

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

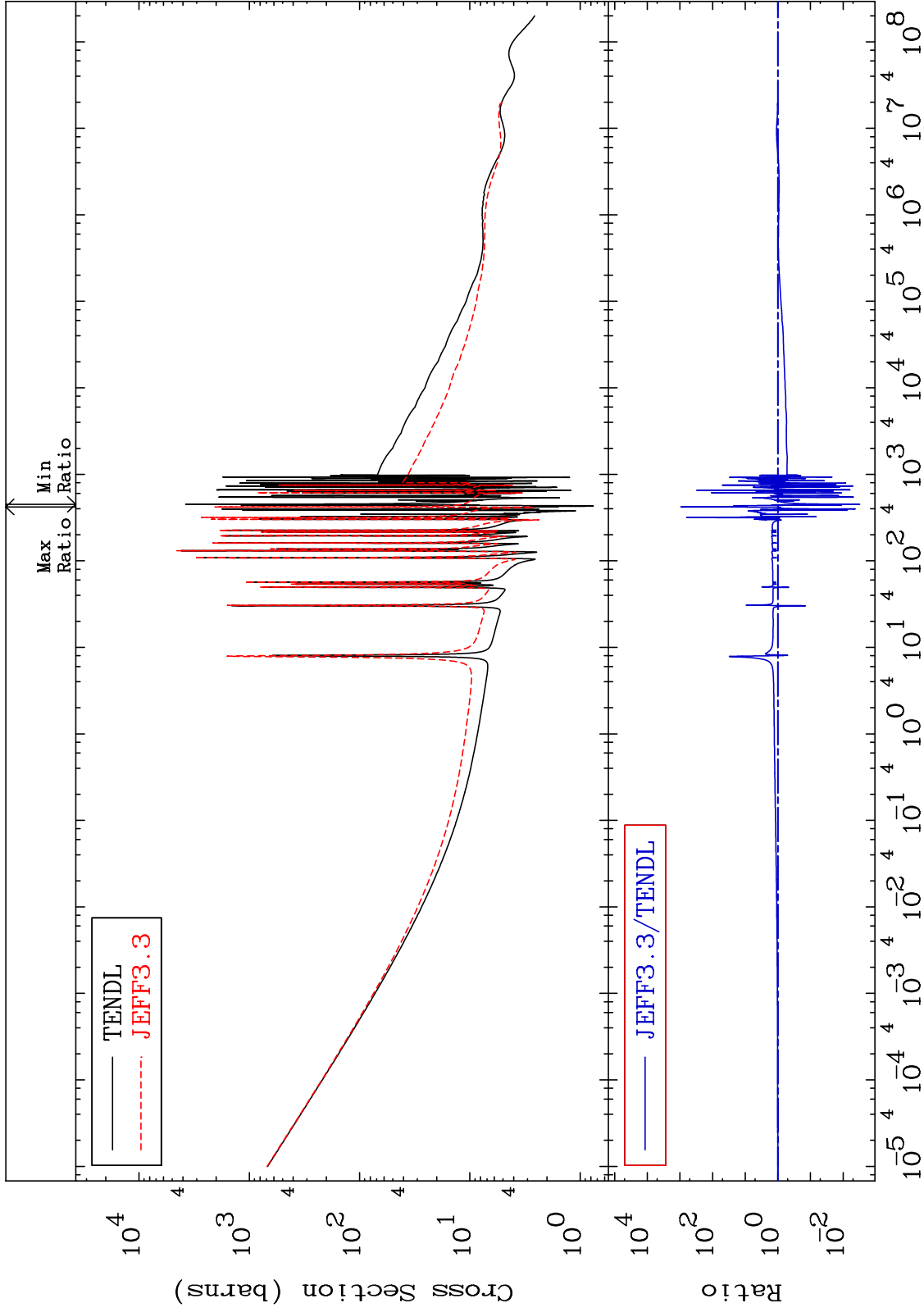
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 6831

Total
Cross Section

68-Er-164
-99.69 To 9999. %



1

Incident Energy (eV)

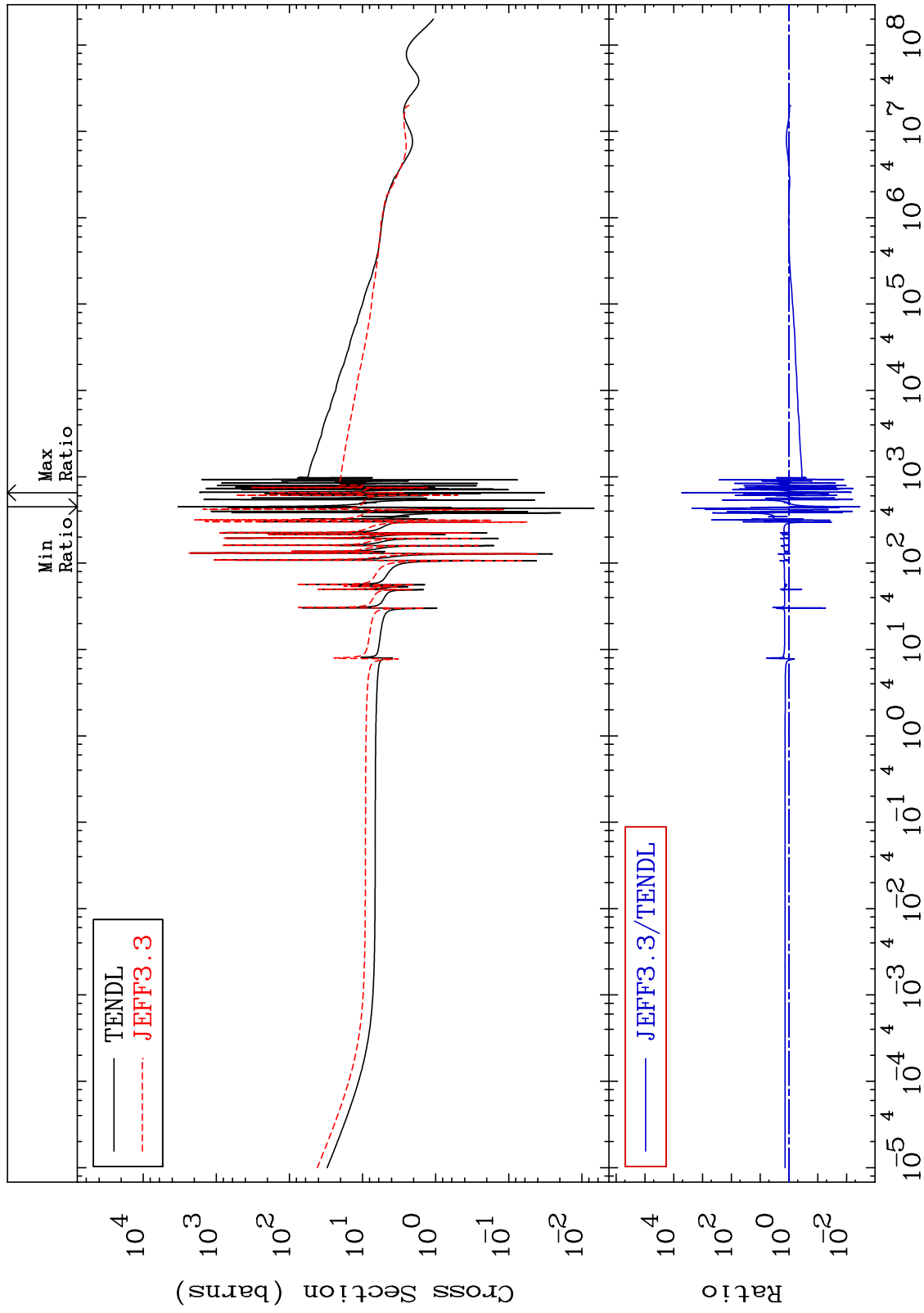
68-Er-164

MAT 6831

Elastic
Cross Section

68-Er-164

-99.65 To 9999. %

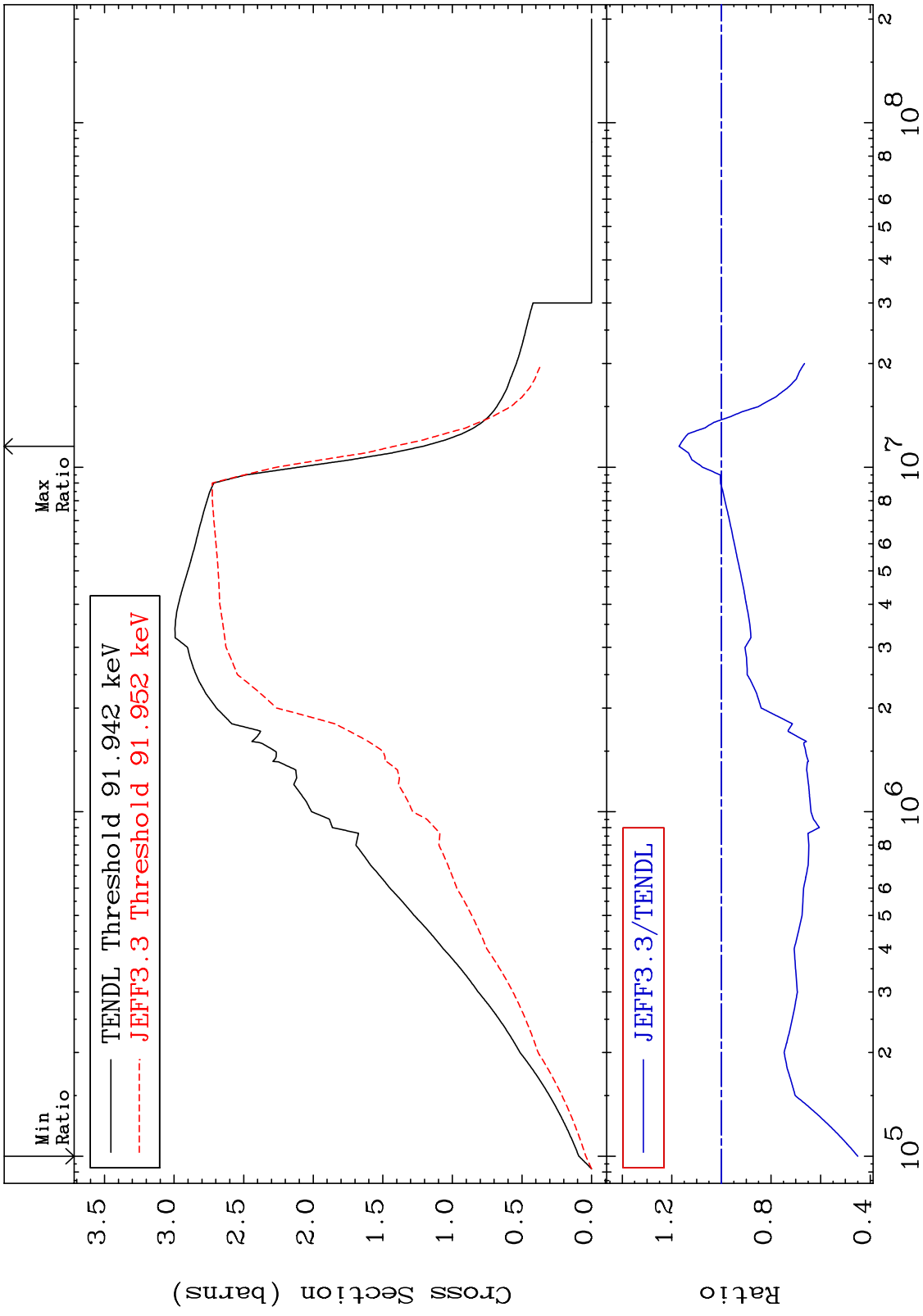


2

Incident Energy (eV)

