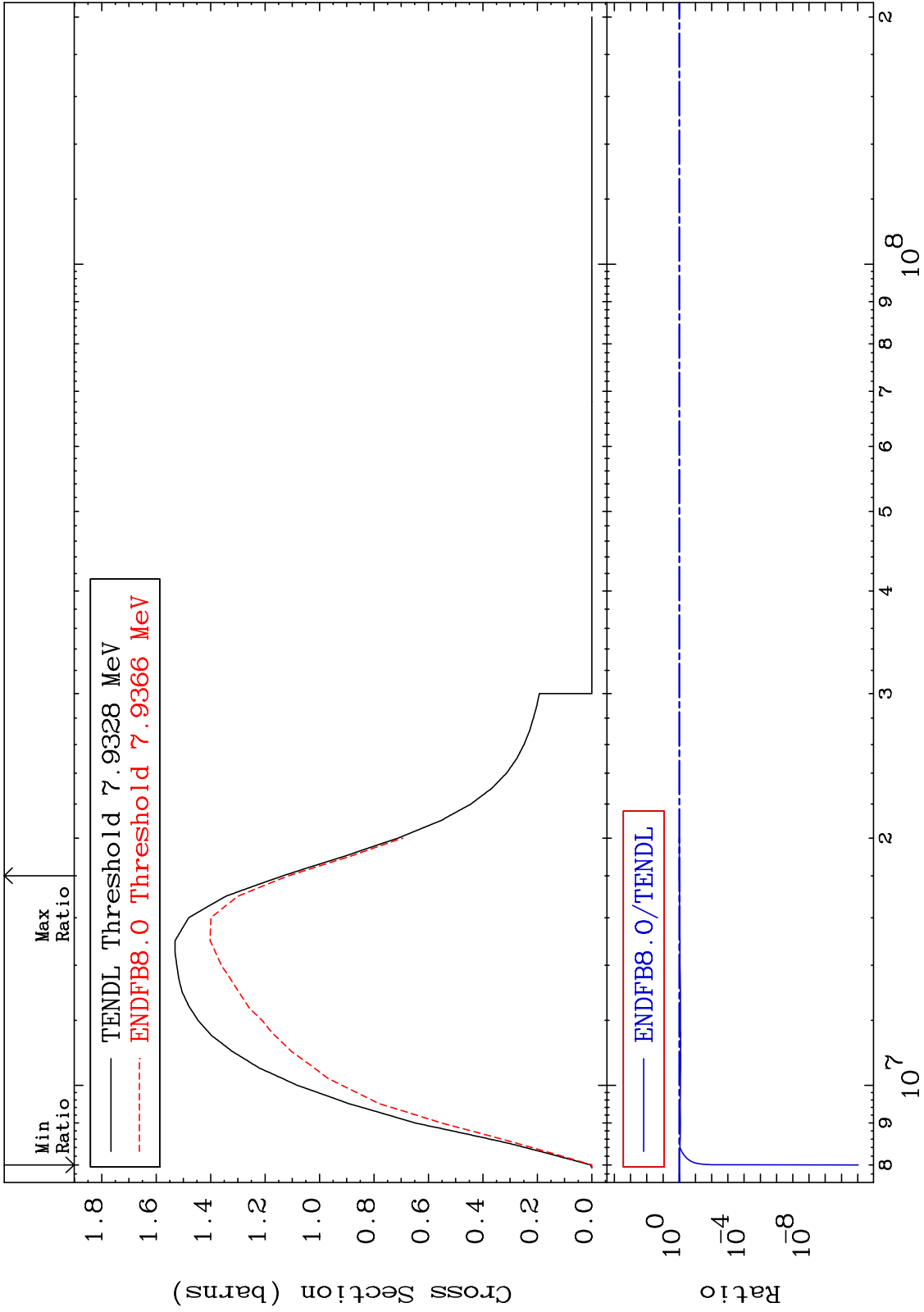
MAT 4043

(n,2n)

40-Zr-96

Cross Section

-100.0 To -1.808%



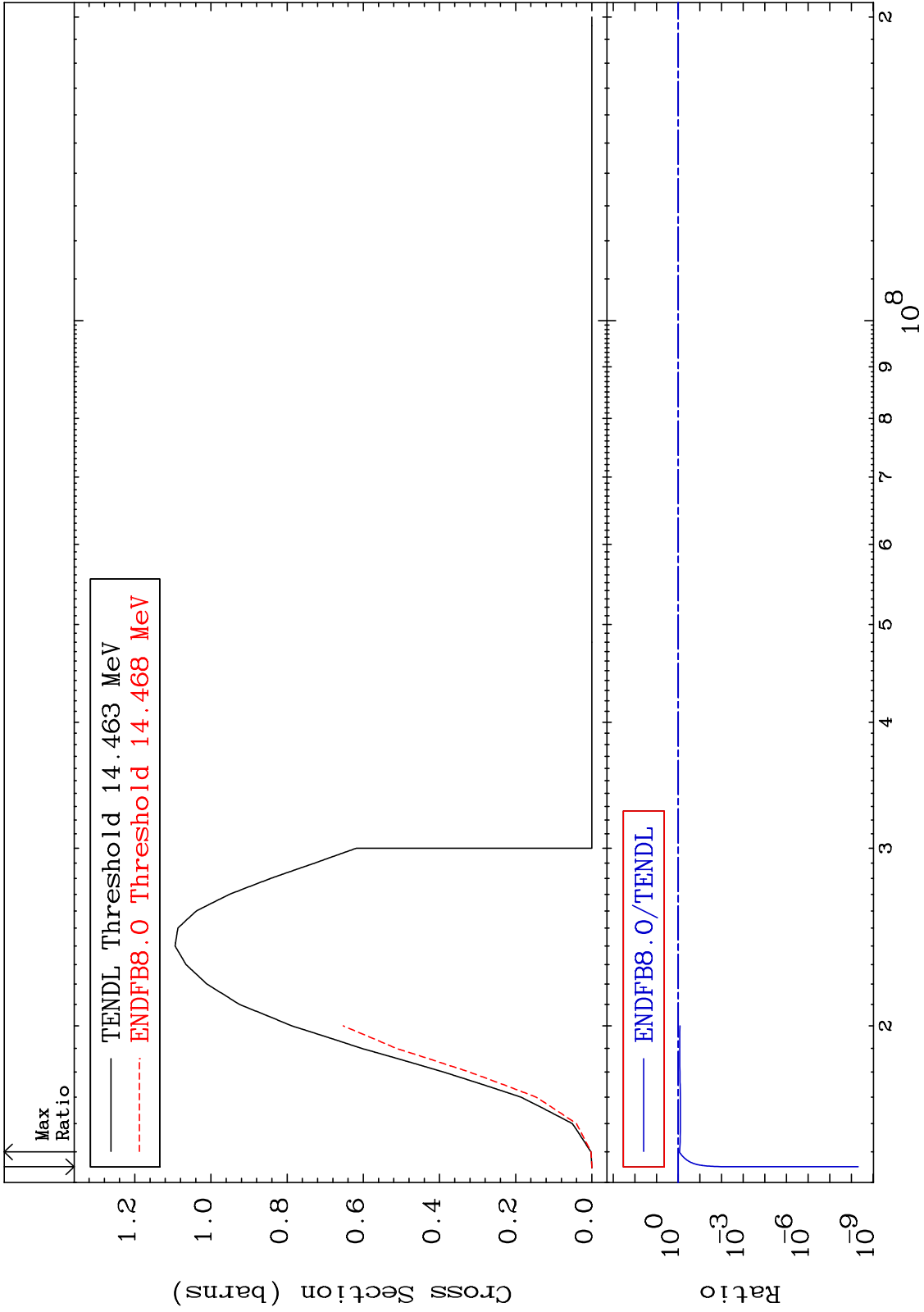
MAT 4043

(n,3n)

40-Zr-96

Cross Section

-100.0 To -12.35%



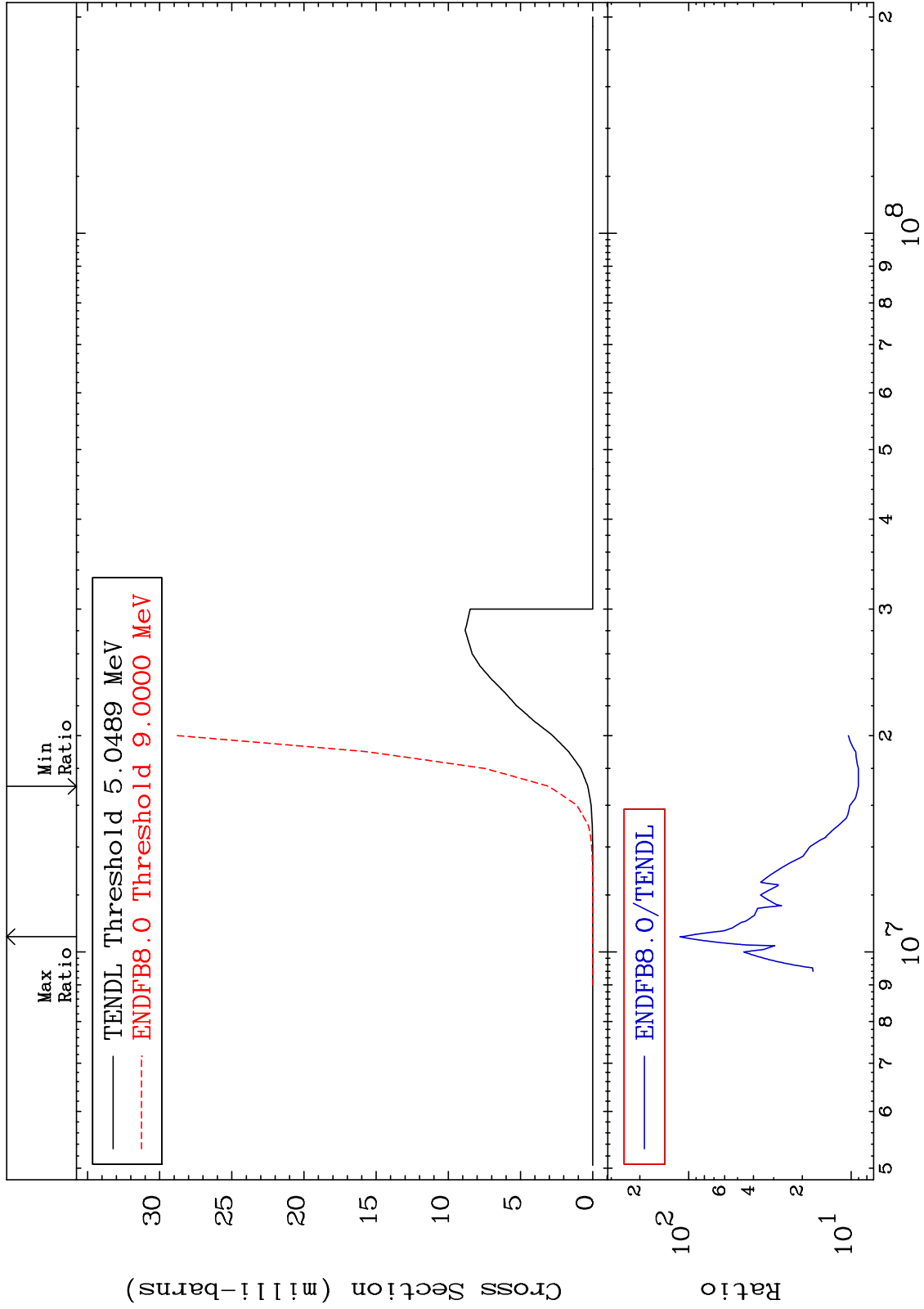
MAT 4043

(n,n')  $\alpha$

40-Zr-96

Cross Section

802.1 To 9999. %



6

Incident Energy (eV)