68-Er-164

MAT 6831 68-Er-164
-55.02 To 17.09 %
Inelastic Cross Section



3 68-Er-164

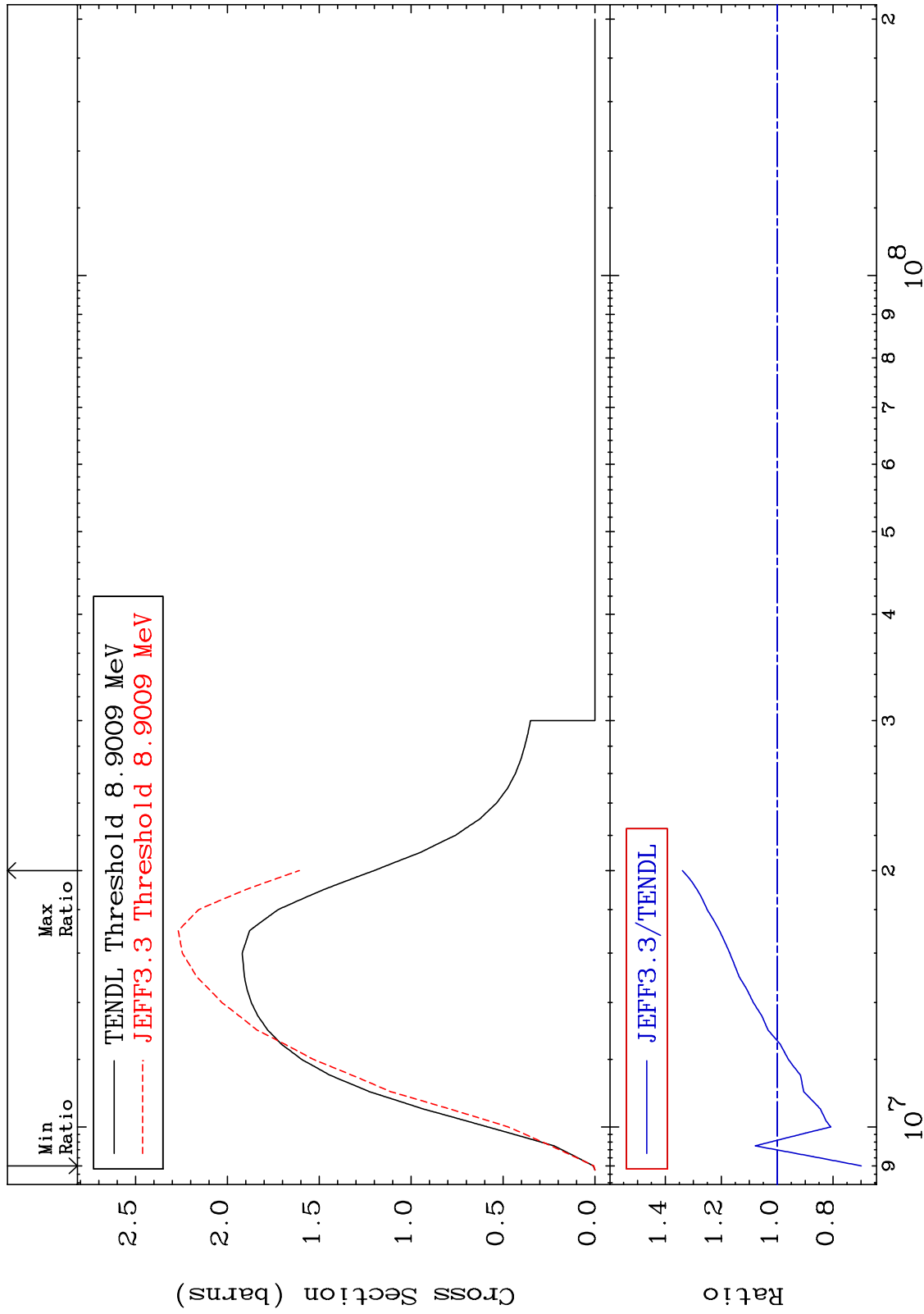
MAT 6831

(n,2n)

68-Er-164

Cross Section

-30.08 To 33.90 %

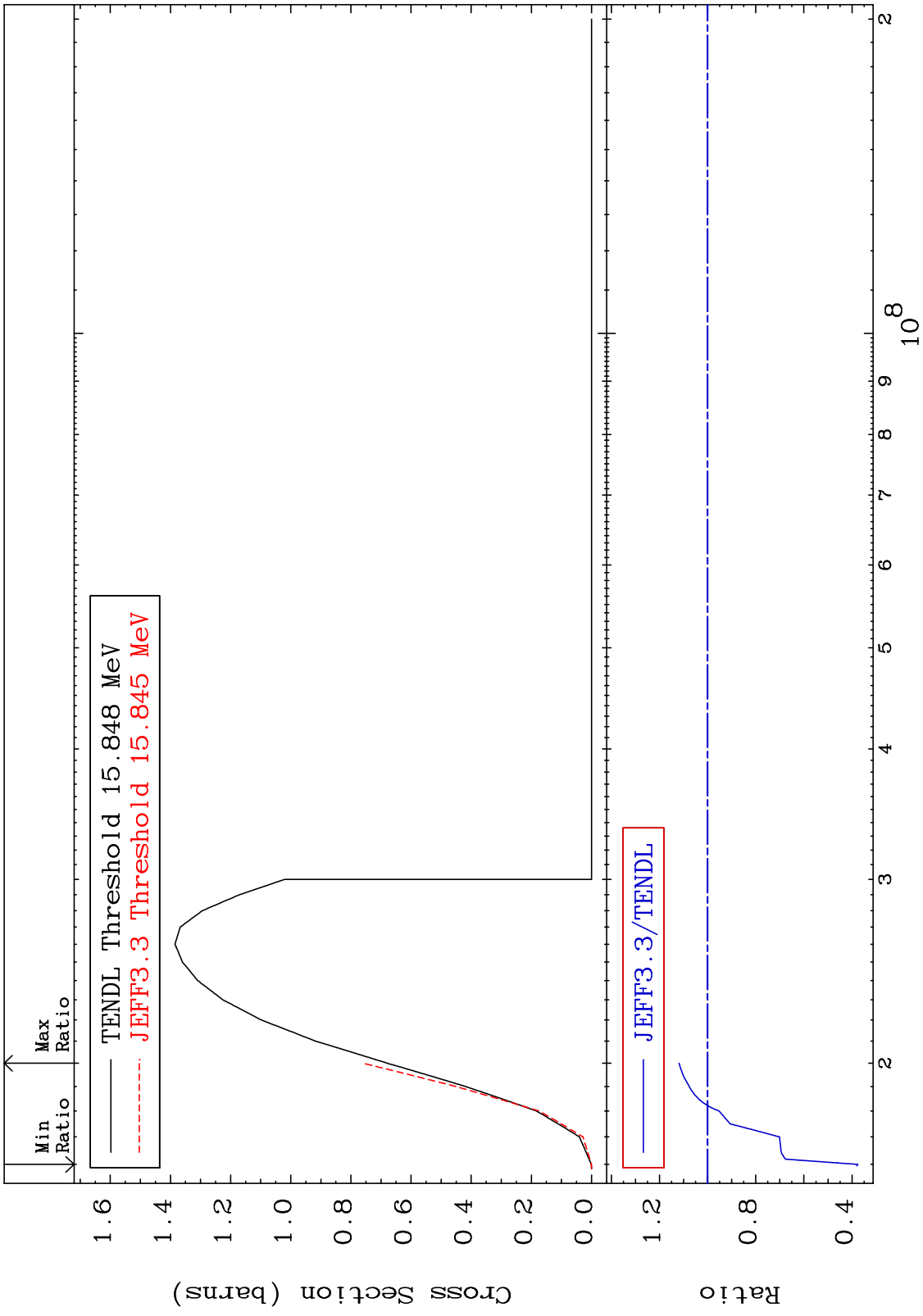


4

Incident Energy (eV)

68-Er-164

MAT 6831 (n,3n) Cross Section 68-Er-164 -62.42 To 11.91 %



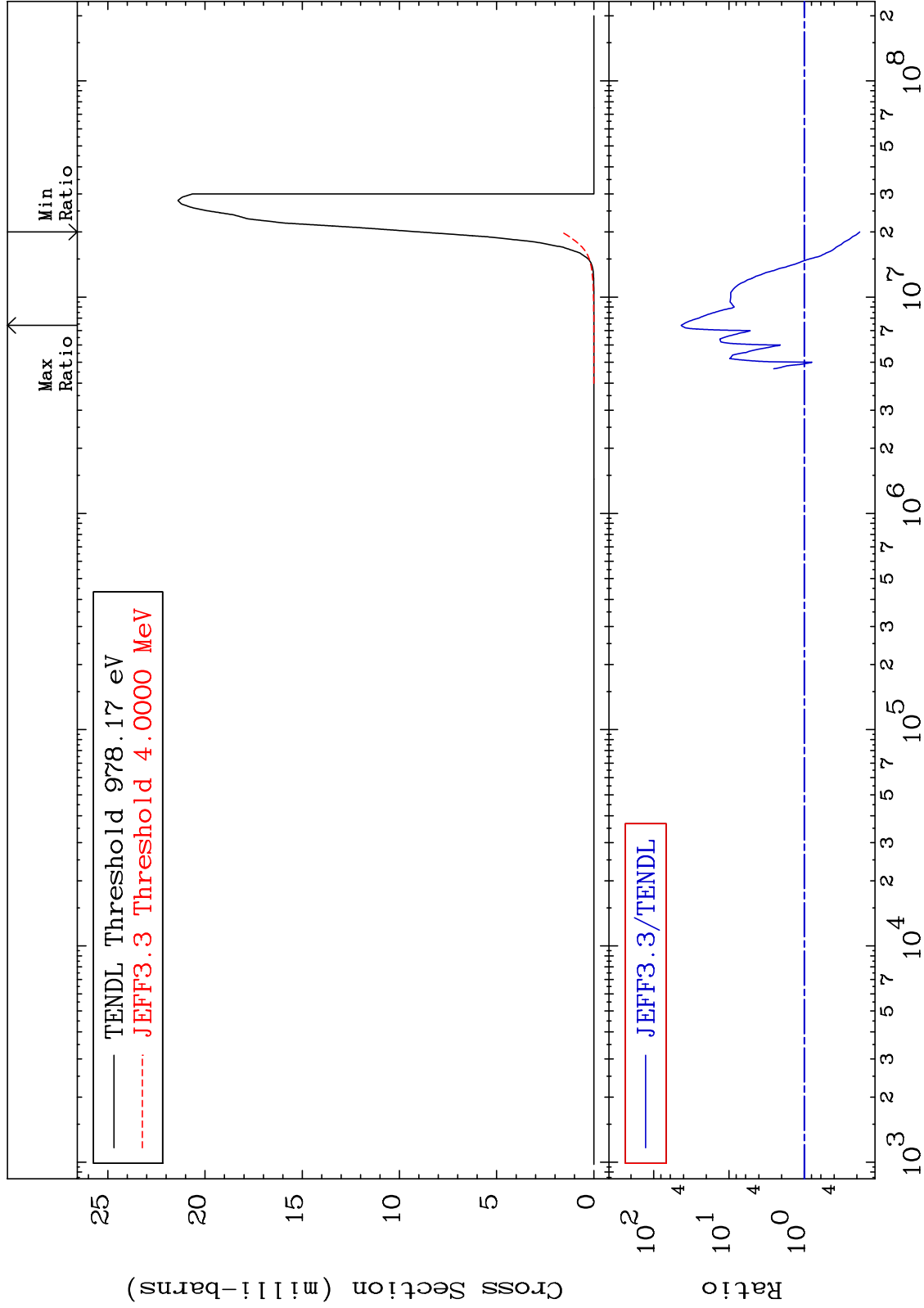
MAT 6831

(n, n') α

68-Er-164

Cross Section

-81.71 To 4191. %

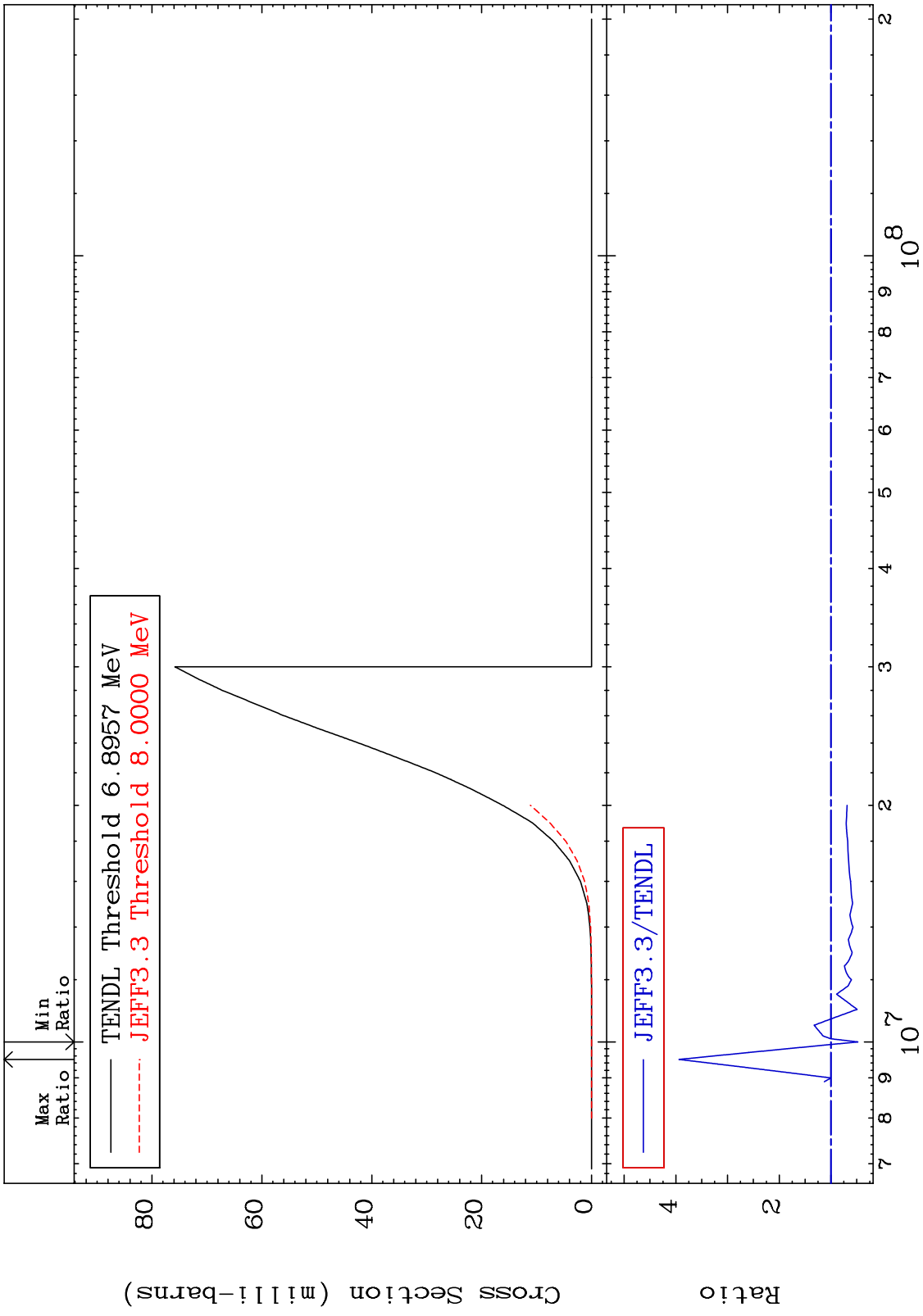


6

Incident Energy (eV)