40-Zr-96

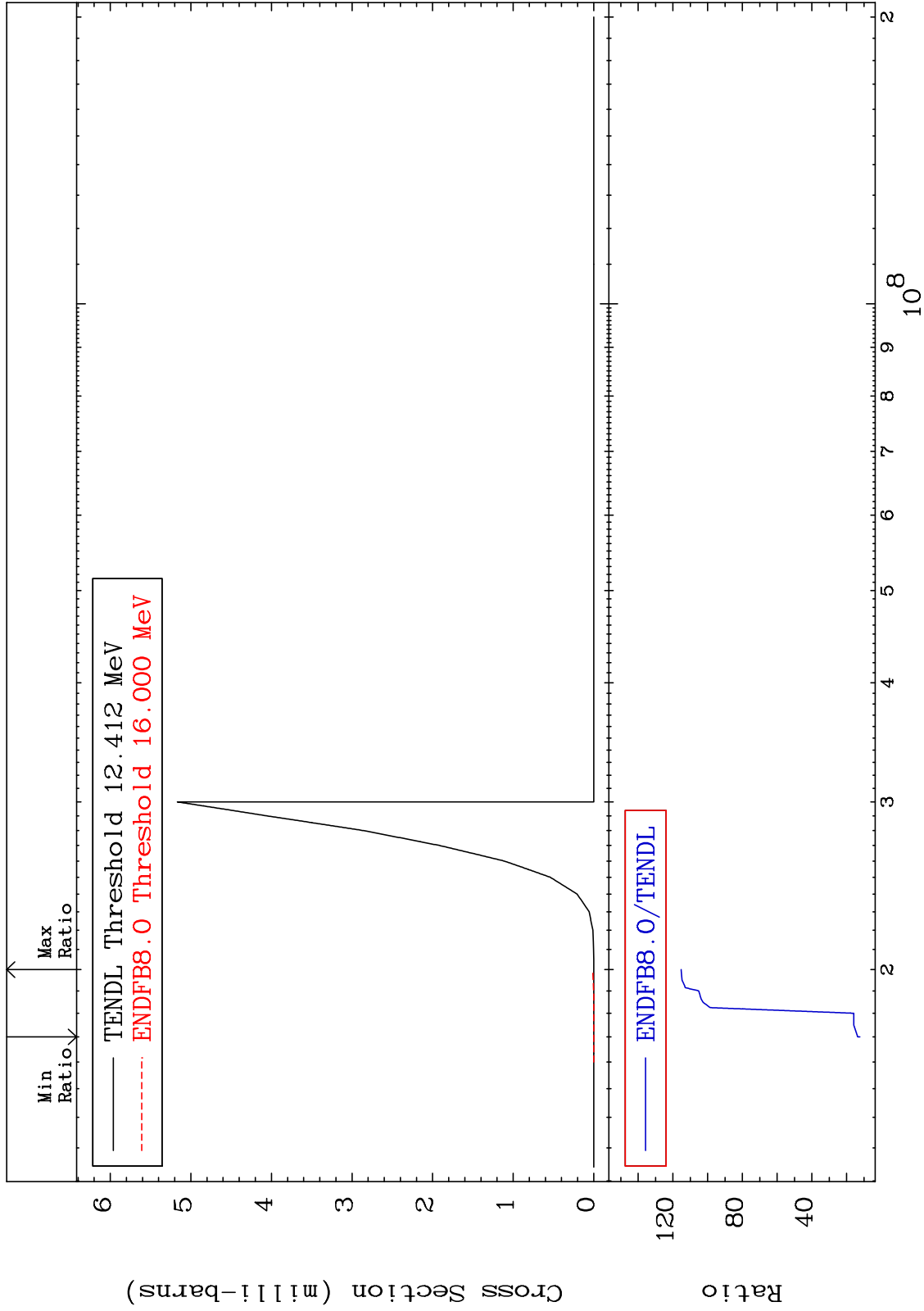
MAT 4043

(n,2n)  $\alpha$

40-Zr-96

Cross Section

1131. To 9999. %

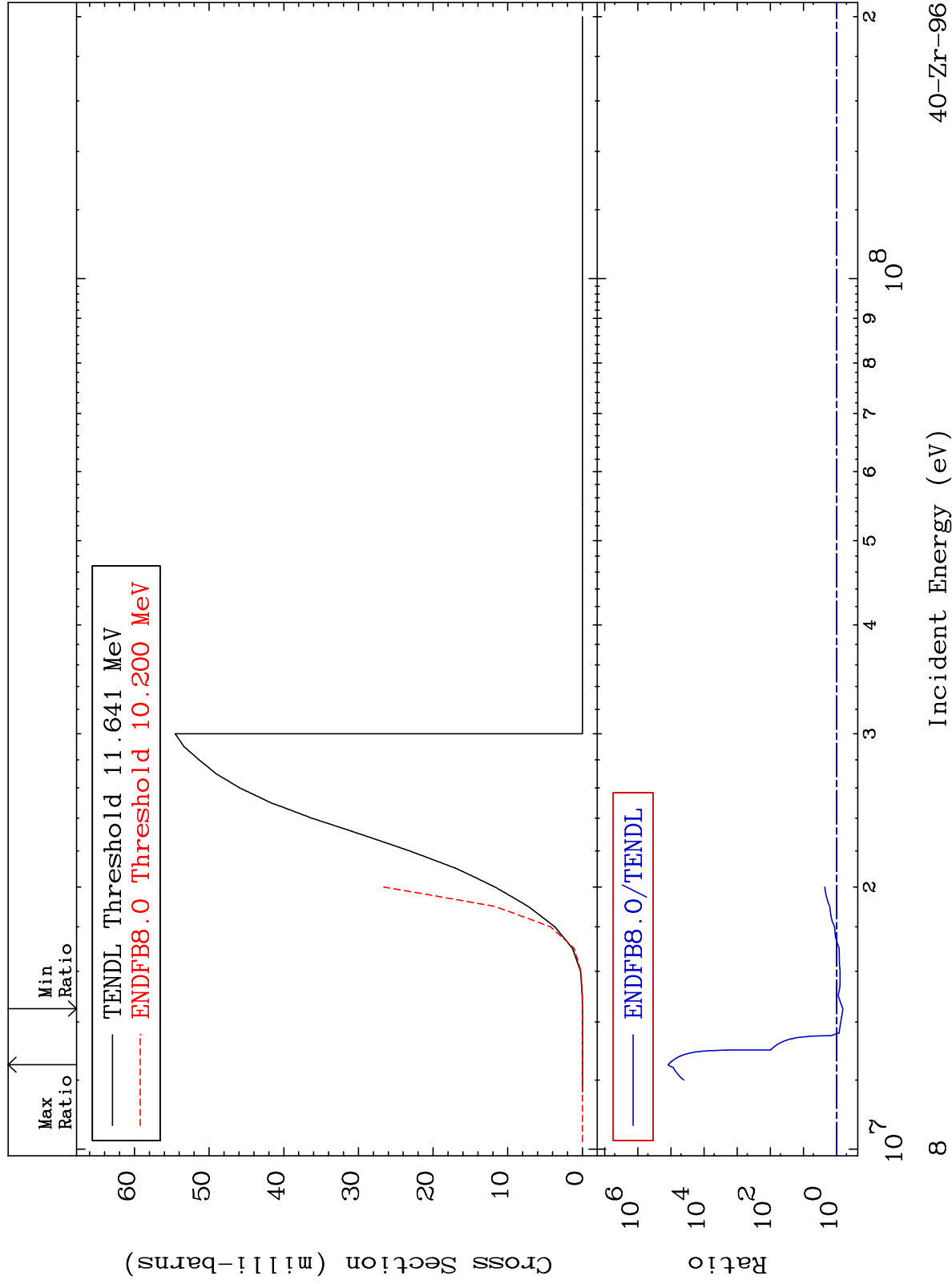




MAT 4043

(n,n') p  
Cross Section

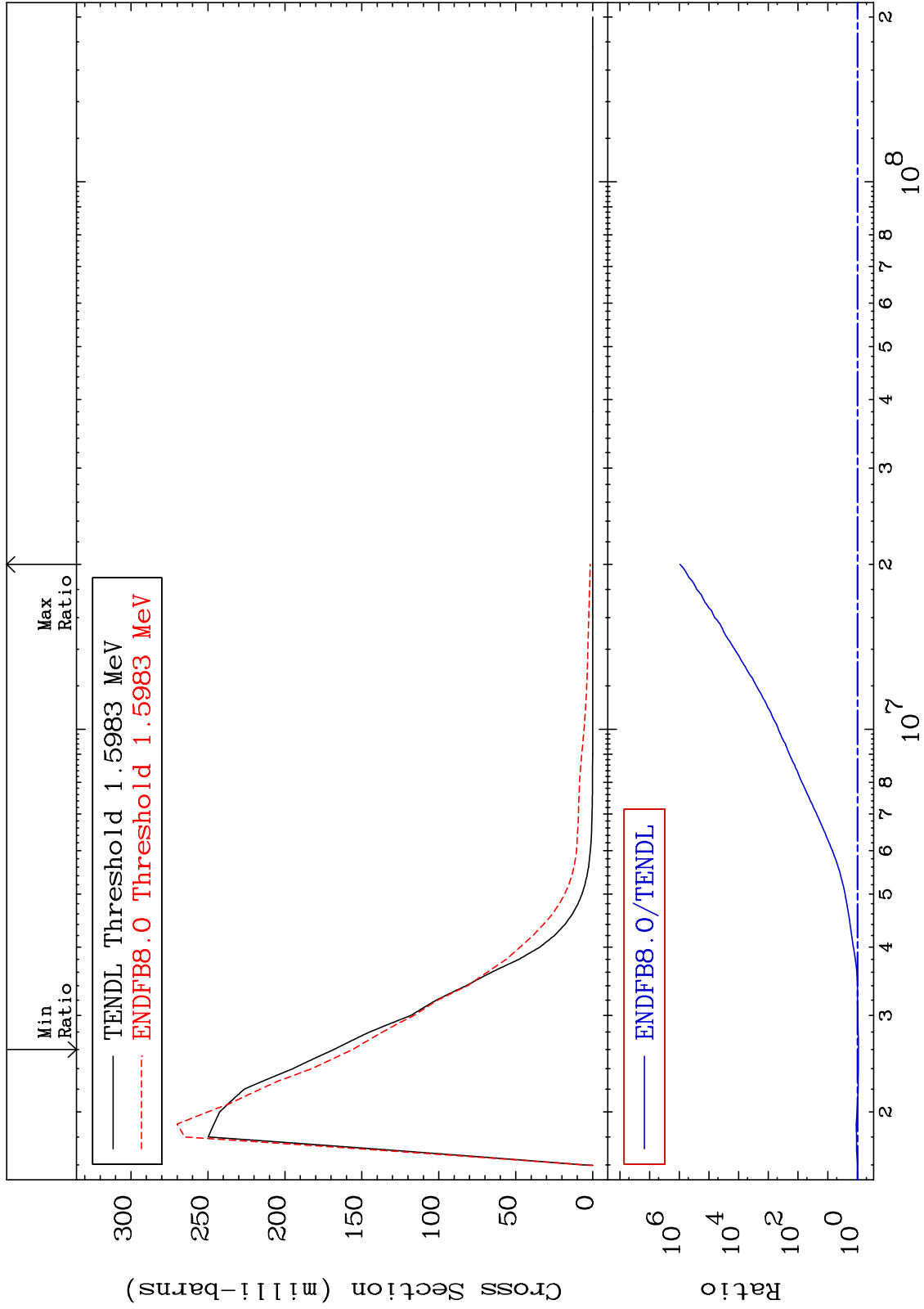
40-Zr-96  
-35.43 To 9999. %



MAT 4043

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

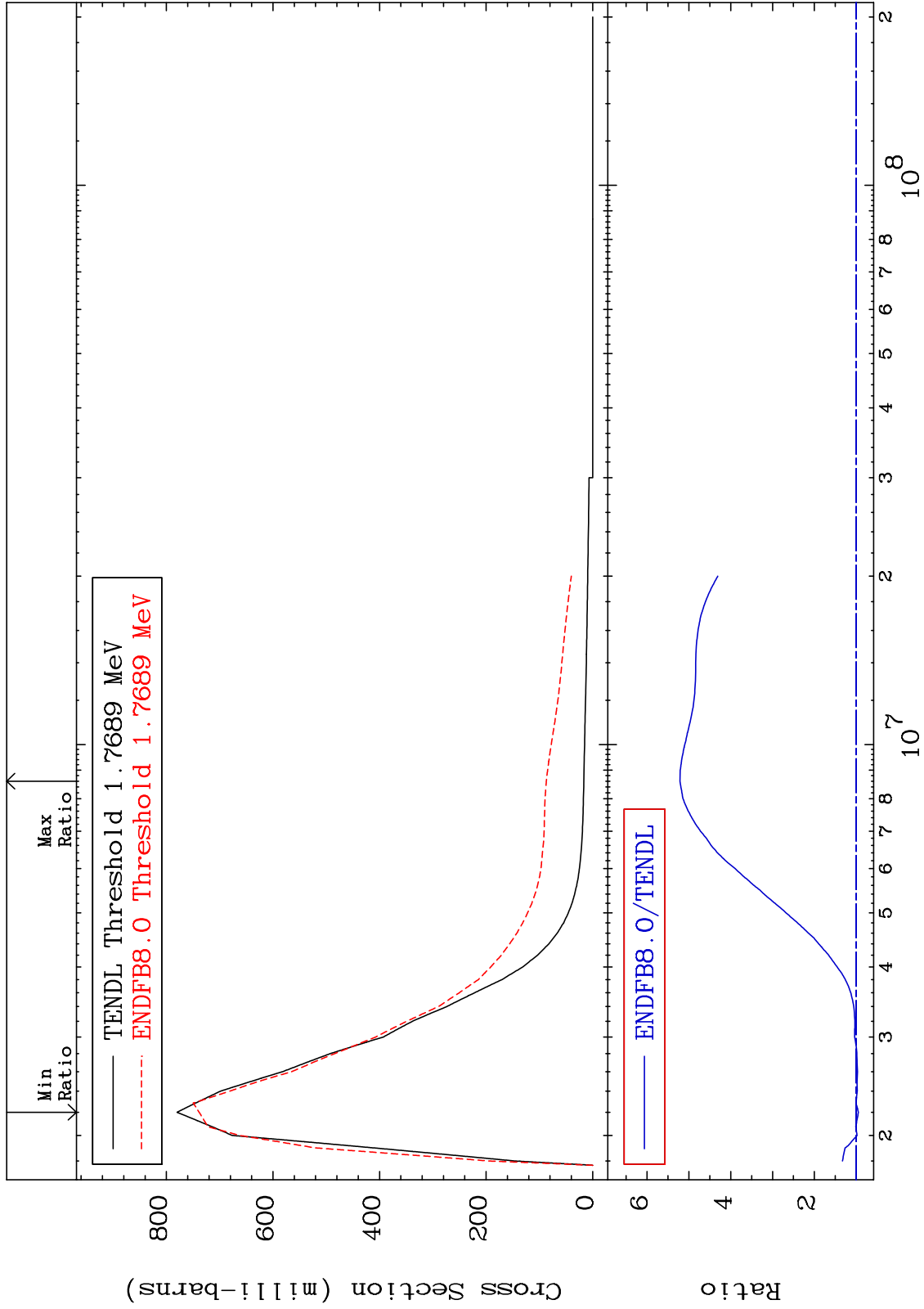
40-Zr-96  
-7.260 To 9999. %



MAT 4043

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

40-Zr-96  
-5.308 To 421.2 %



10

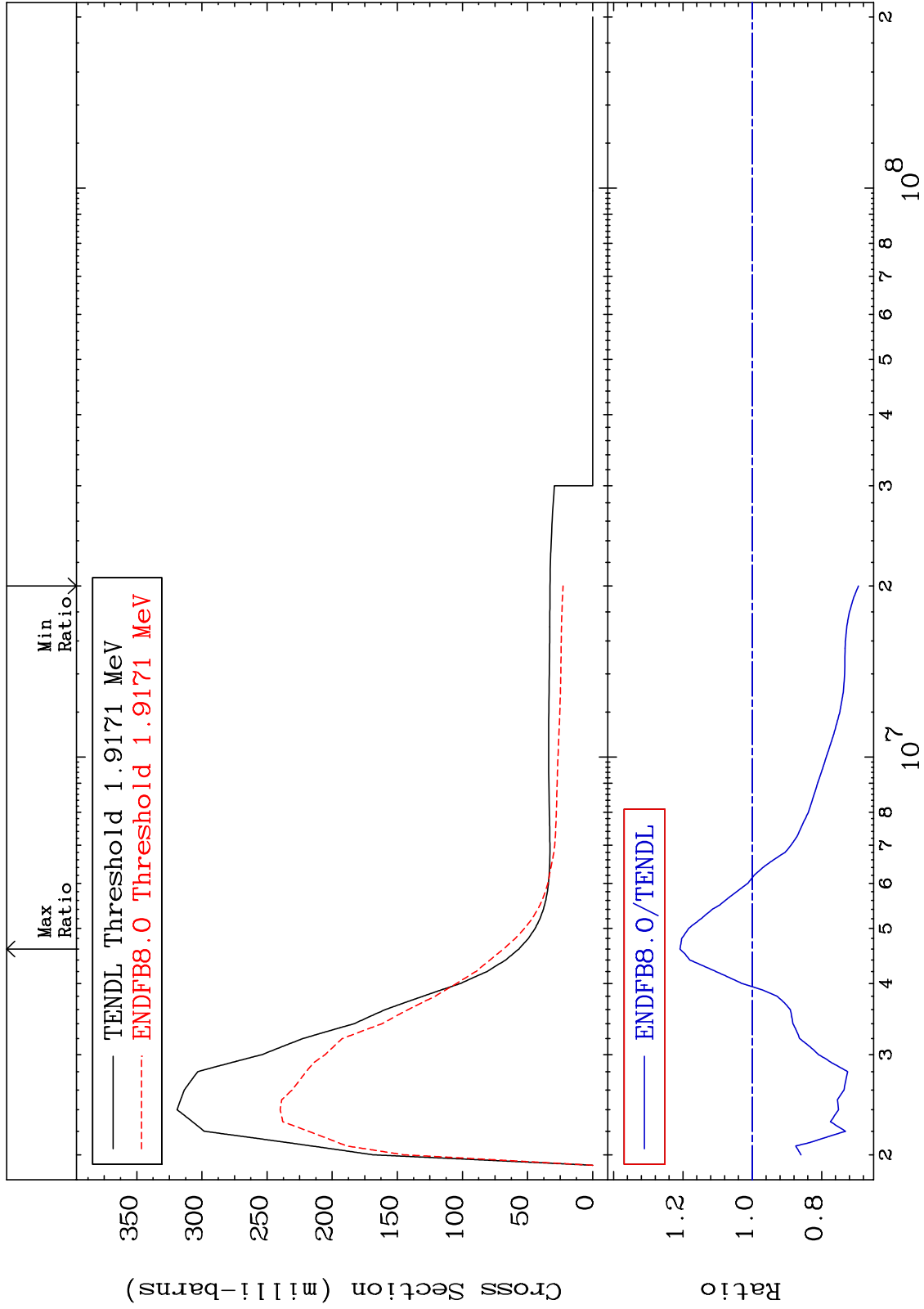
Incident Energy (eV)

40-Zr-96

MAT 4043

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

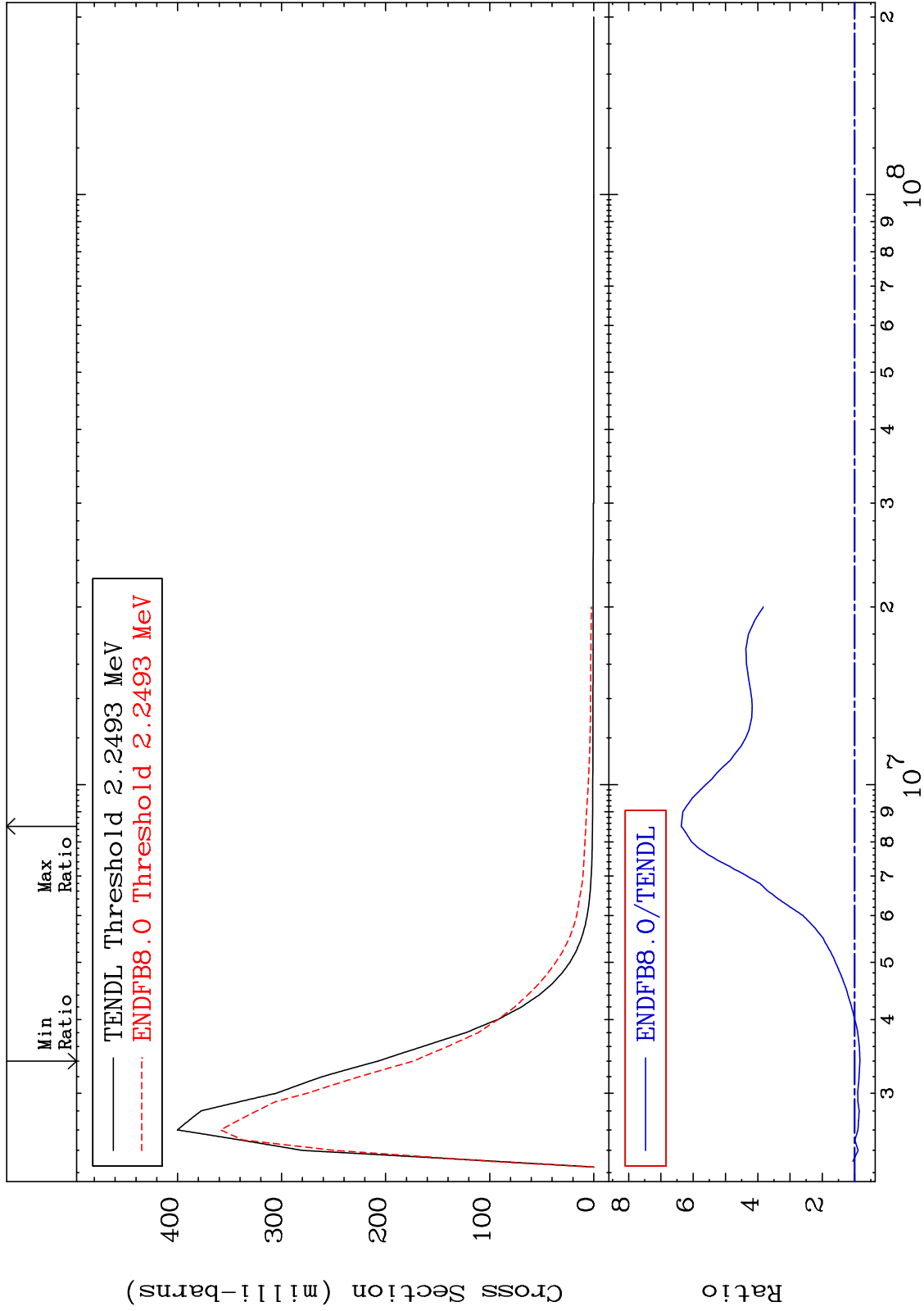
40-Zr-96  
-30.59 To 20.85 %

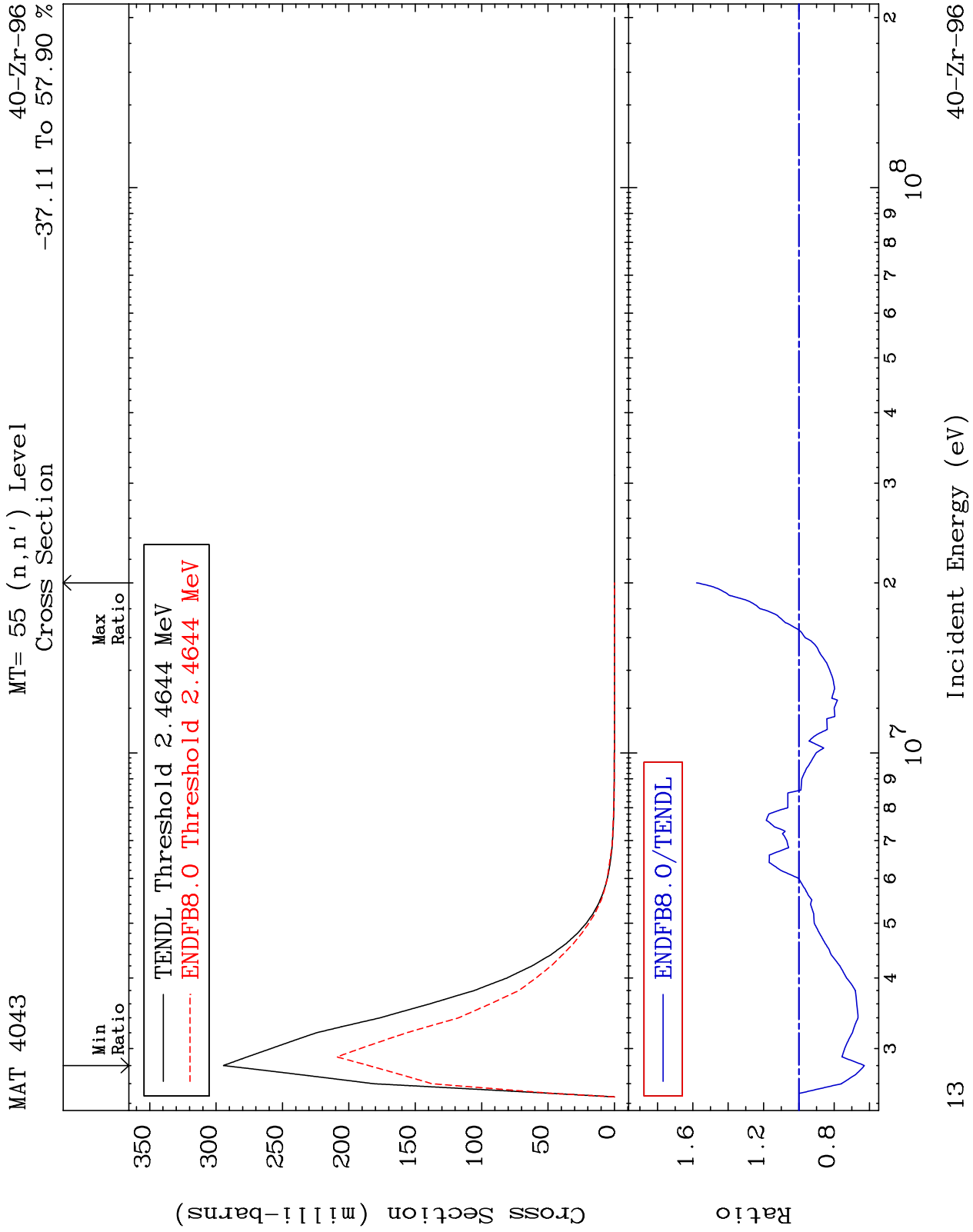


MAT 4043

MT= 54 (n,n') Level  
Cross Section

40-Zr-96  
-16.39 To 537.1 %

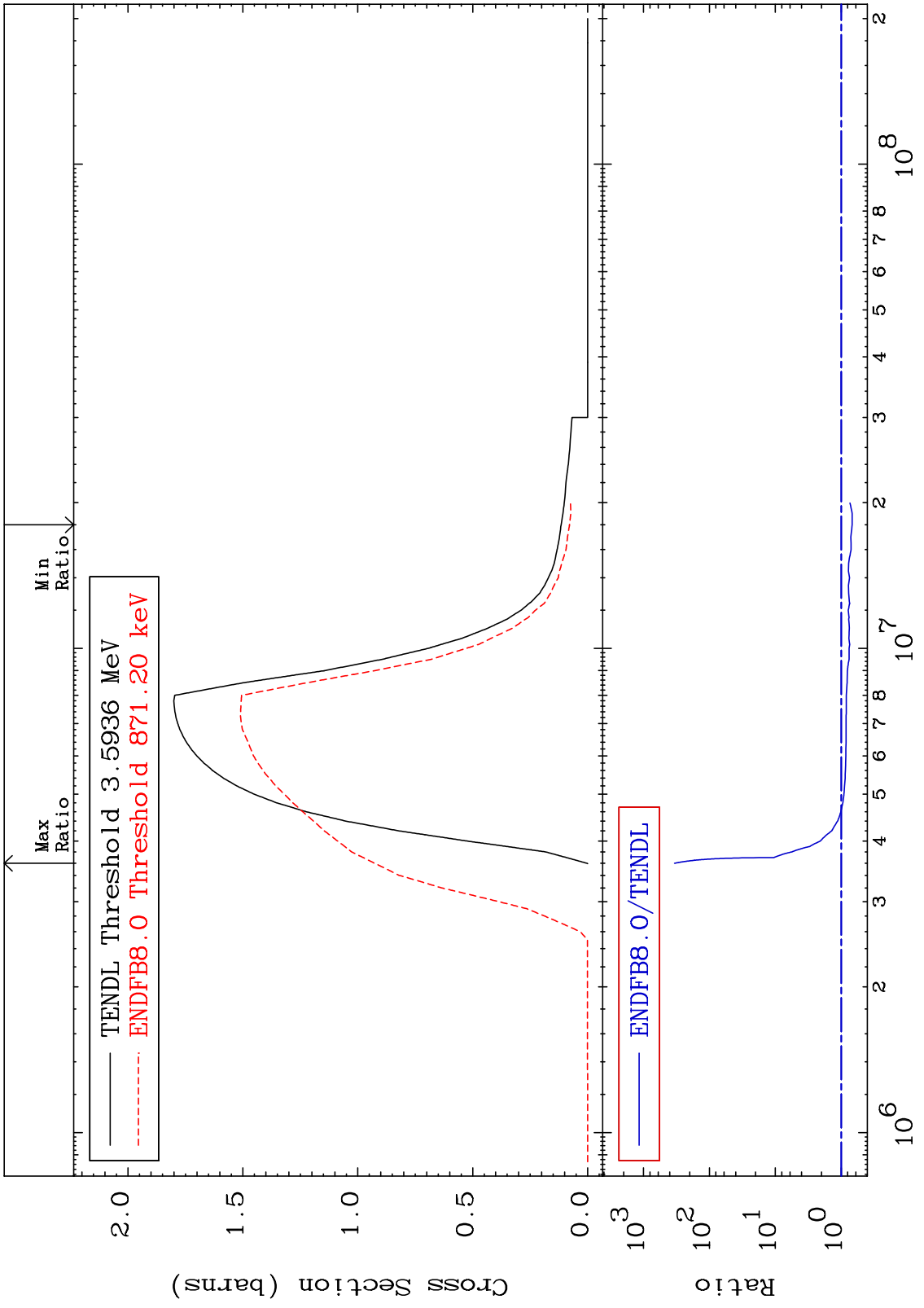




MAT 4043

(n, n') Continuum  
Cross Section

40-Zr-96  
-31.74 To 9999. %



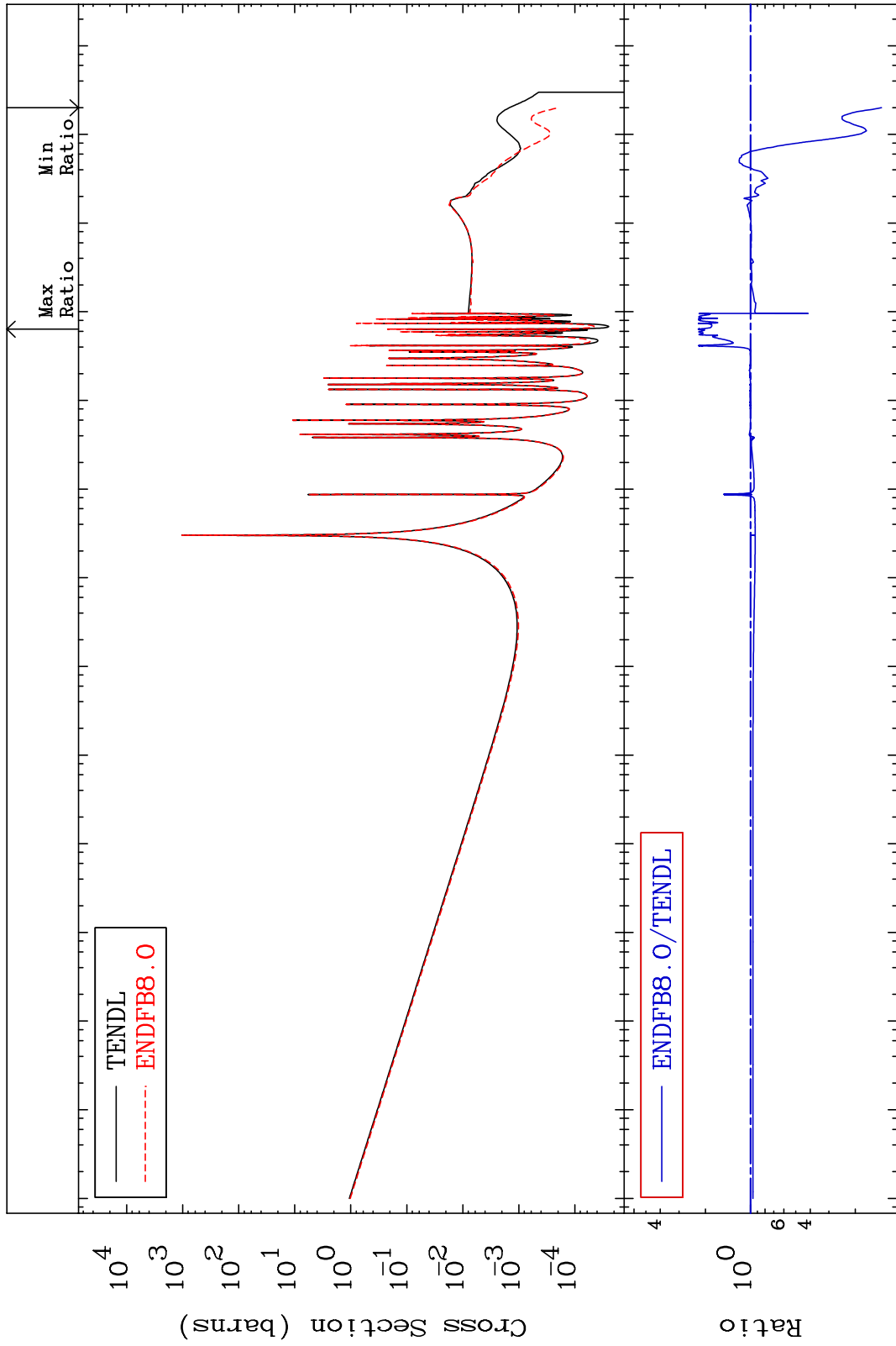
MAT 4043

40-Zr-96

(n,  $\gamma$ )

Cross Section

-86.64 To 122.9 %



40-Zr-96

Incident Energy (eV)