68-Er-164

MAT 6831 (n, n') p 68-Er-164
 Cross Section -52.04 To 293.8 %

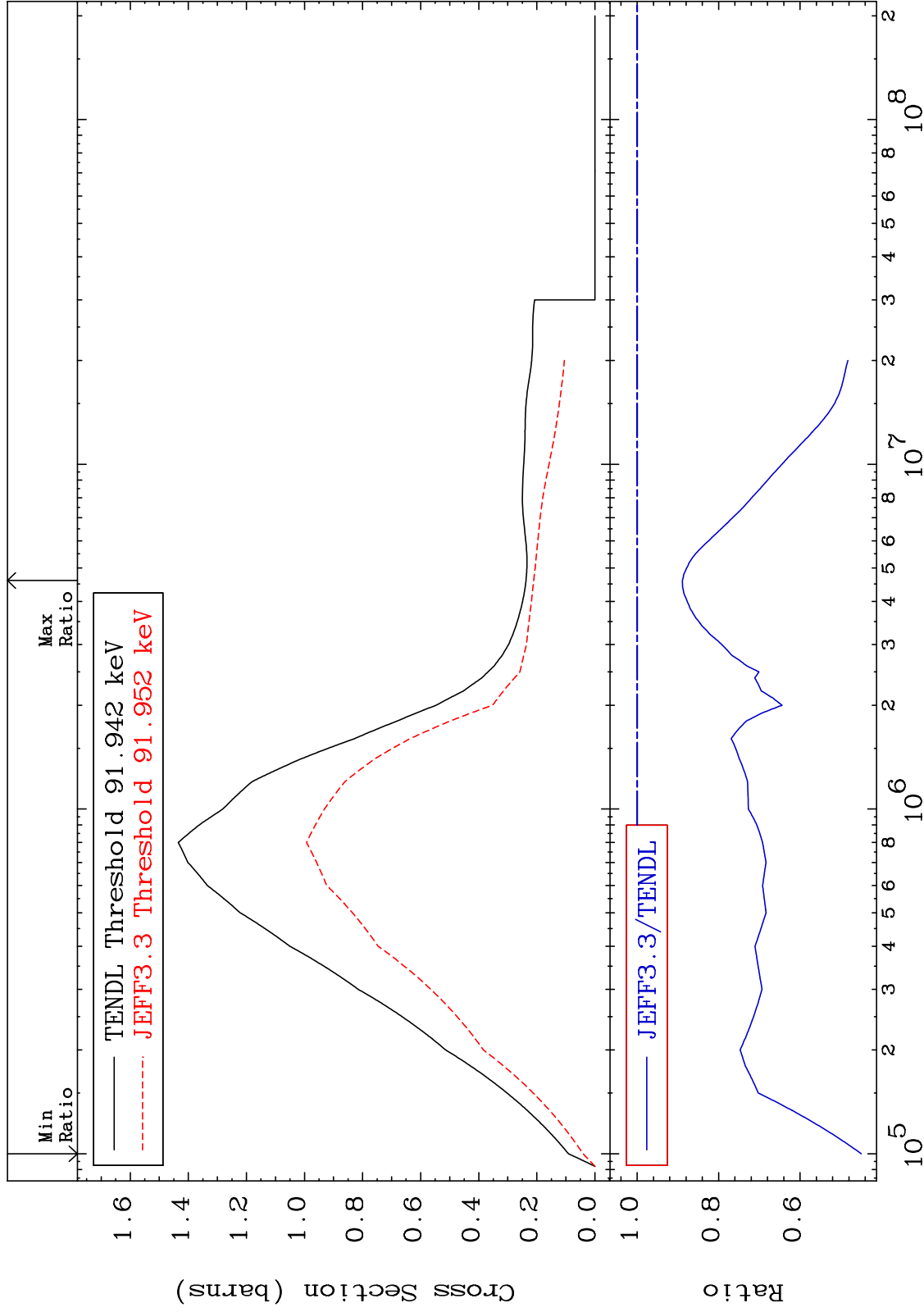


7 8 9 7 8 9 10⁷ 10⁸ 68-Er-164

MAT 6831

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

68-Er-164
-55.02 To -11.11%

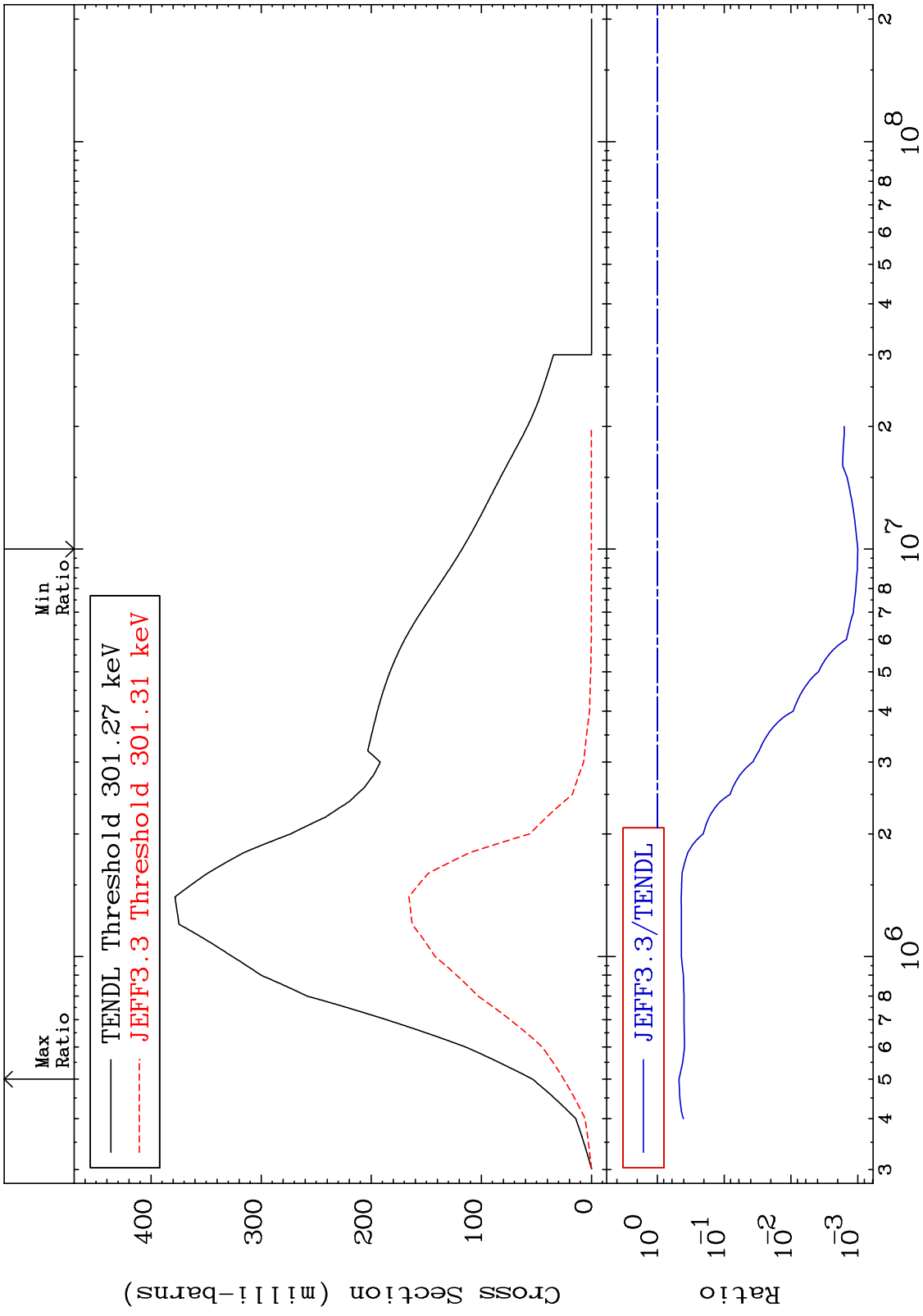


8

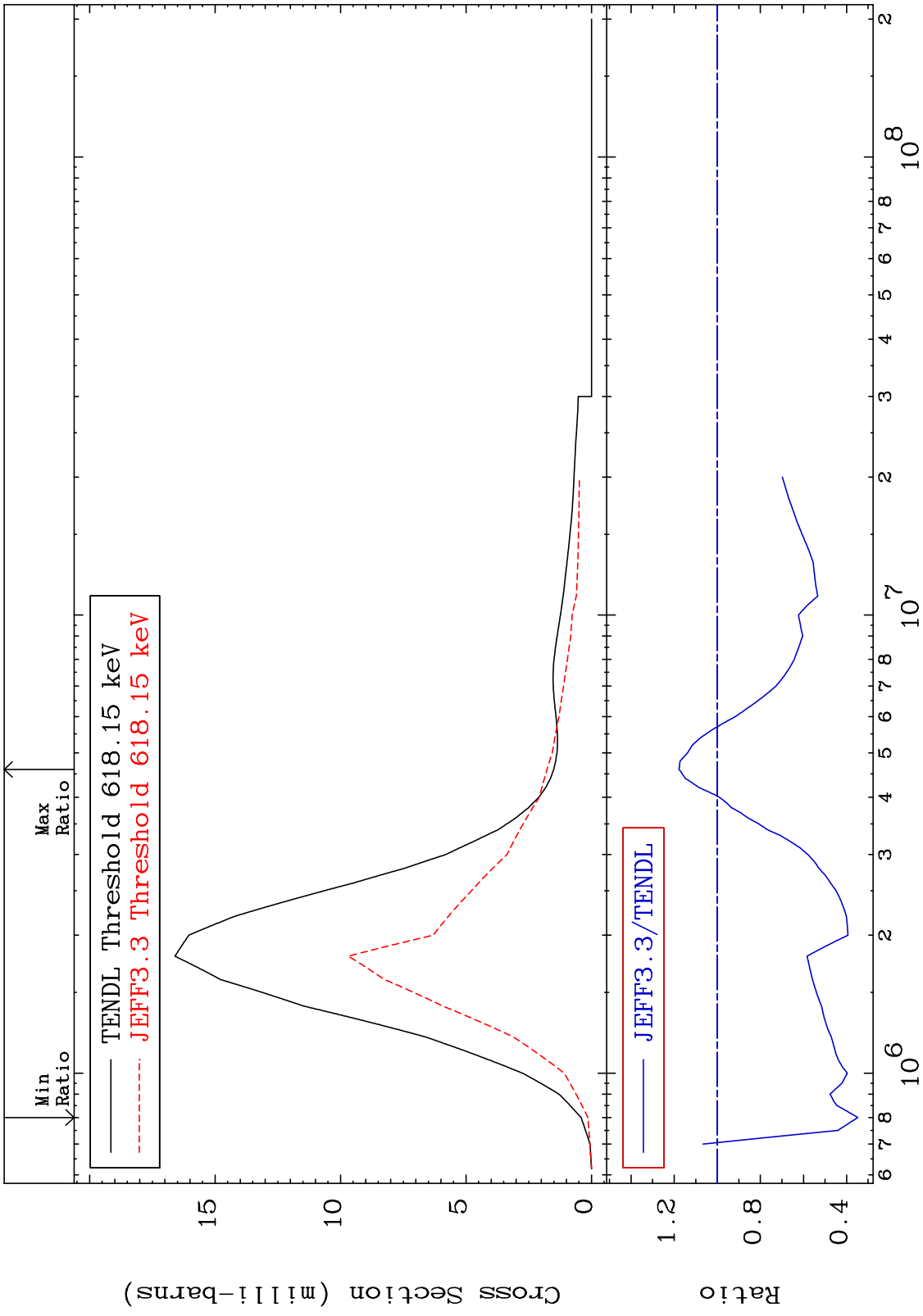
Incident Energy (eV)