15



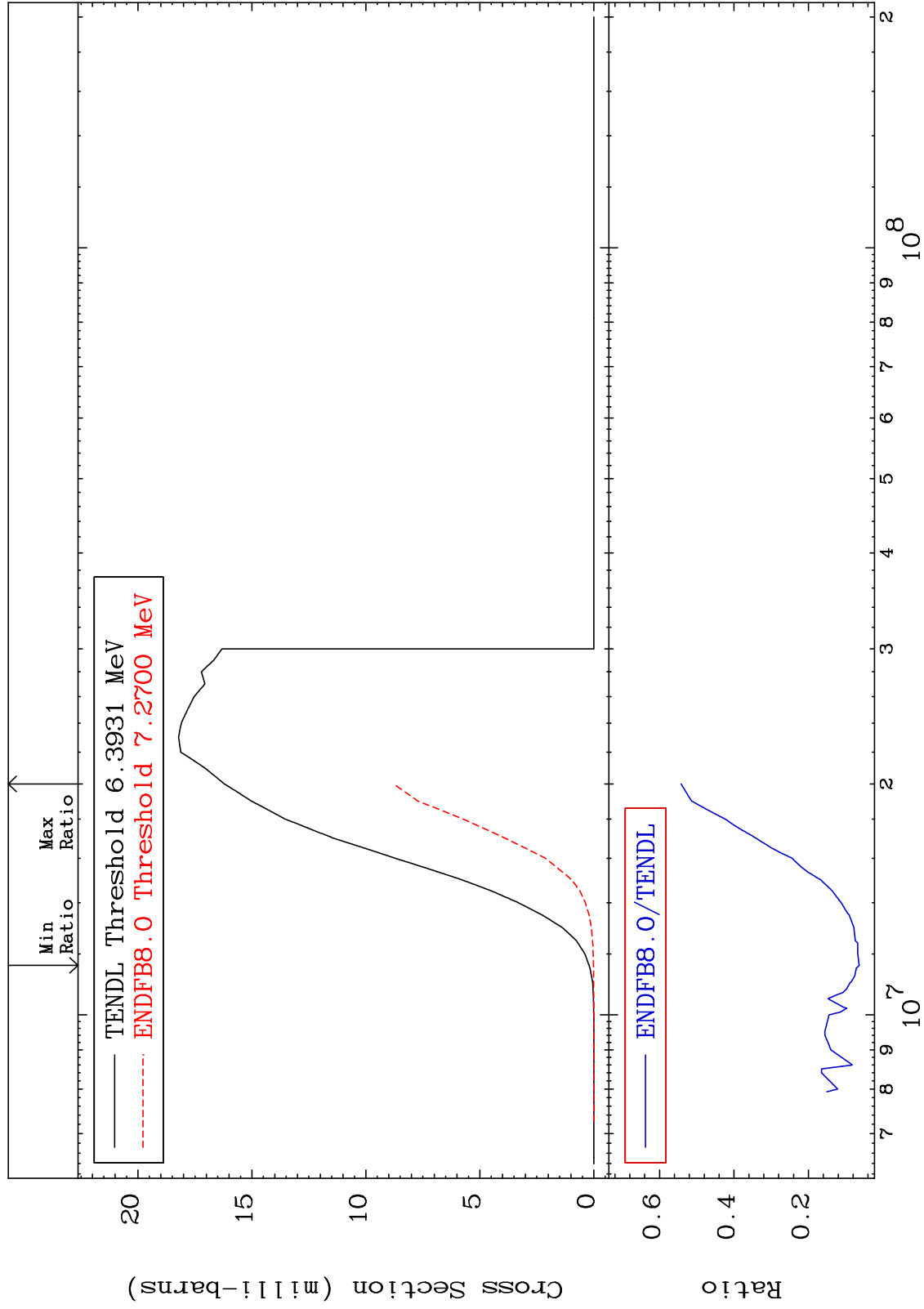
MAT 4043

(n,p)

40-Zr-96

Cross Section

-93.64 To -45.78%



16

Incident Energy (eV)

40-Zr-96

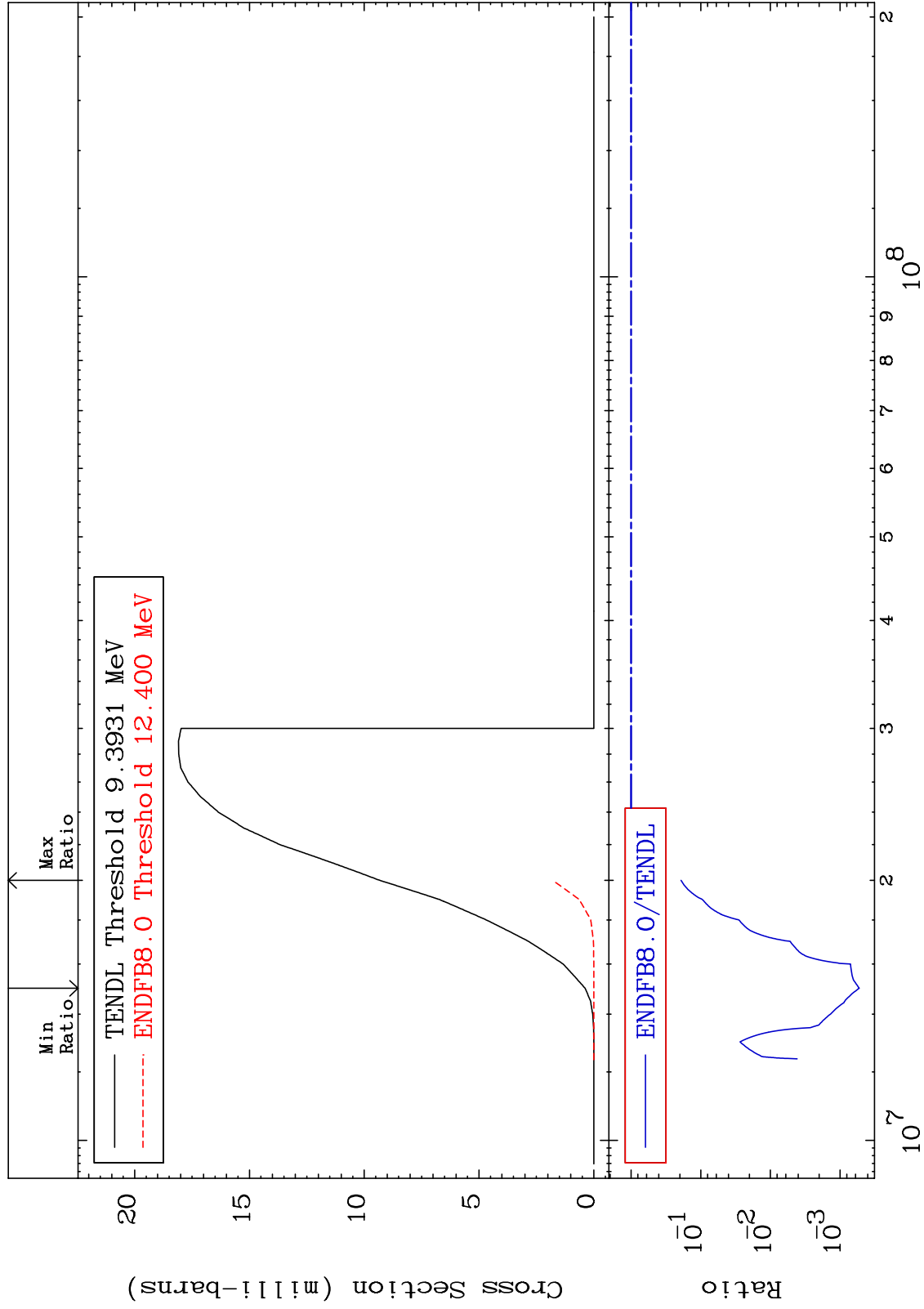
MAT 4043

(n, d)

40-Zr-96

Cross Section

-99.95 To -80.80%

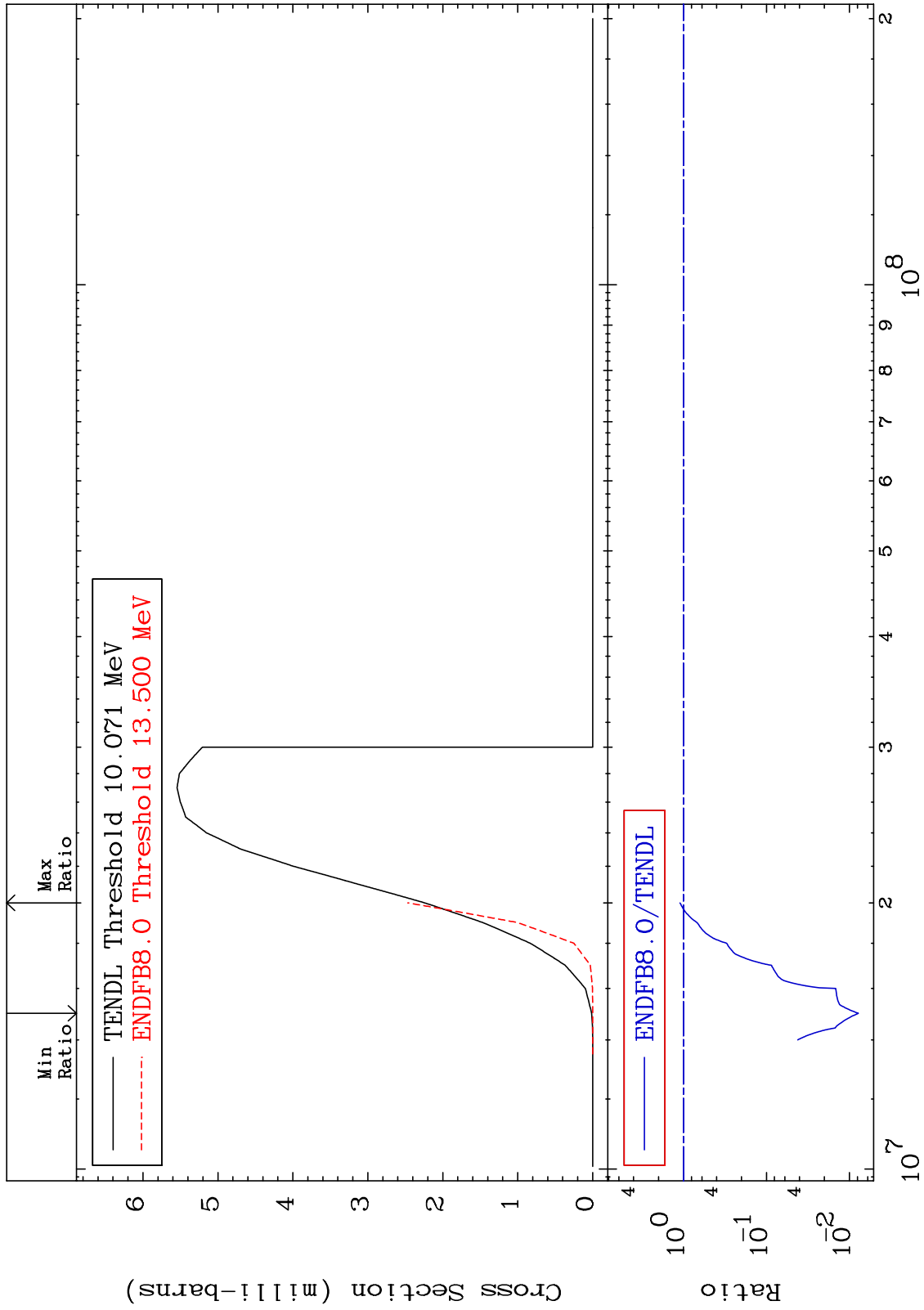


17

Incident Energy (eV)

40-Zr-96

MAT 4043 (n, t) Cross Section 40-Zr-96 -99.22 To 10.03 %

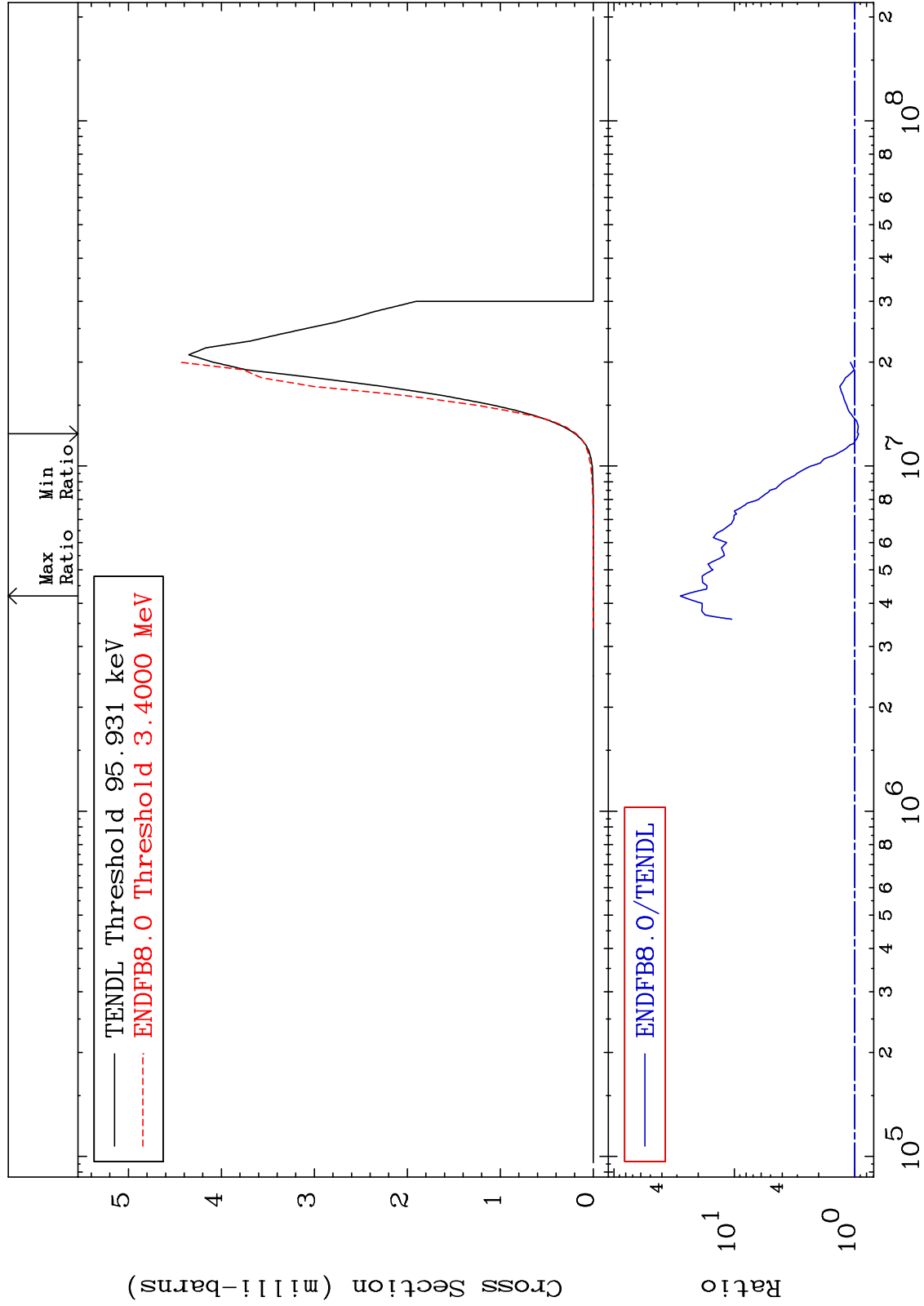


18 Incident Energy (eV) 40-Zr-96

MAT 4043

40-Zr-96

(n,  $\alpha$ )  
Cross Section  
-6.935 To 2706. %



— TENDL Threshold 95.931 keV  
- - - ENDFB8.0 Threshold 3.4000 MeV

— ENDFB8.0/TENDL

40-Zr-96

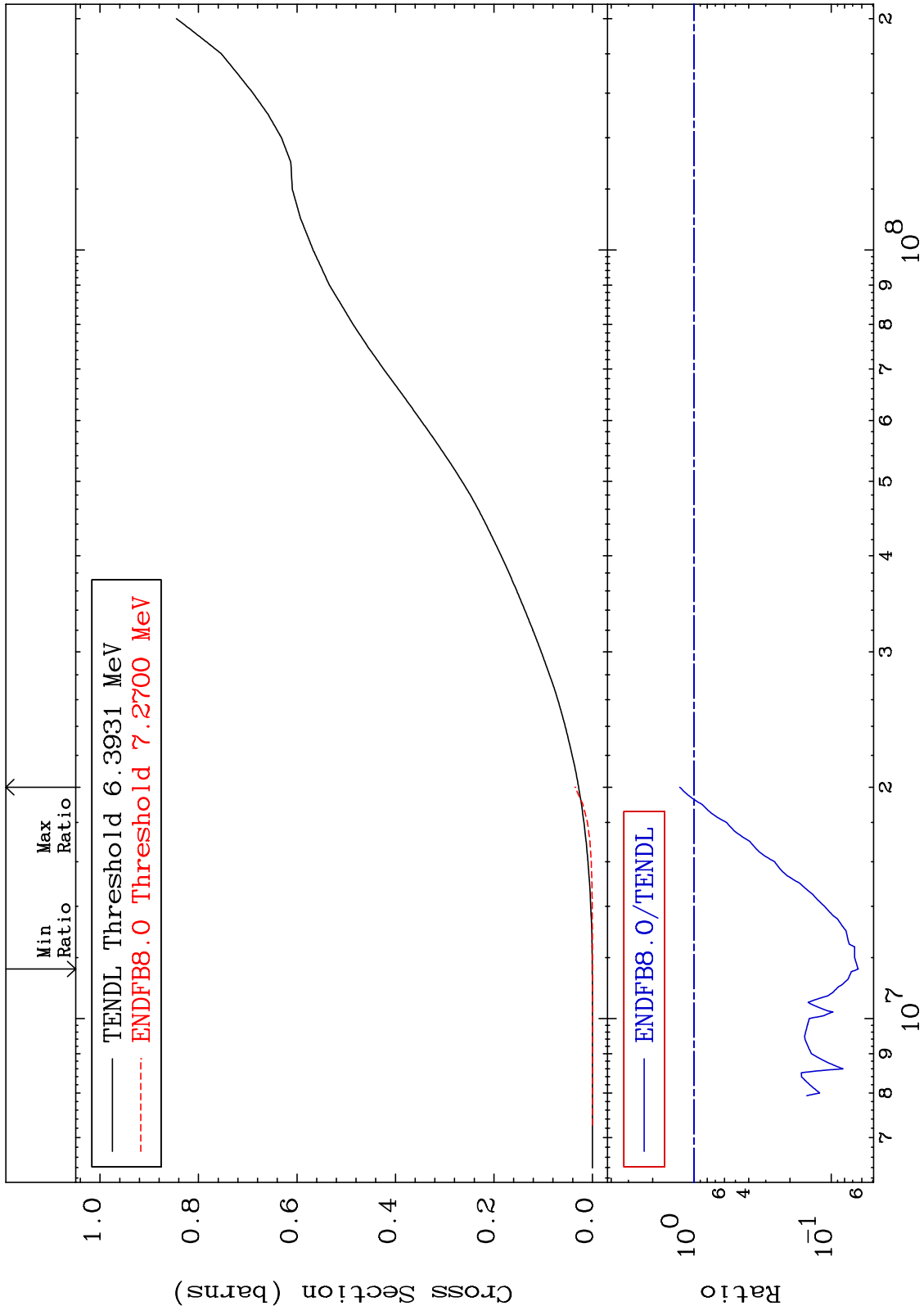
Incident Energy (eV)