68-Er-164

MAT 6831 MT= 52 (n,n') Level Cross Section 68-Er-164 -99.90 To -52.78%

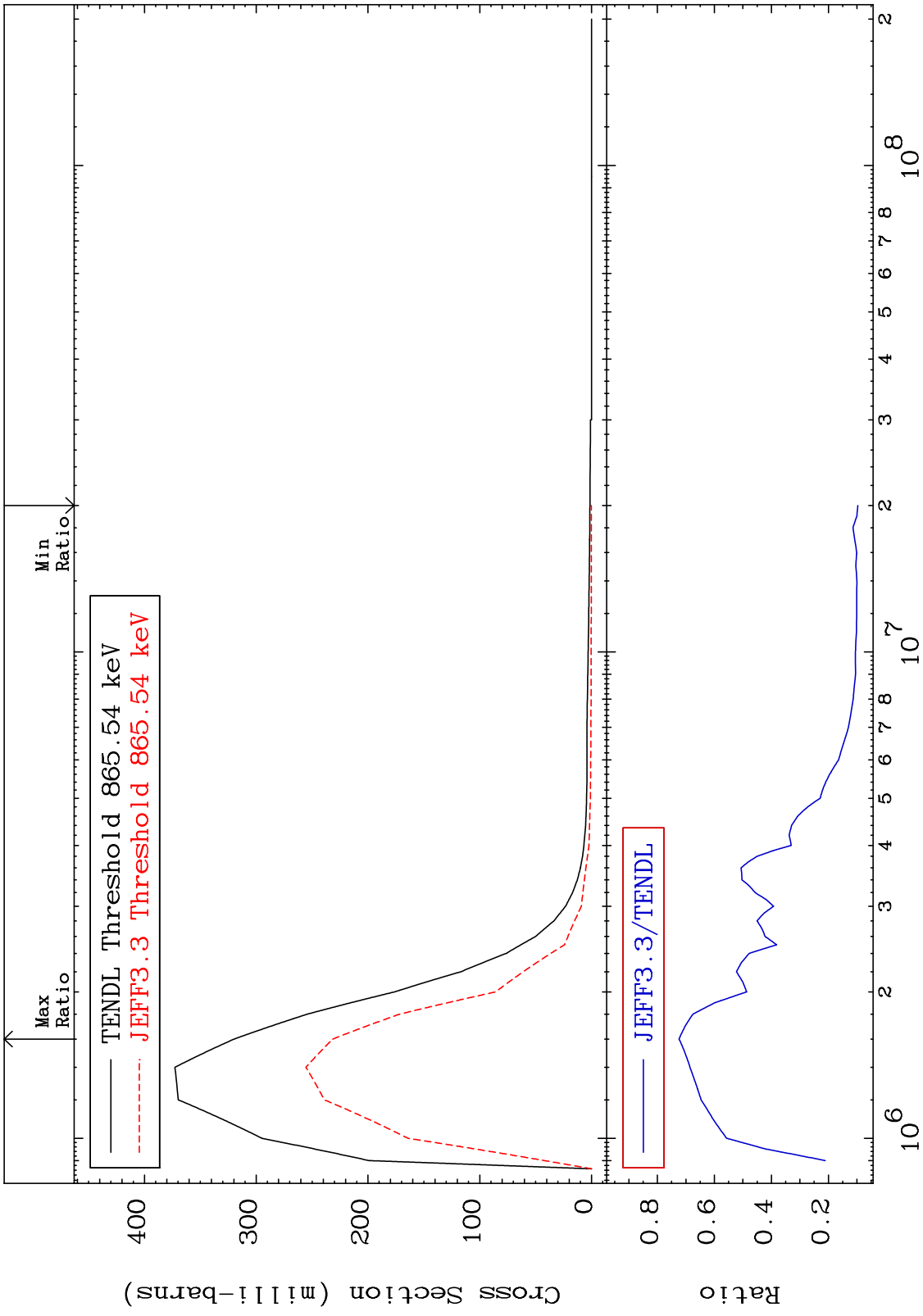


MAT 6831 MT= 53 (n,n') Level Cross Section 68-Er-164
 -65.21 To 17.75 %

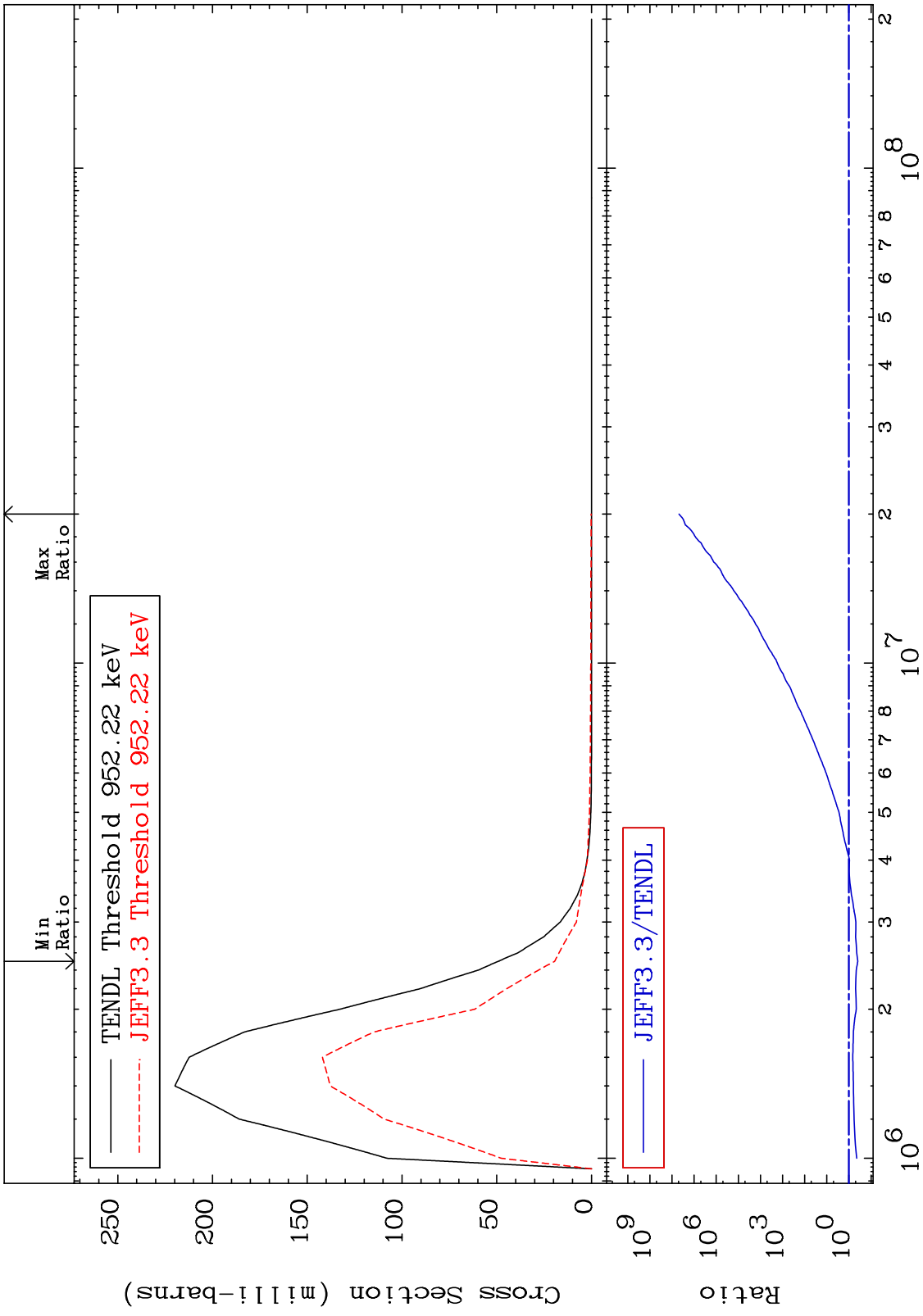


10 1.2 0.8 0.4 6 7 8 10⁶ 2 3 4 5 6 7 8 10⁷ 2 3 4 5 6 7 8 10⁸ 68-Er-164

MAT 6831 MT= 54 (n,n') Level 68-Er-164
 Cross Section -90.33 To -27.61%

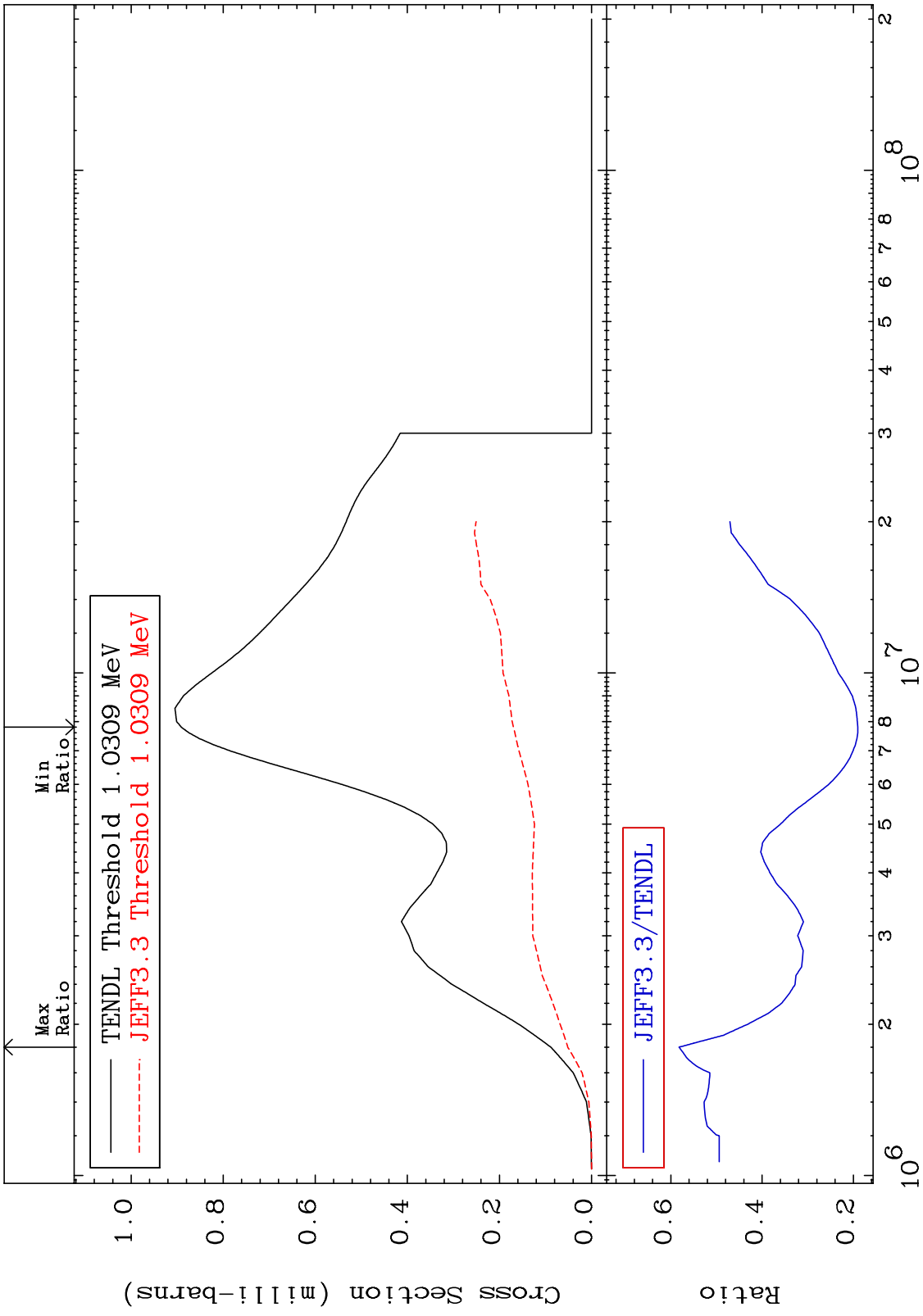


MAT 6831 MT= 55 (n,n') Level 68-Er-164
 Cross Section -60.53 To 9999. %



12 Incident Energy (eV) 68-Er-164

MAT 6831 MT= 56 (n,n') Level Cross Section 68-Er-164 -80.97 To -41.79%

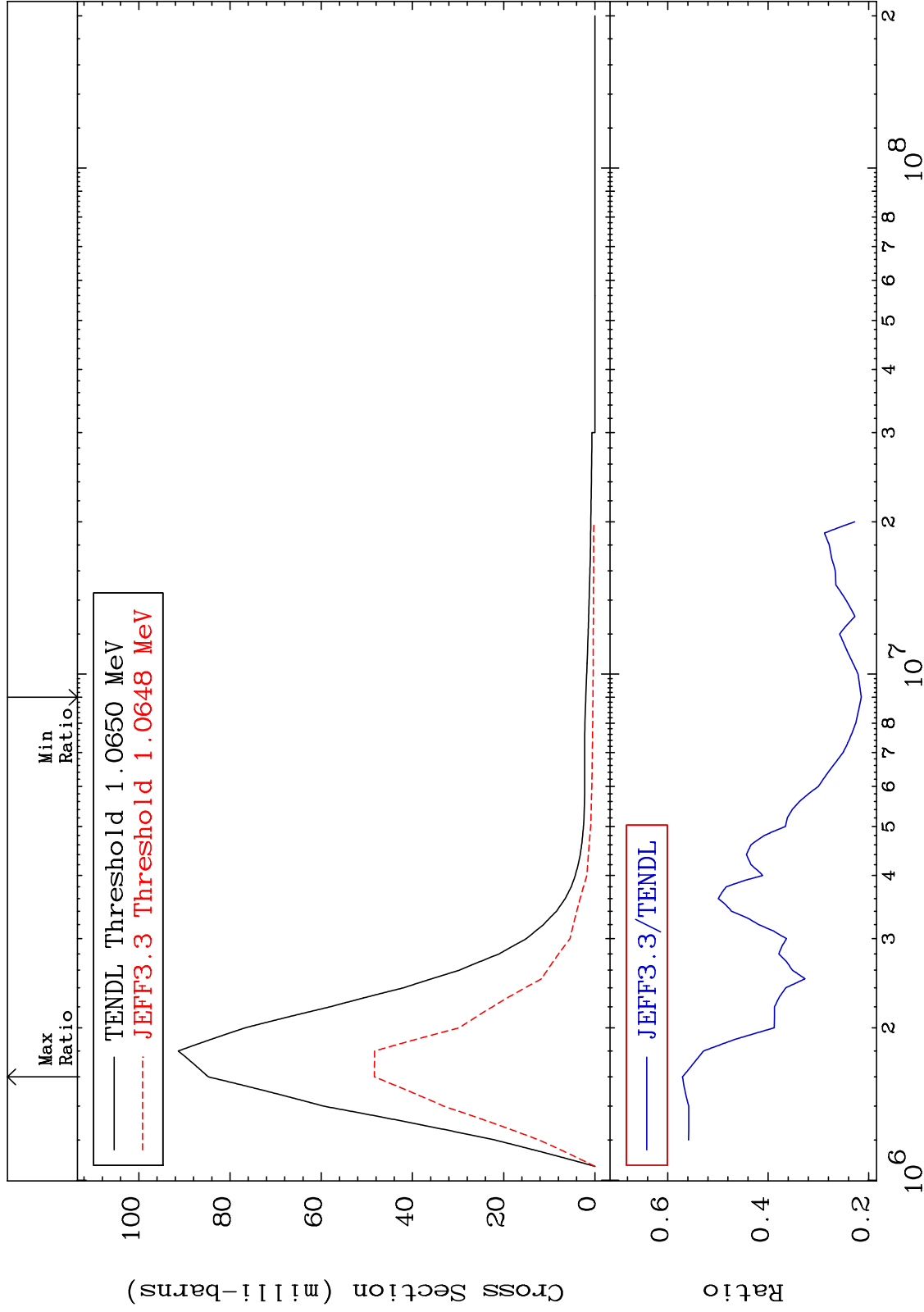


13 68-Er-164

MAT 6831

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

68-Er-164
-78.55 To -42.94%



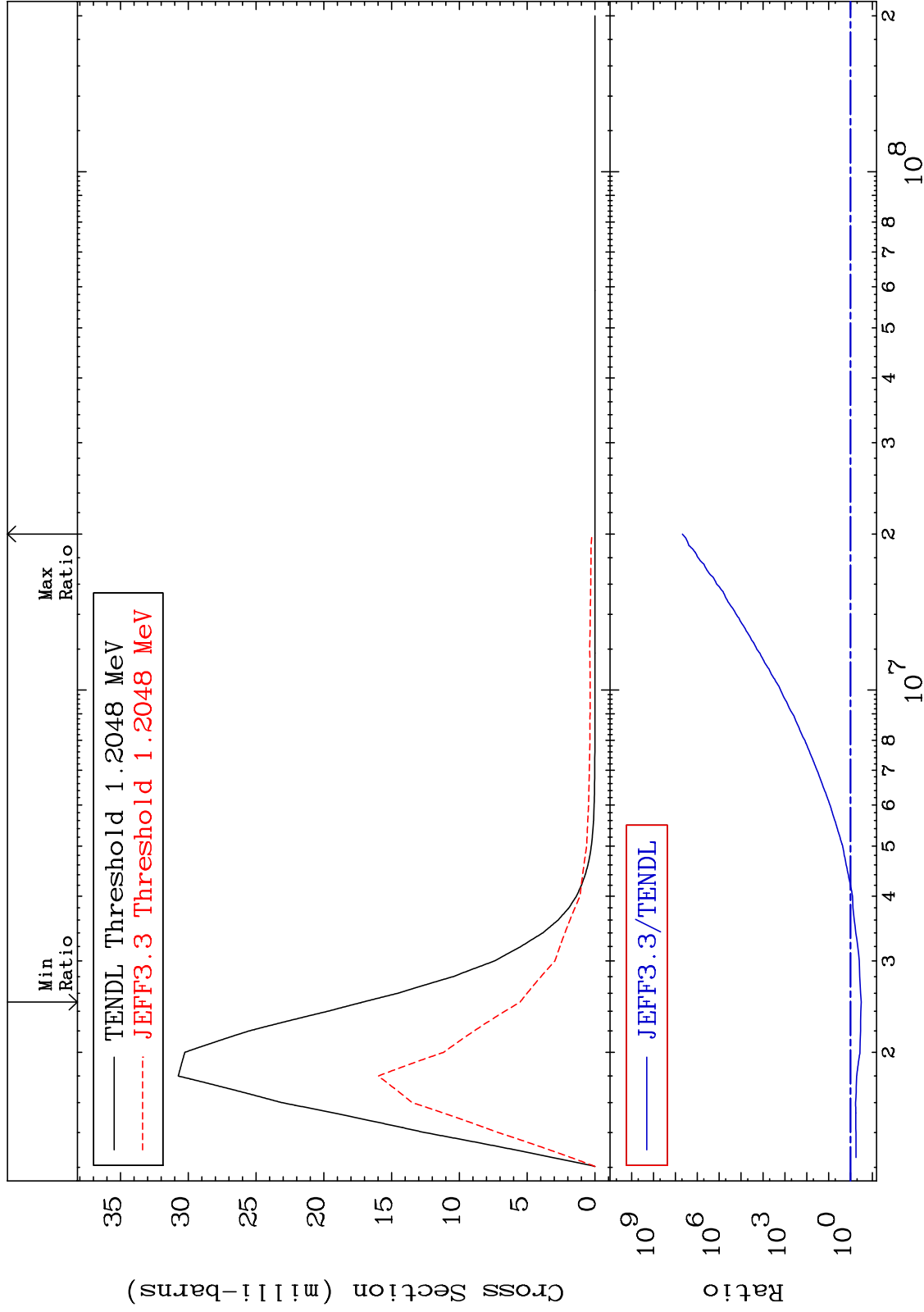
14

68-Er-164

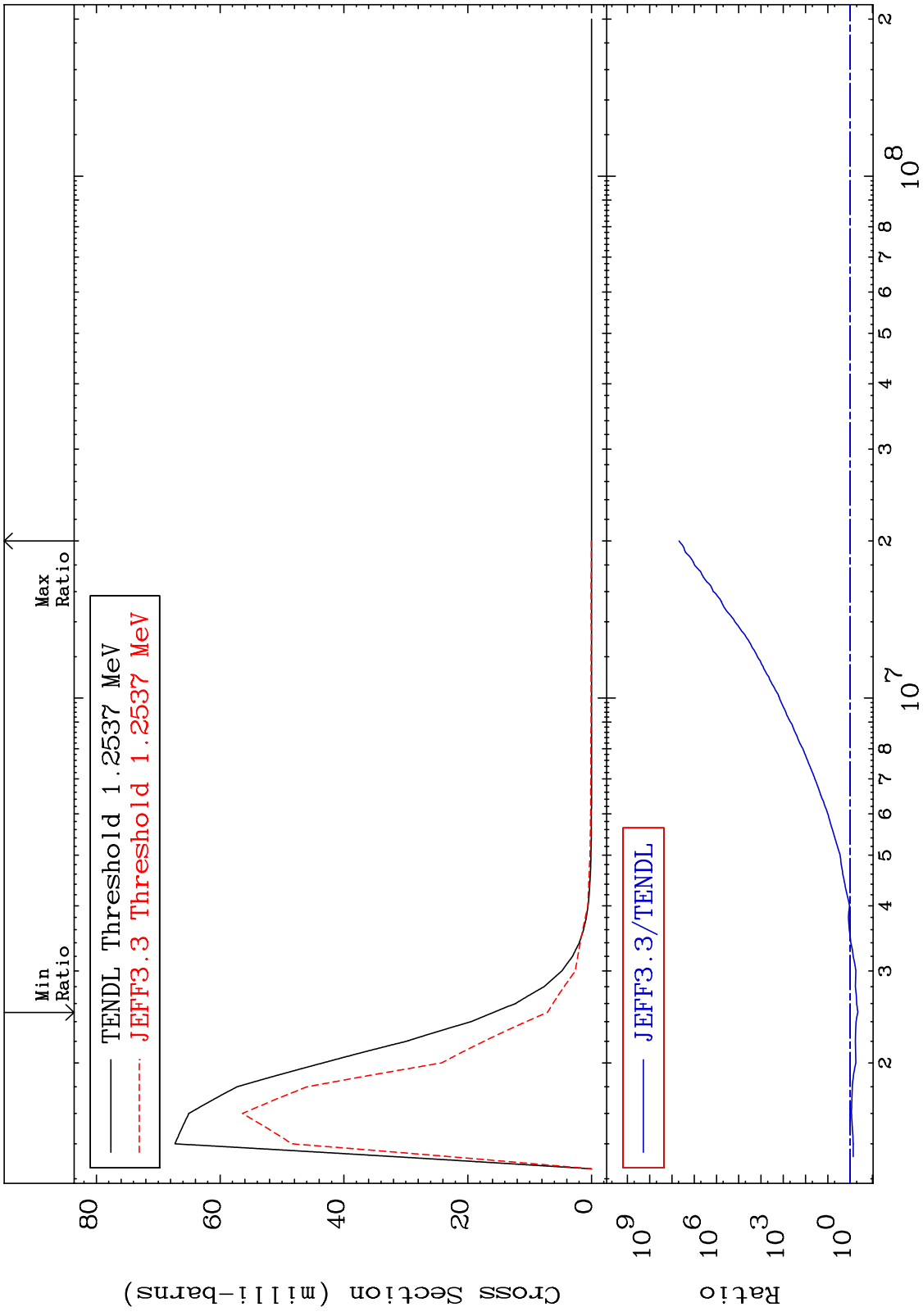
MAT 6831

MT= 58 (n,n') Level
Cross Section

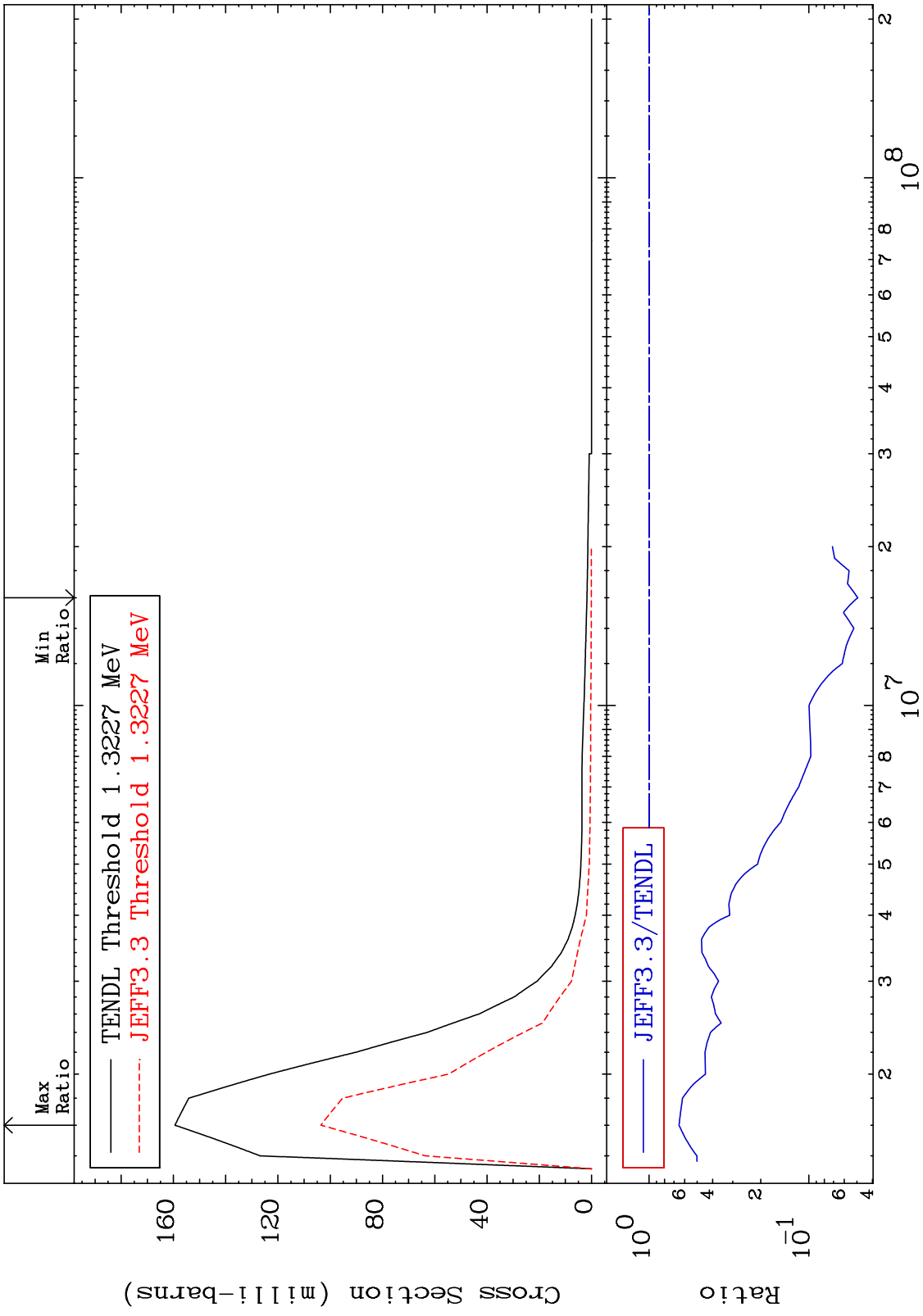
68-Er-164
-67.77 To 9999. %



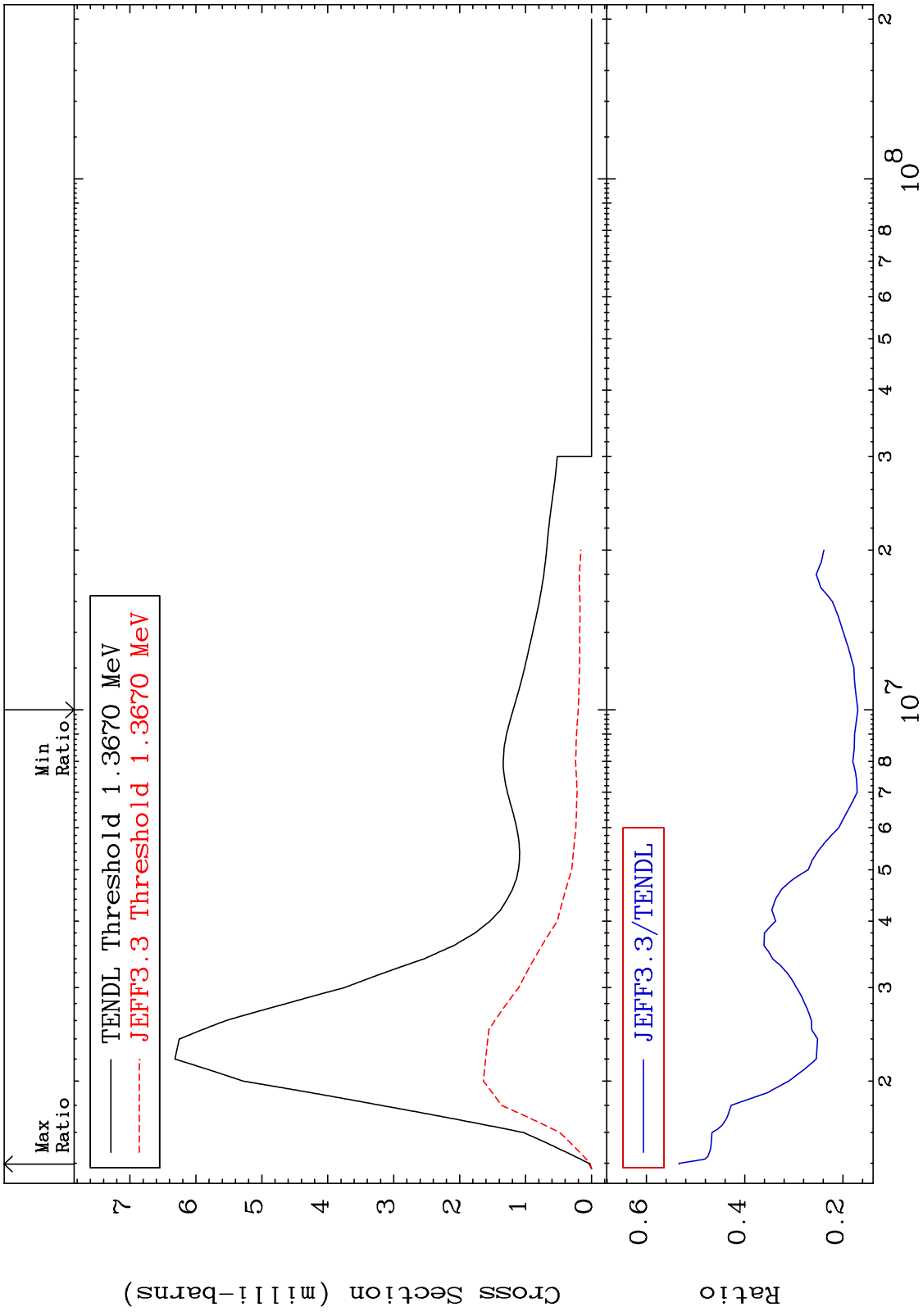
MAT 6831 MT= 59 (n, n') Level Cross Section 68-Er-164
 -55.10 To 9999. %



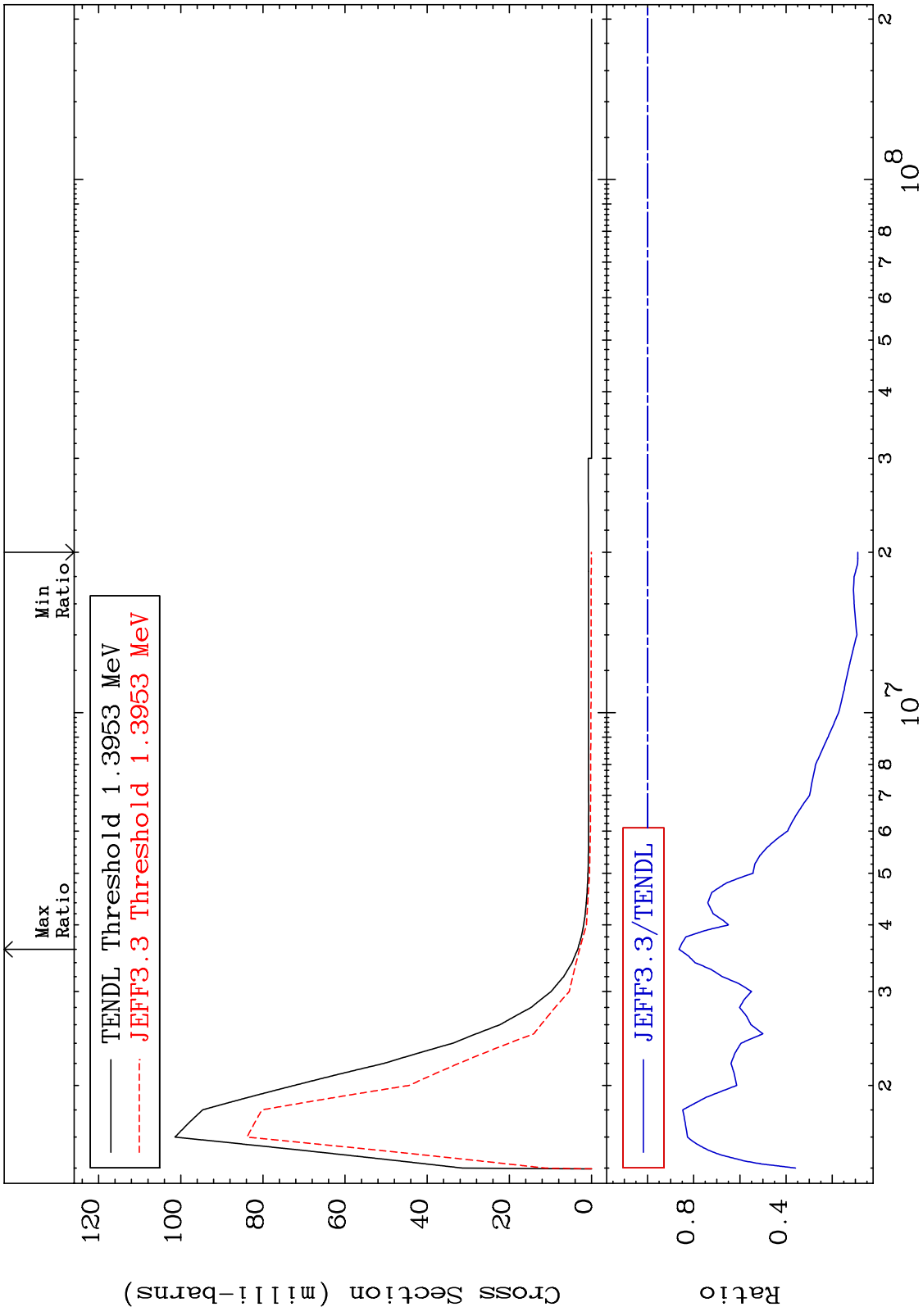
MAT 6831 MT= 60 (n,n') Level Cross Section 68-Er-164 -95.06 To -35.03%