19

MAT 4043

Hydrogen Production  
Cross Section

40-Zr-96  
-93.64 To 26.81 %



20

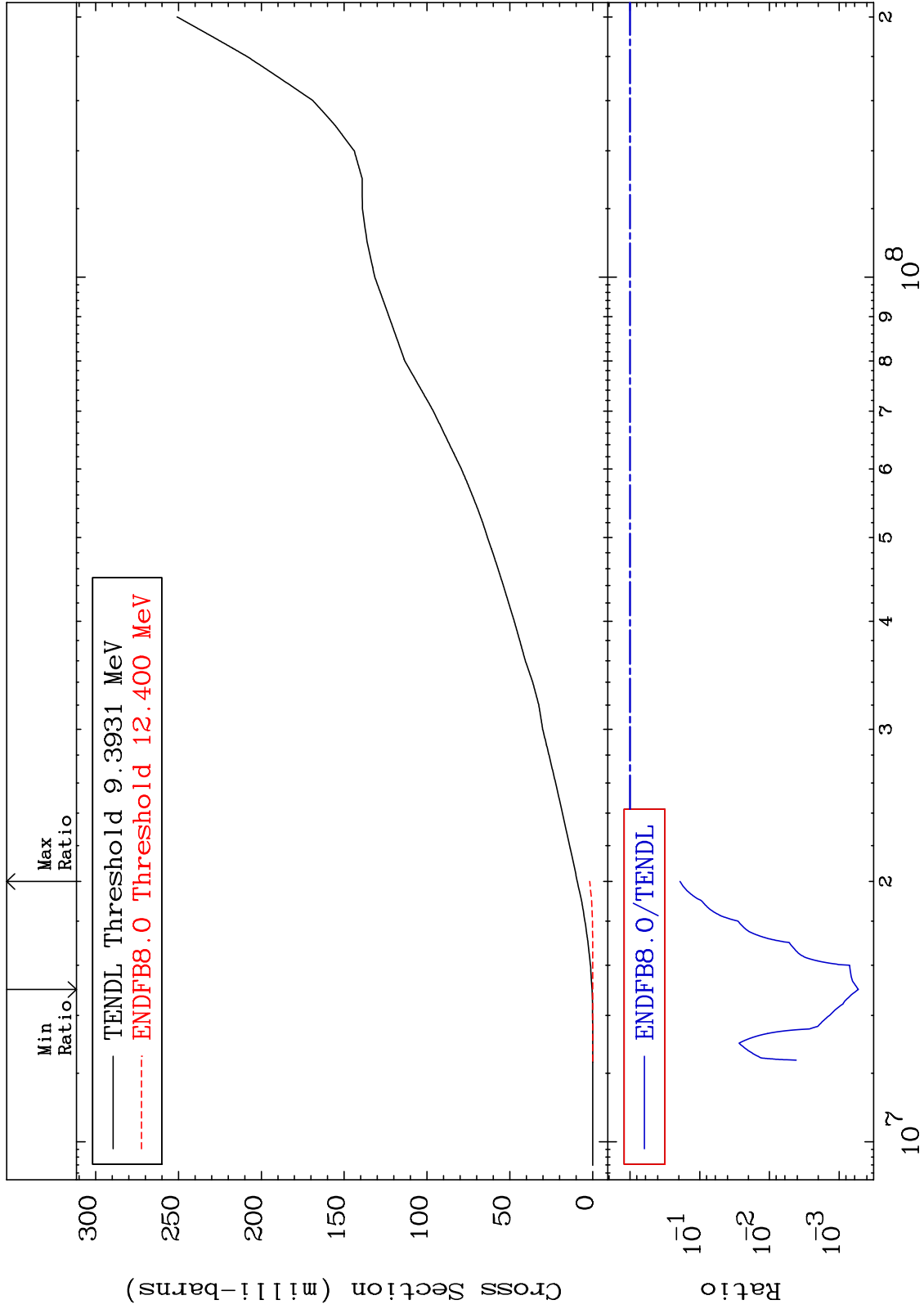
Incident Energy (eV)

40-Zr-96

MAT 4043

Deuterium Production  
Cross Section

40-Zr-96  
-99.95 To -80.80%



21

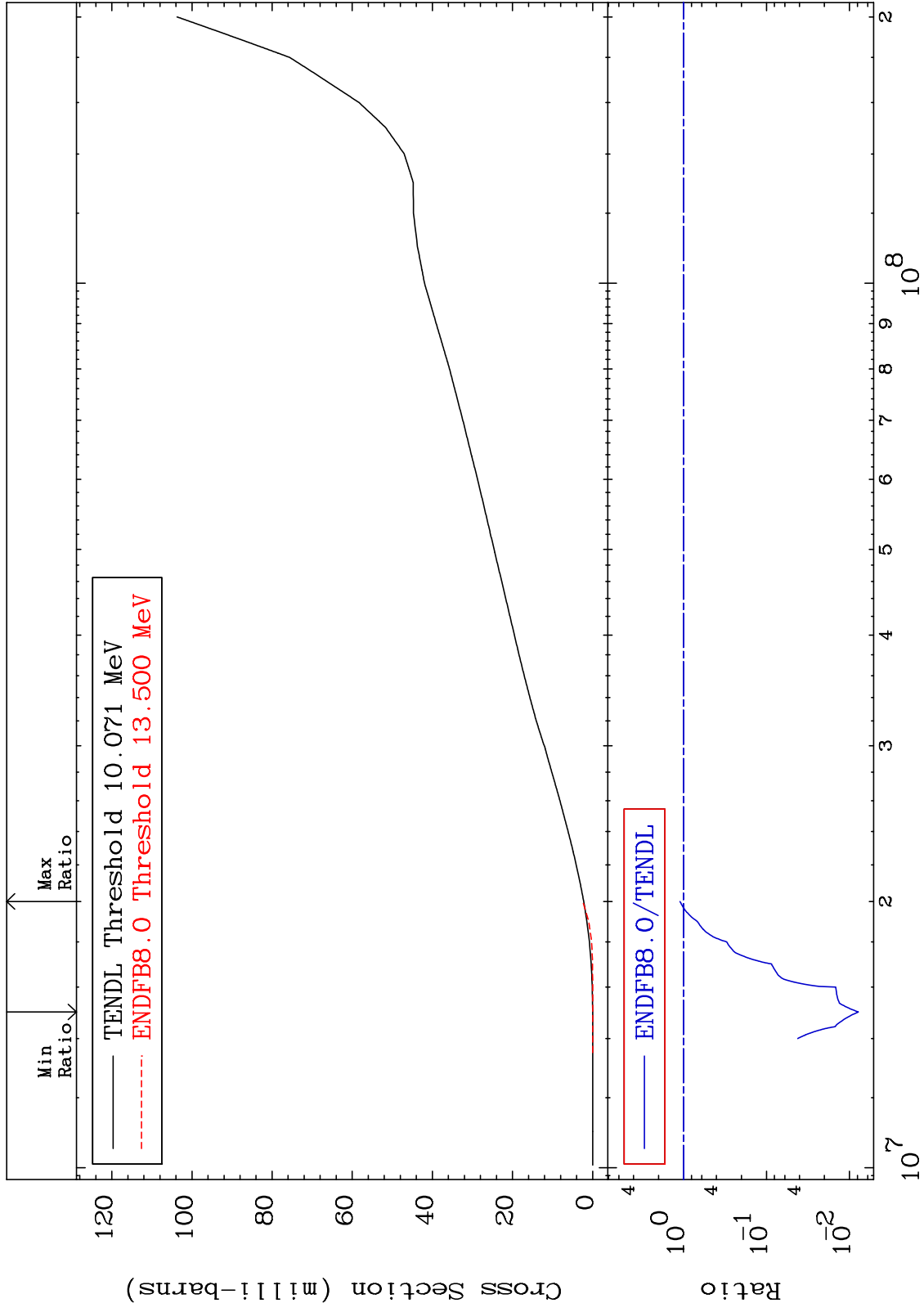
Incident Energy (eV)

40-Zr-96

MAT 4043

Tritium Production  
Cross Section

40-Zr-96  
-99.22 To 10.02 %



Incident Energy (eV)