MAT 6831 MT= 61 (n,n') Level Cross Section 68-Er-164 -83.01 To -46.66%



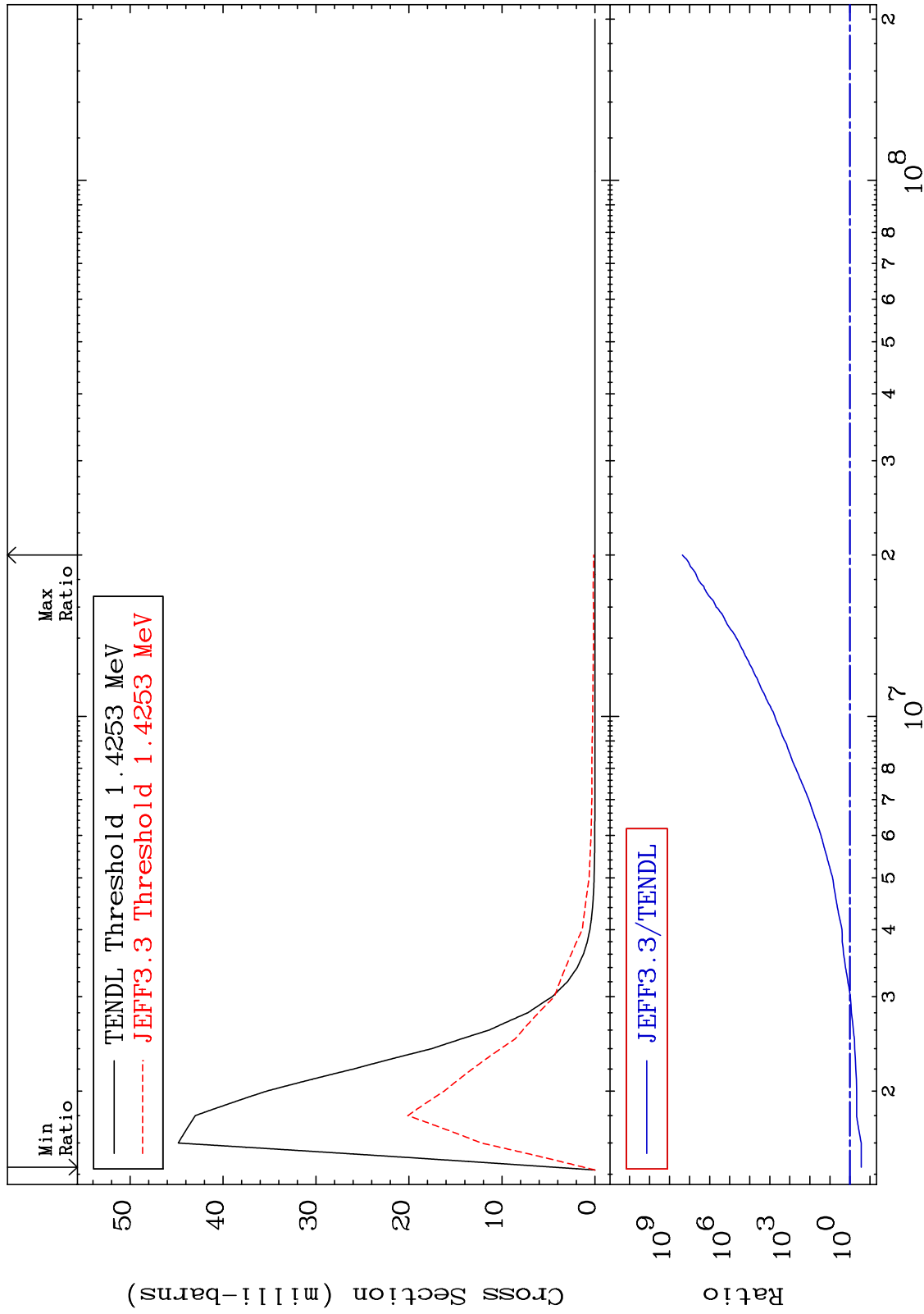
MAT 6831 MT= 62 (n,n') Level Cross Section 68-Er-164 -91.05 To -13.65%