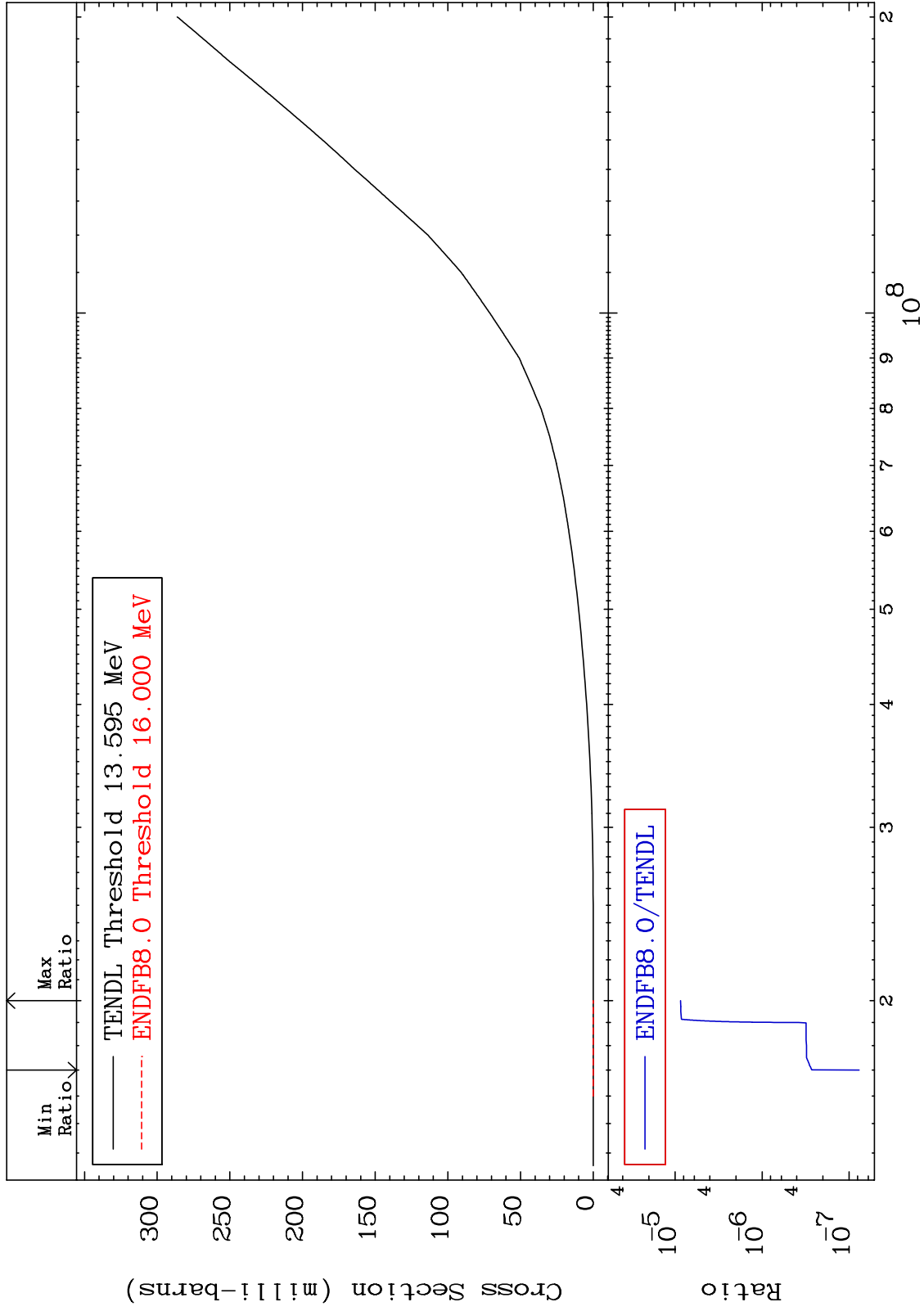
40-Zr-96

22

MAT 4043

He-3 Production  
Cross Section

40-Zr-96  
-100.0 To -100.0%

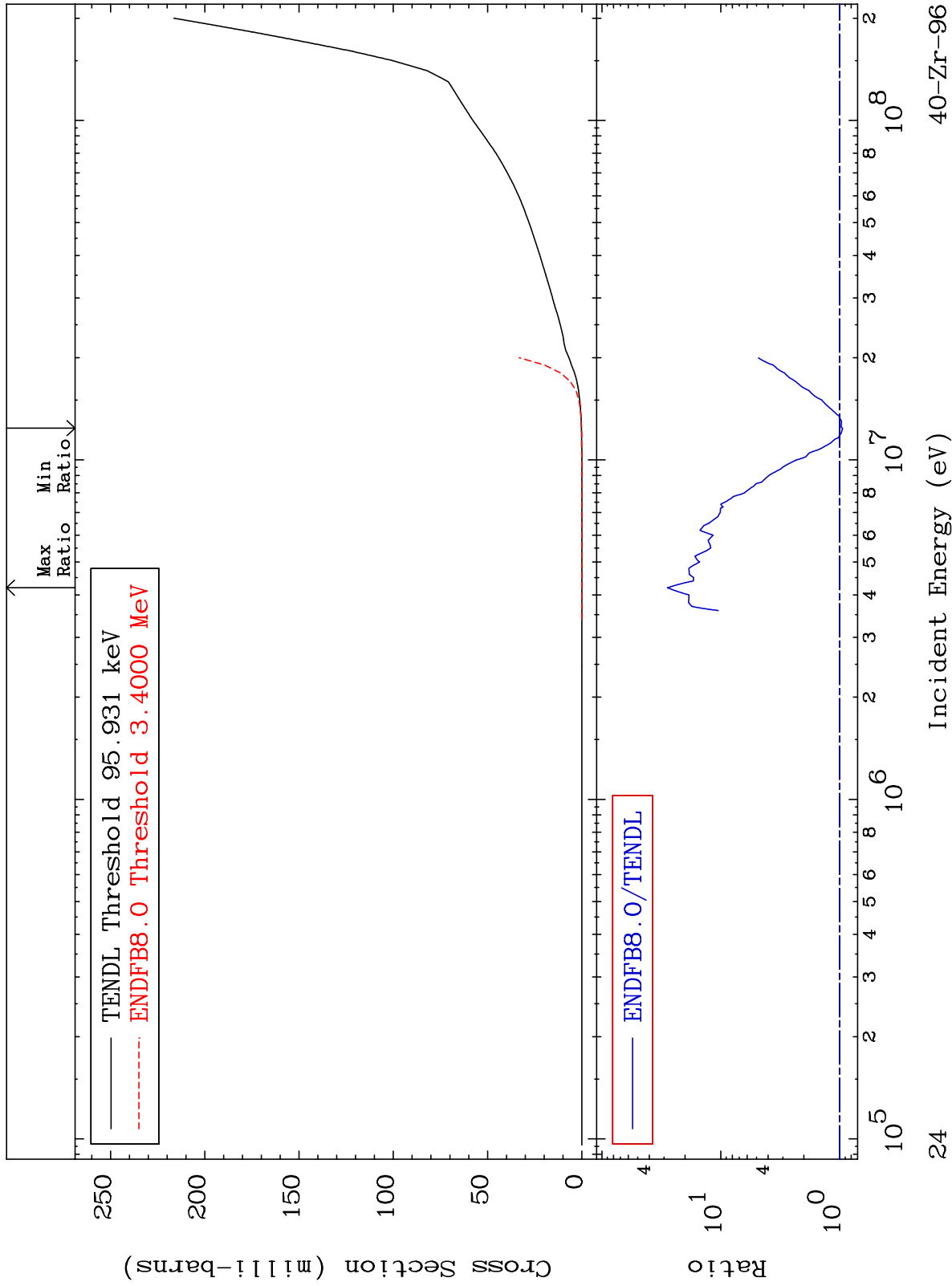




MAT 4043

He-4 Production  
Cross Section

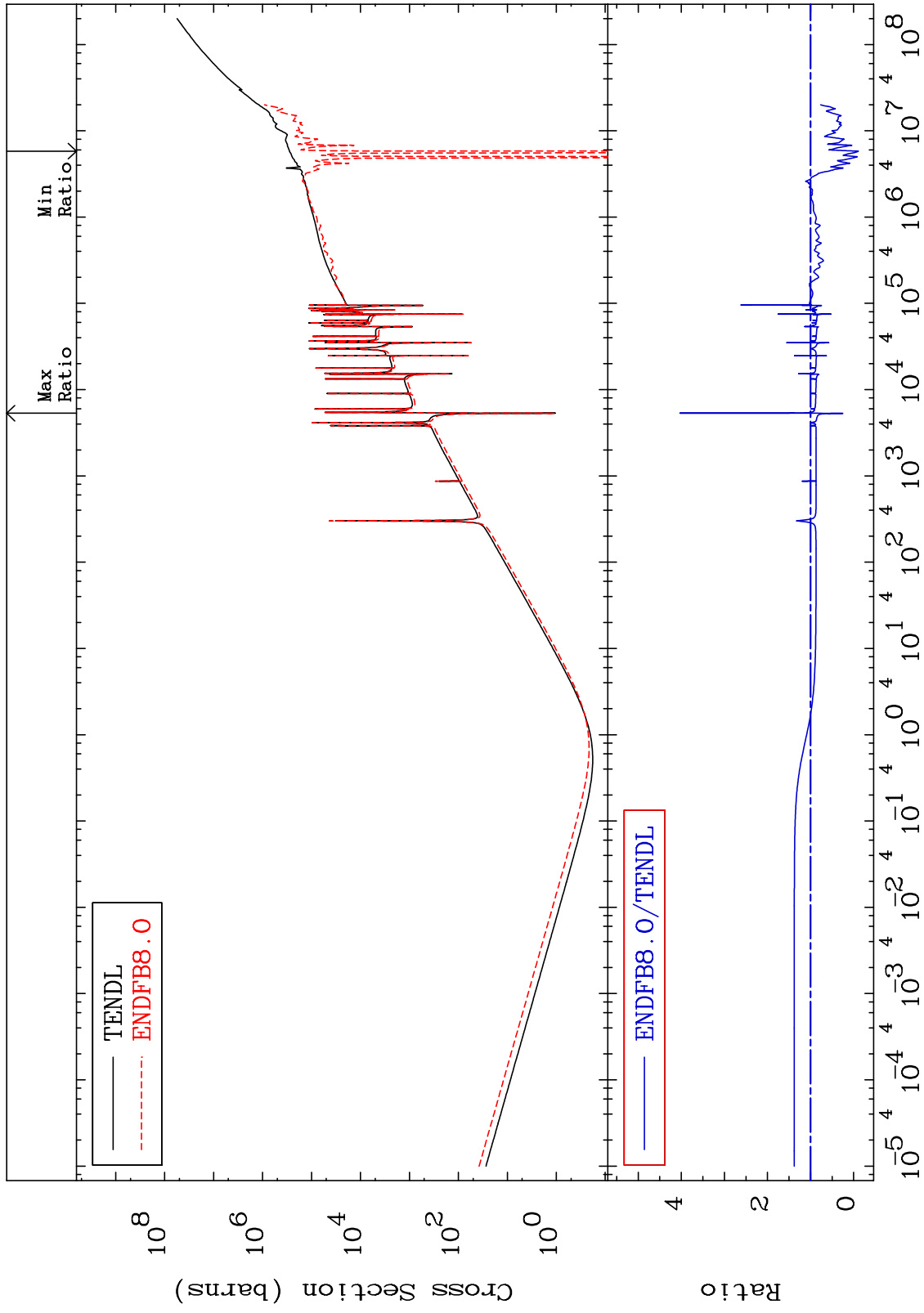
40-Zr-96  
-5.599 To 2706. %



MAT 4043

Kerma total (eV-barns)  
Cross Section

40-Zr-96  
-111.0 To 303.0 %



25

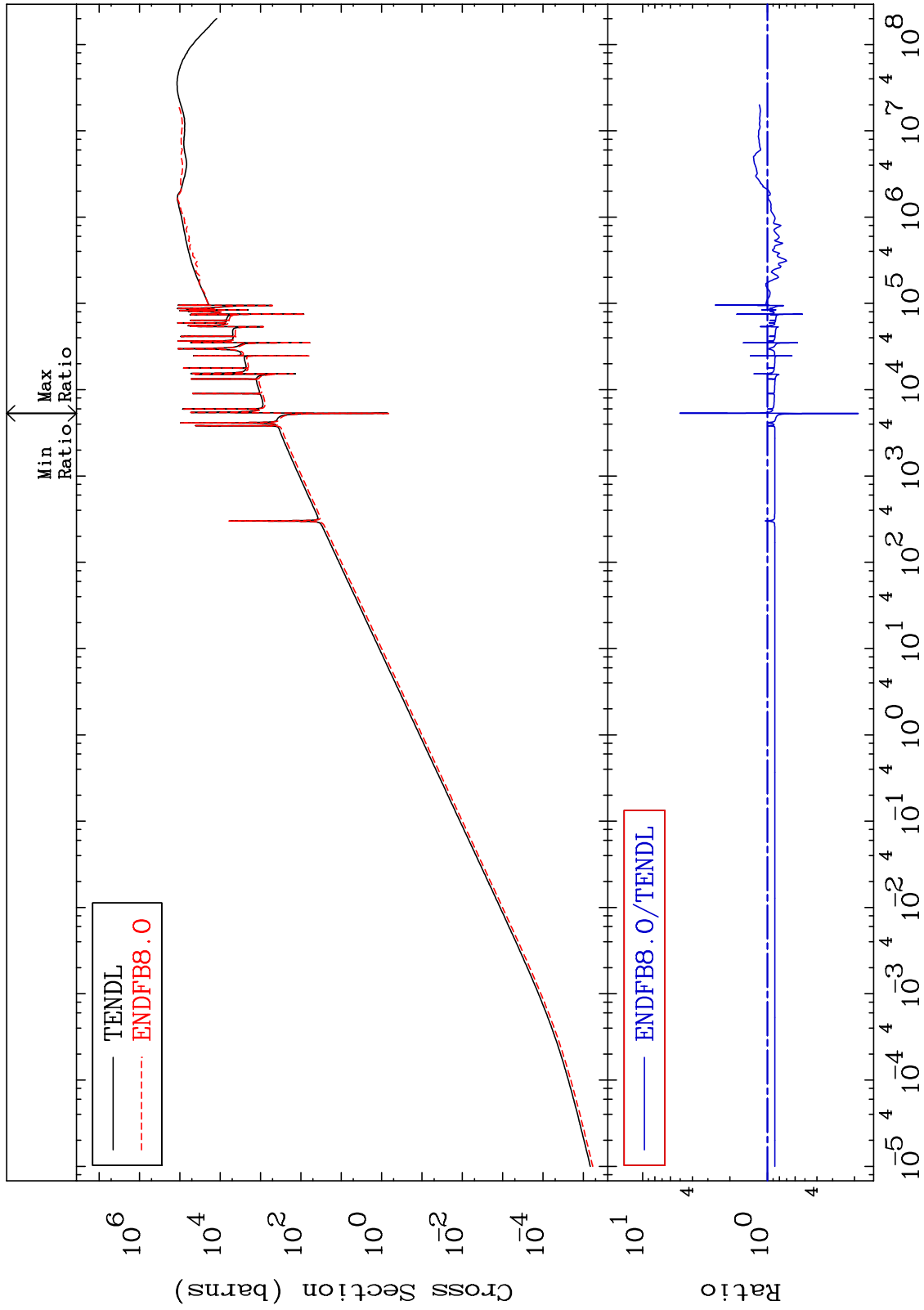
Incident Energy (eV)

40-Zr-96

MAT 4043

Kerma elastic  
Cross Section

40-Zr-96  
-81.40 To 401.9 %



26

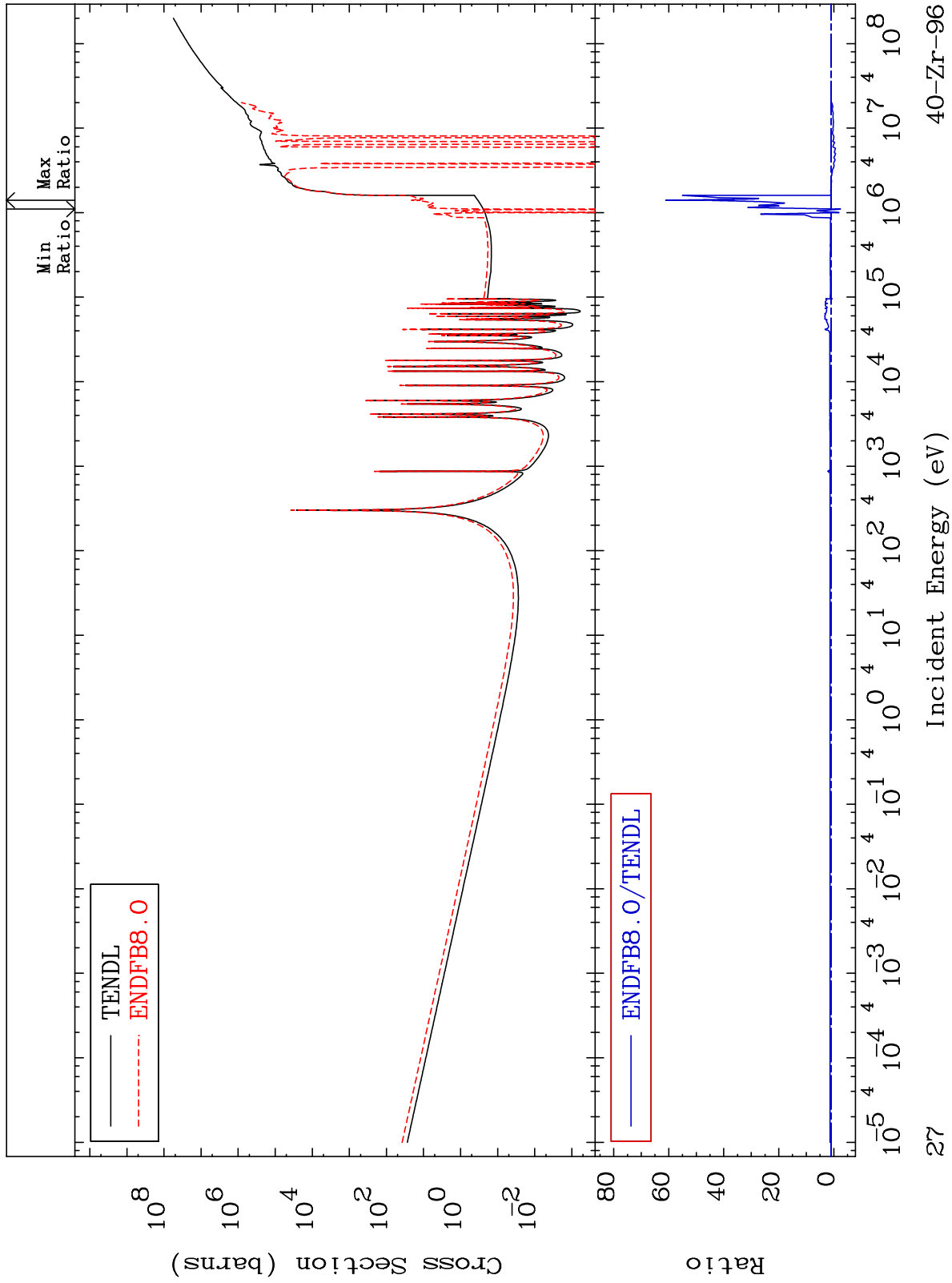
Incident Energy (eV)

40-Zr-96

MAT 4043

Kerma non-elastic (all but mt2)  
Cross Section

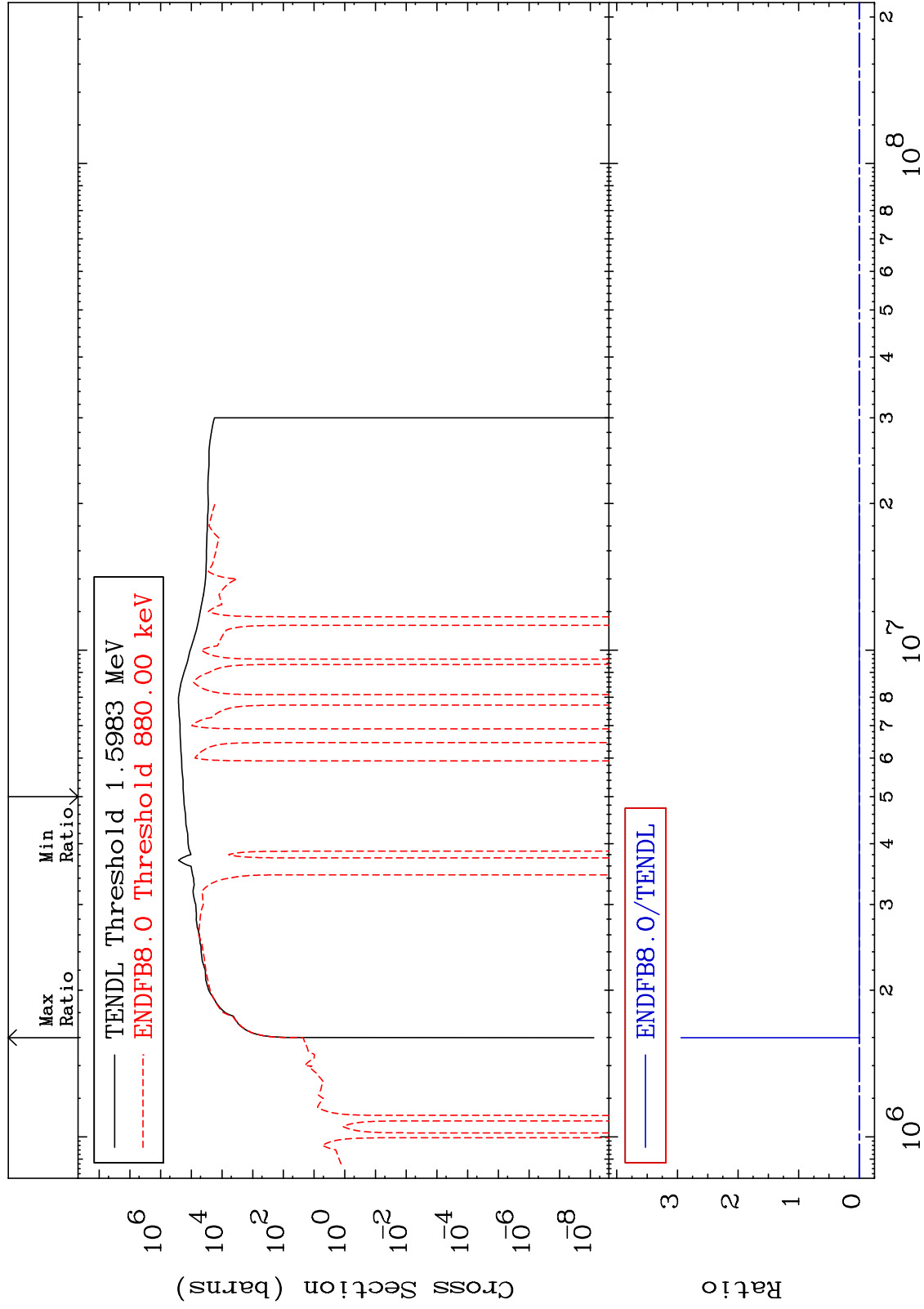
40-Zr-96  
-346.1 To 6005. %



MAT 4043

Kerma inelastic (mt51-91)  
Cross Section

40-Zr-96  
-164.5 To 9999. %



28

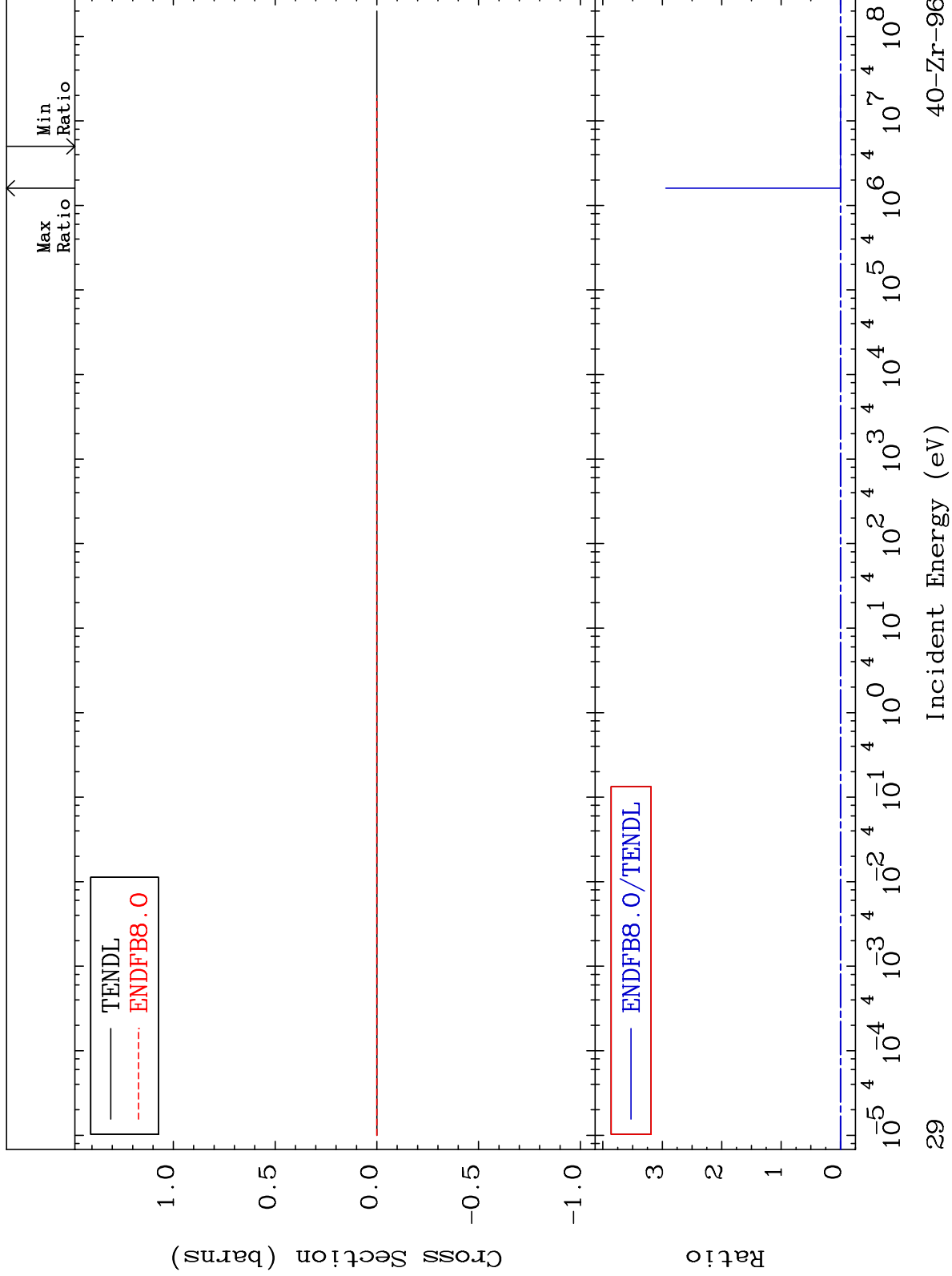
Incident Energy (eV)

40-Zr-96

MAT 4043

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

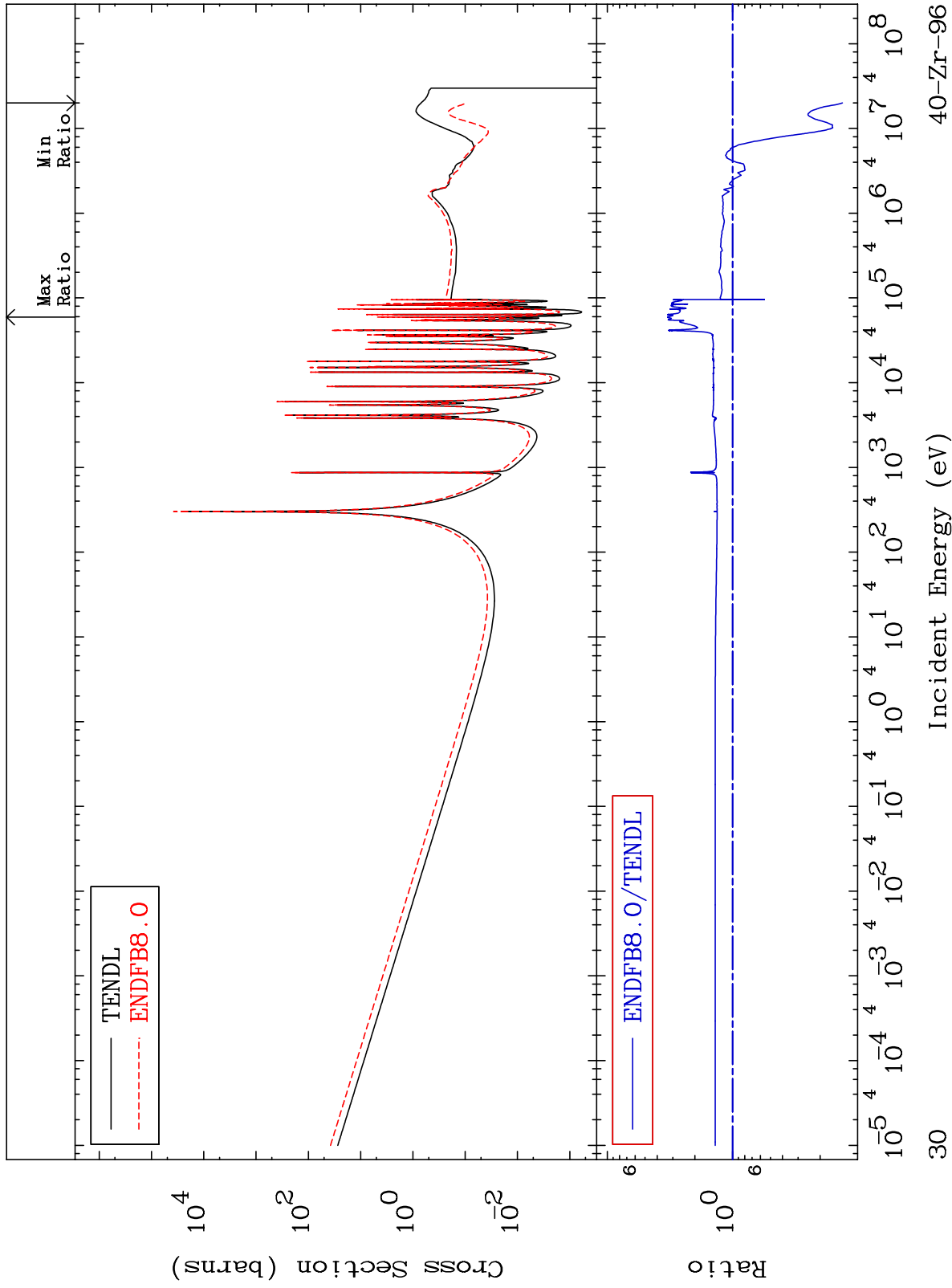
40-Zr-96  
-164.5 To 9999. %



MAT 4043

Kerma capture (mt102)  
Cross Section

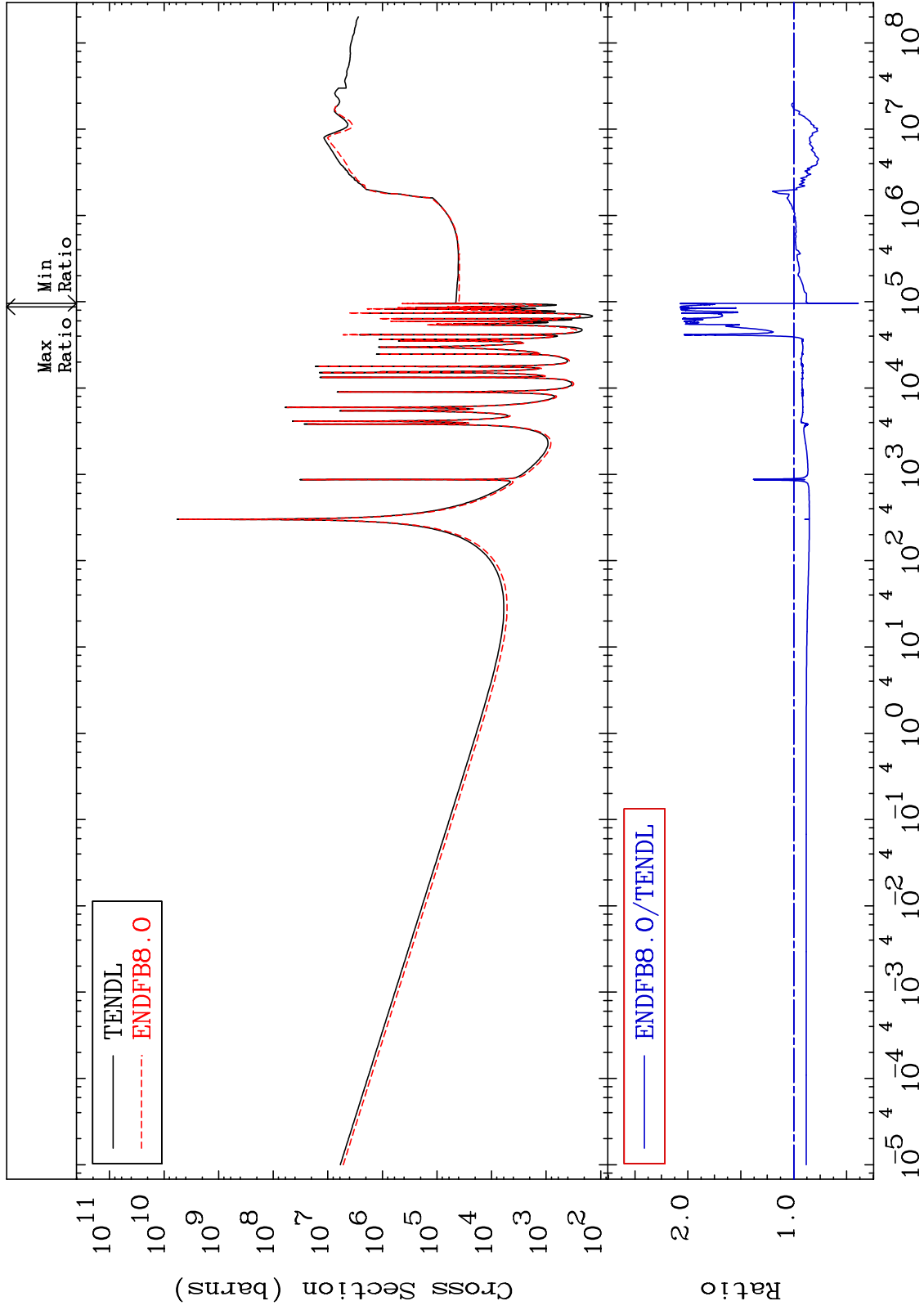
40-Zr-96  
-86.76 To 230.8 %



MAT 4043

Total photon (eV-barns)  
Cross Section

40-Zr-96  
-61.07 To 107.4 %



31

Incident Energy (eV)

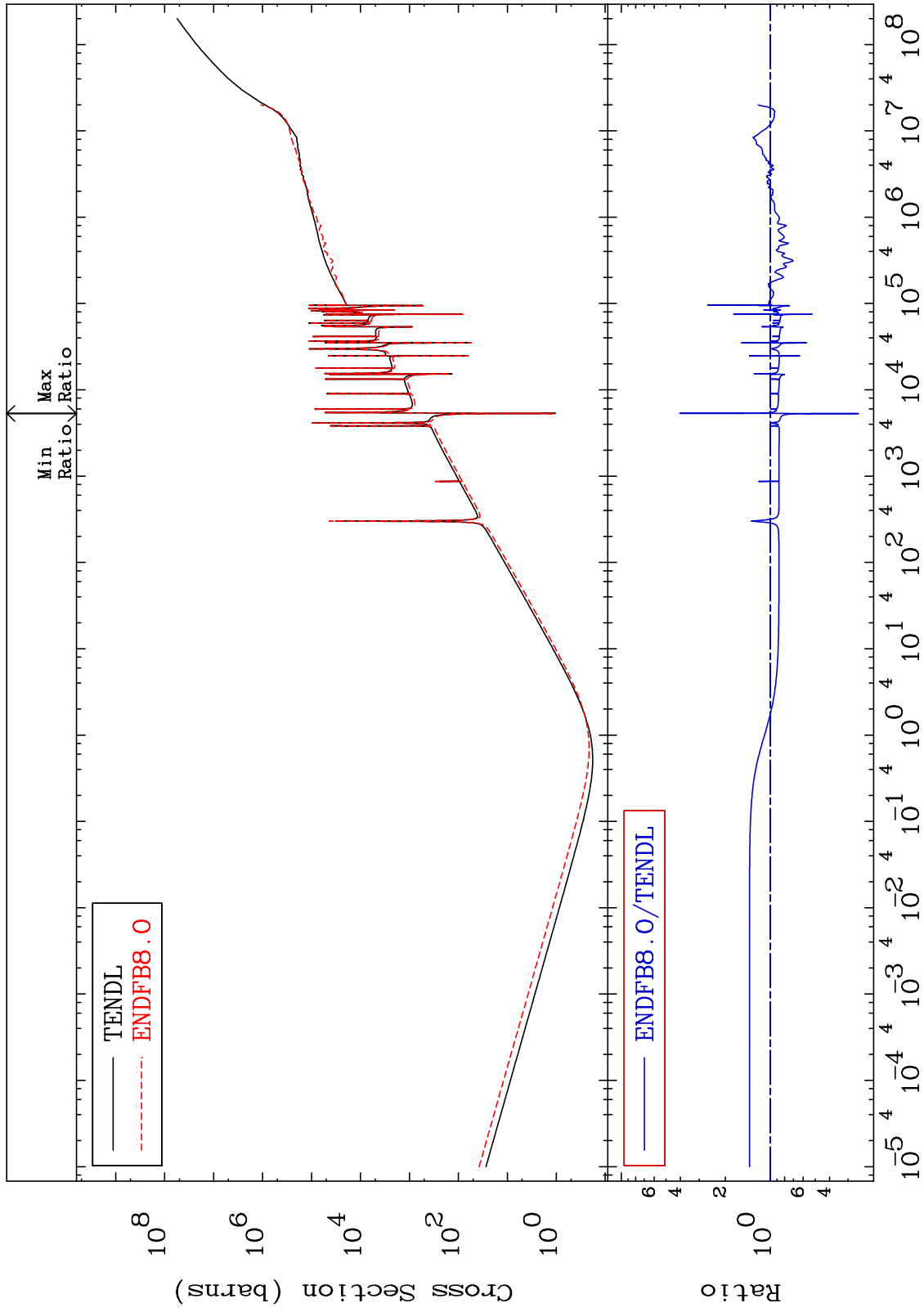
40-Zr-96



MAT 4043

Total kinematic kerma (high limit)  
Cross Section

40-Zr-96  
-74.40 To 303.0 %

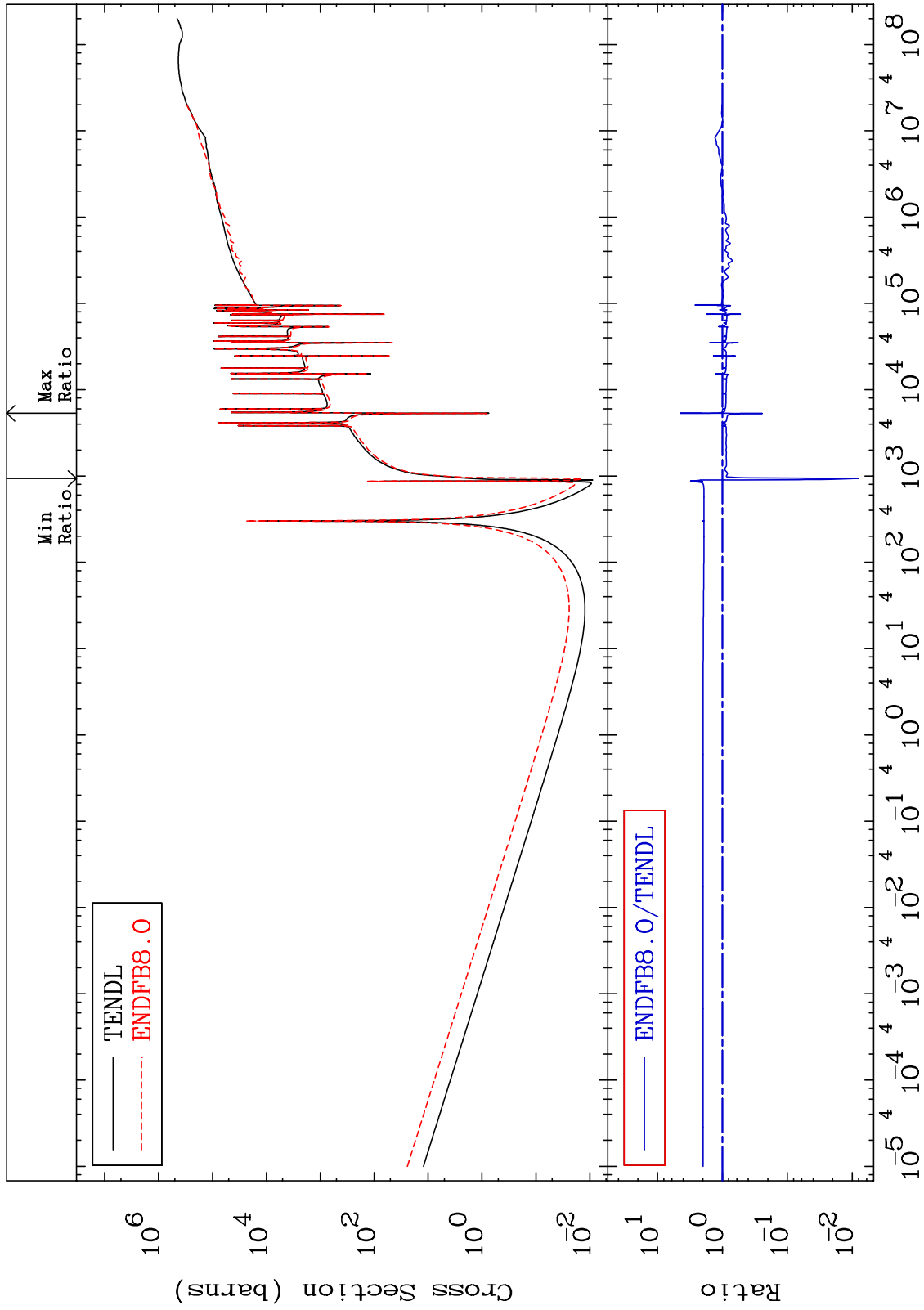


MAT 4043

Dpa total (eV-barns)

40-Zr-96

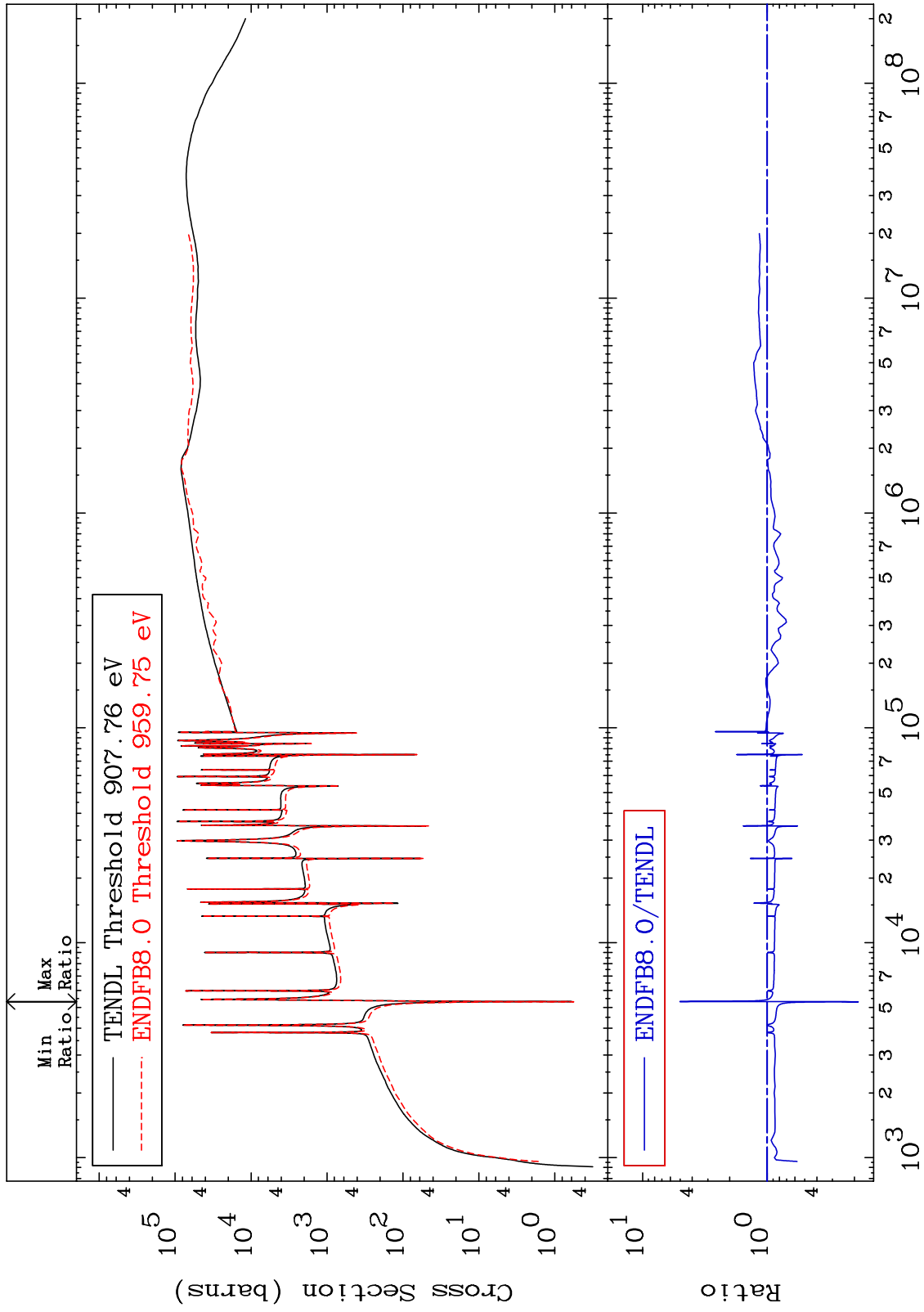
-99.20 To 349.3 %



MAT 4043

Dpa elastic (mt2)  
Cross Section

40-Zr-96  
-81.42 To 401.2 %



34

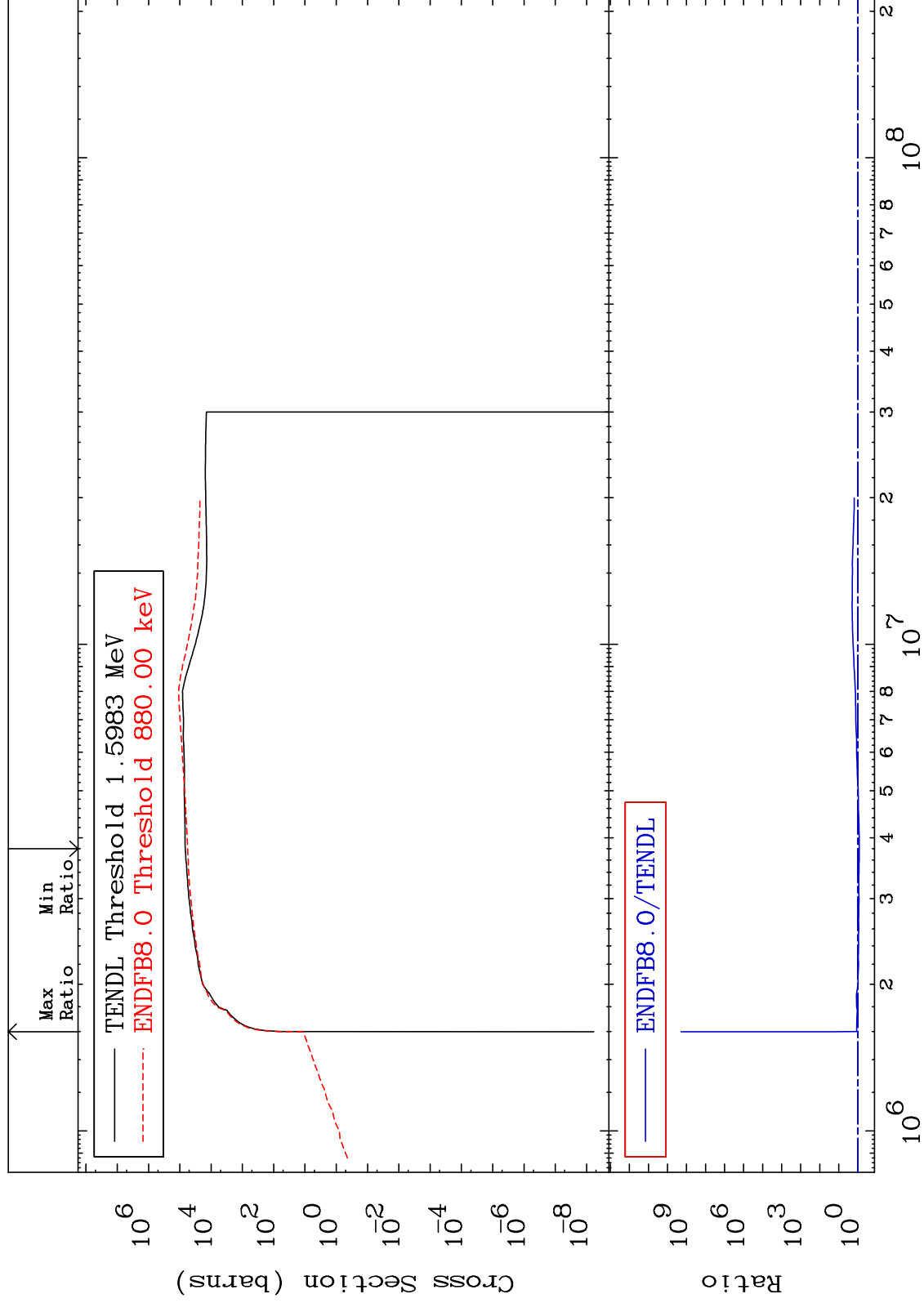
40-Zr-96

40-Zr-96

MAT 4043

Dpa inelastic (mt51-91)  
Cross Section

40-Zr-96  
-16.13 To 9999. %



40-Zr-96

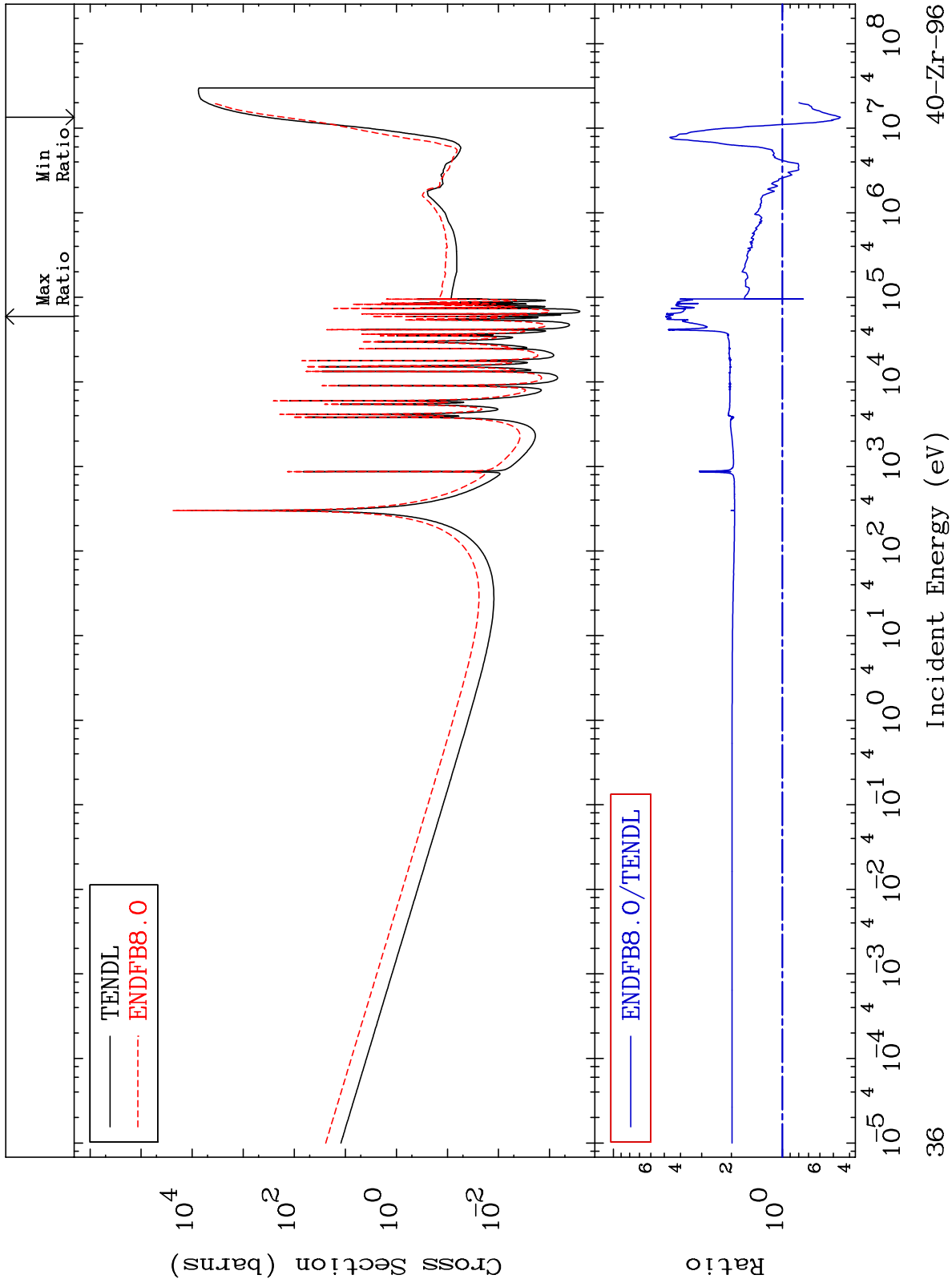
Incident Energy (eV)

35

MAT 4043

Dpa disappearance (mt102 -120)  
Cross Section

40-Zr-96  
-54.67 To 390.6 %



36

40-Zr-96