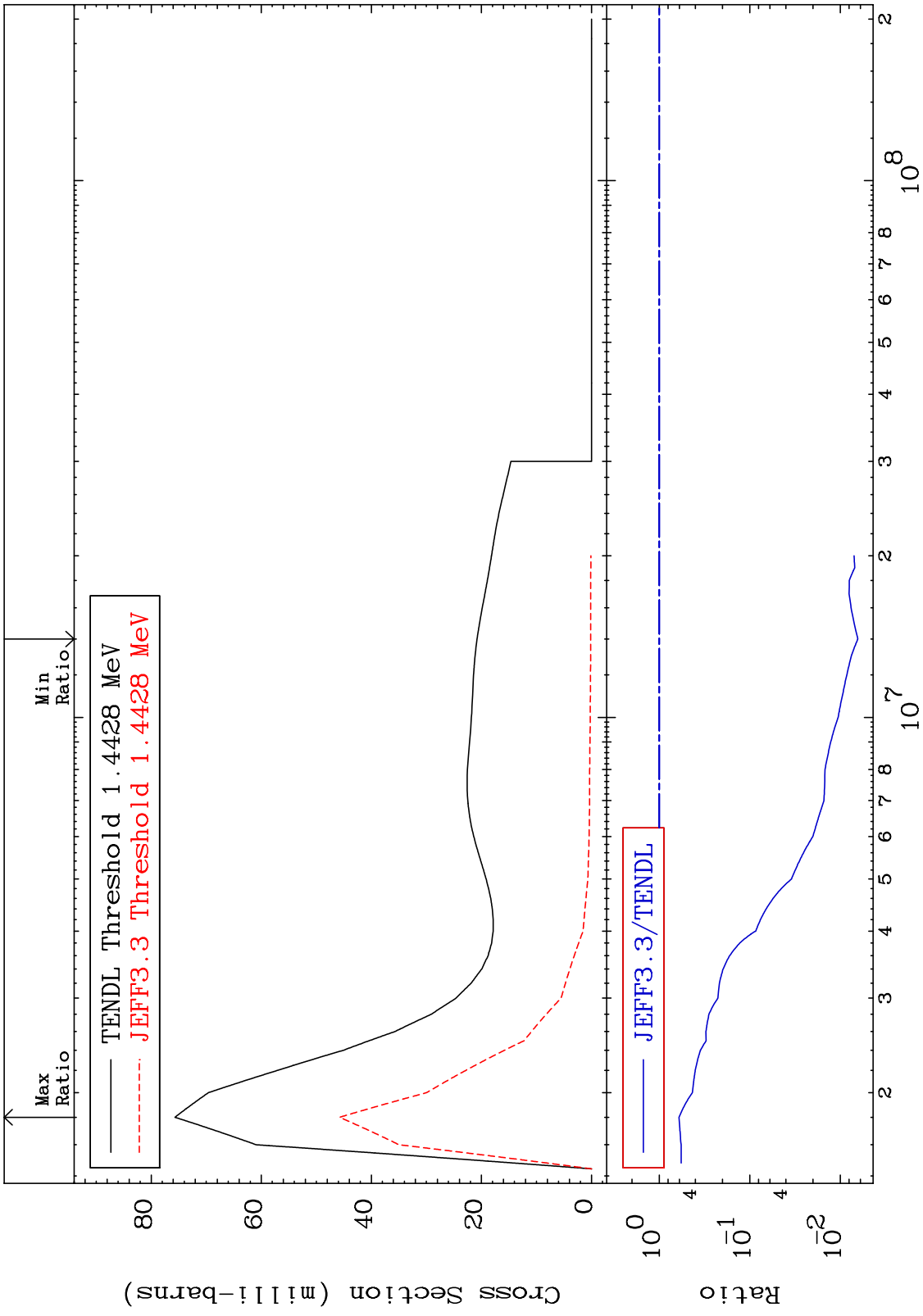
MAT 6831

MT= 63 (n,n') Level
Cross Section

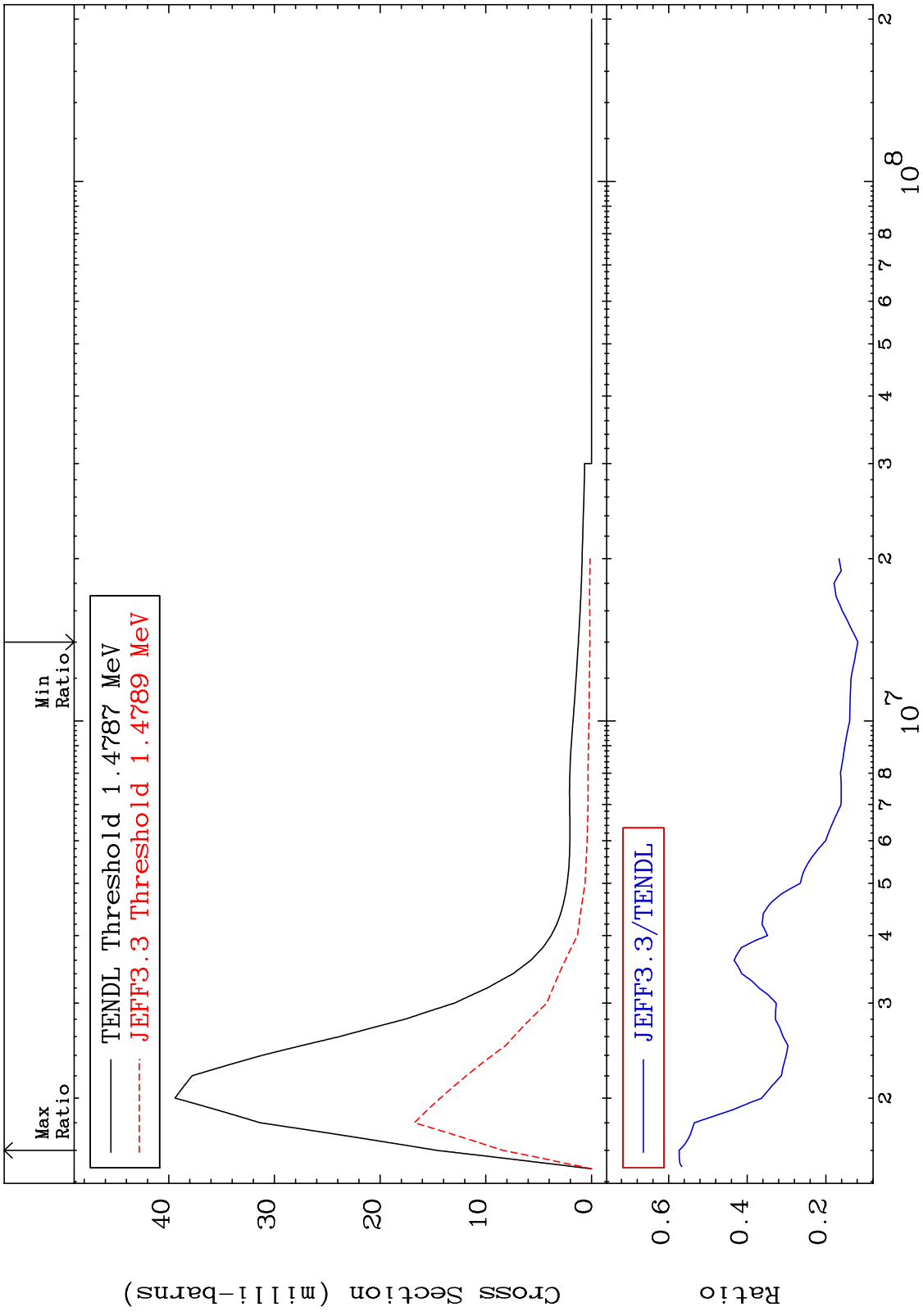
68-Er-164
-72.81 To 9999. %



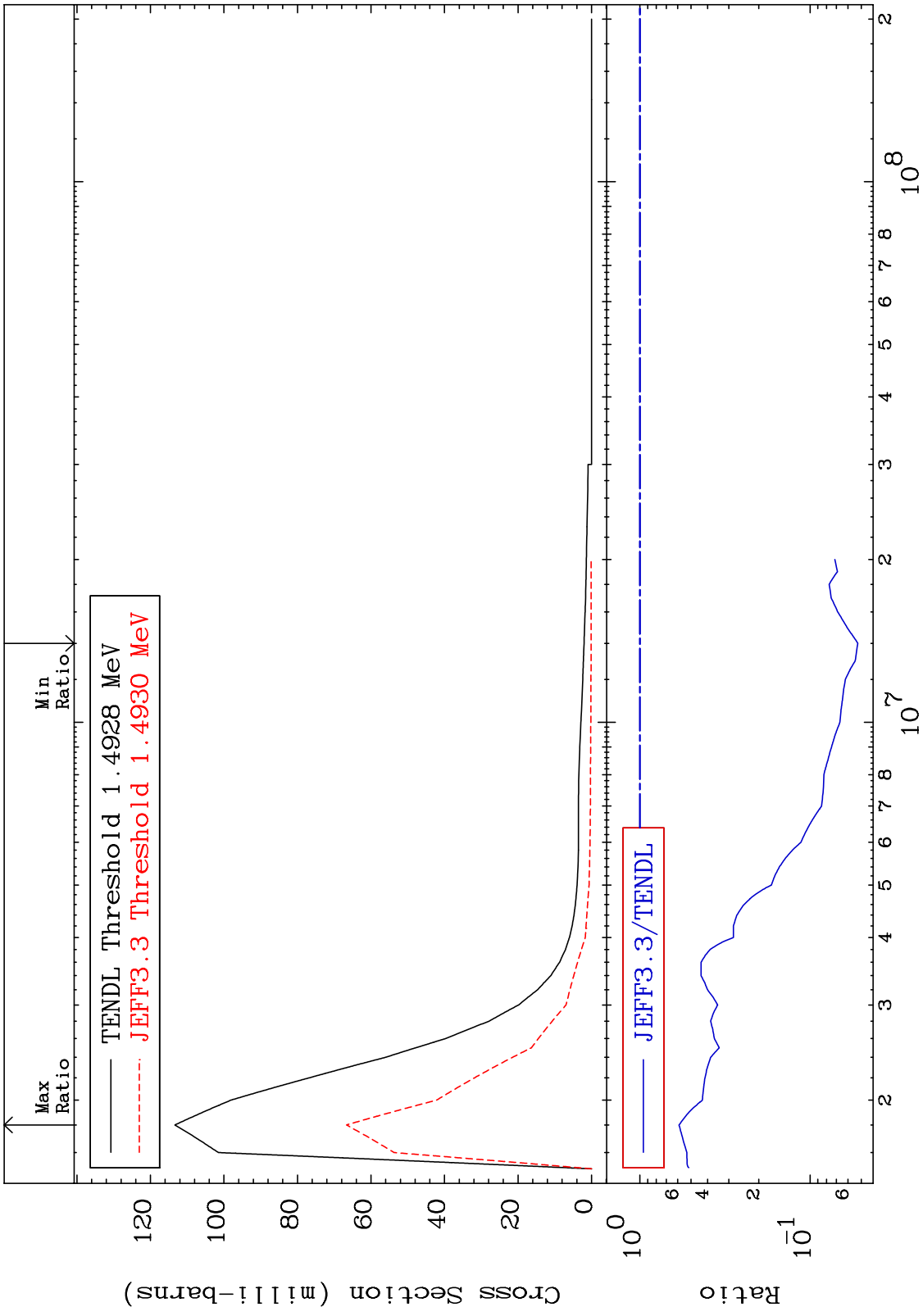
MAT 6831 MT= 64 (n,n') Level Cross Section 68-Er-164
 -99.36 To -39.52%



MAT 6831 MT= 65 (n,n') Level Cross Section 68-Er-164
 -88.15 To -42.66%



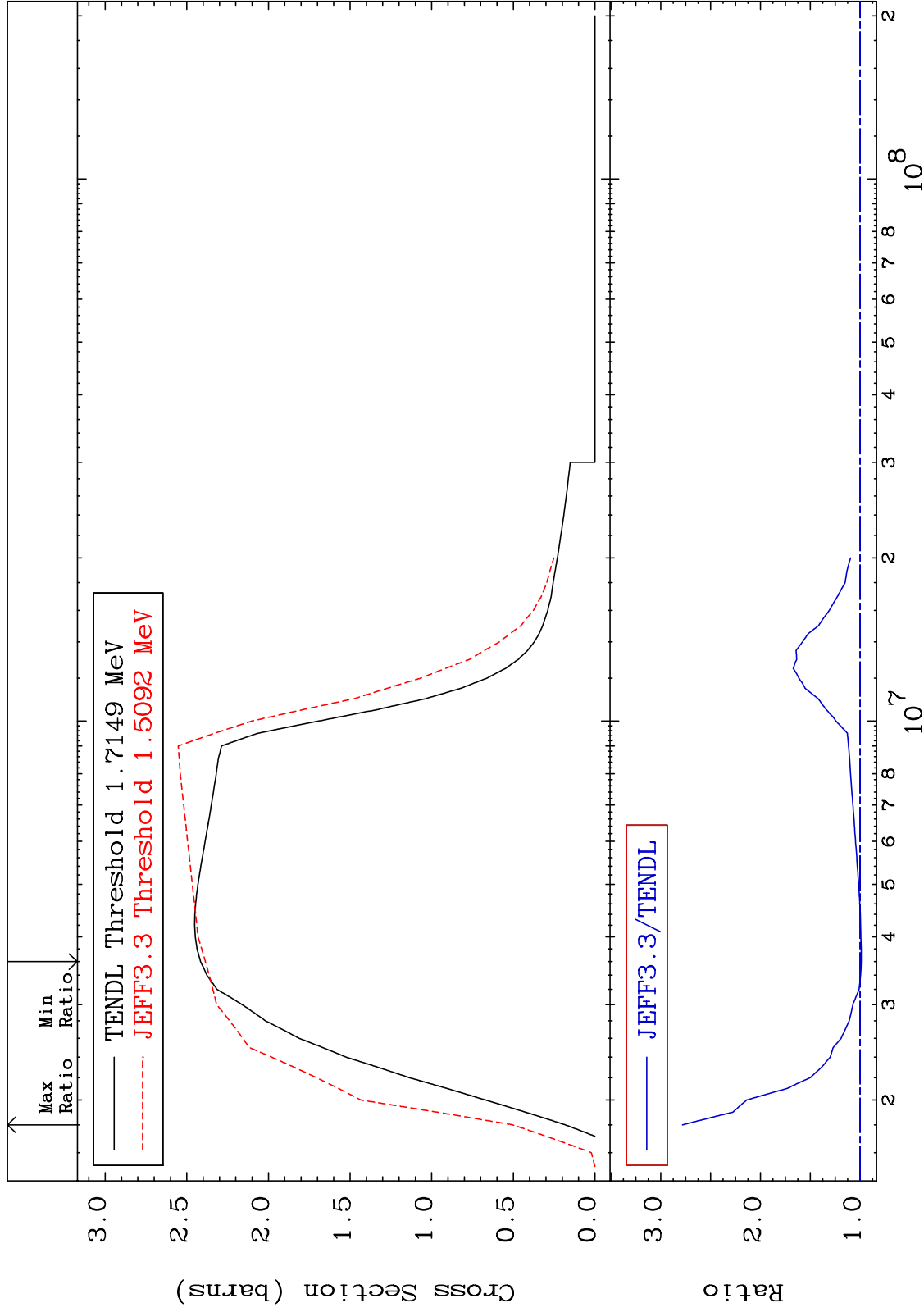
MAT 6831 MT= 66 (n,n') Level Cross Section 68-Er-164
 -94.76 To -41.16%



MAT 6831

(n,n') Continuum
Cross Section

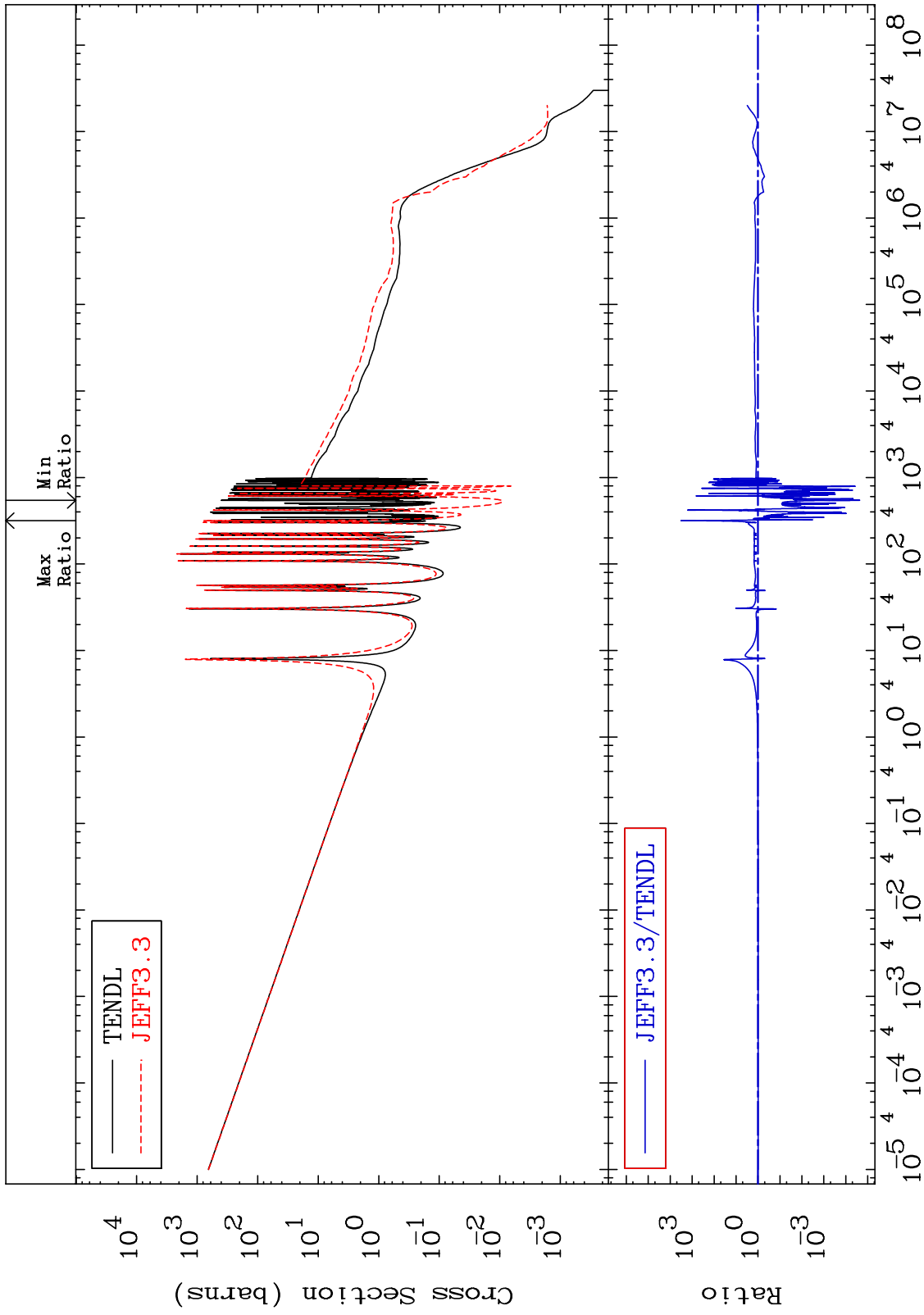
68-Er-164
-1.225 To 178.2 %



MAT 6831

(n, γ)
Cross Section

68-Er-164
-100.0 To 9999. %



MAT 6831

(n,p)

68-Er-164

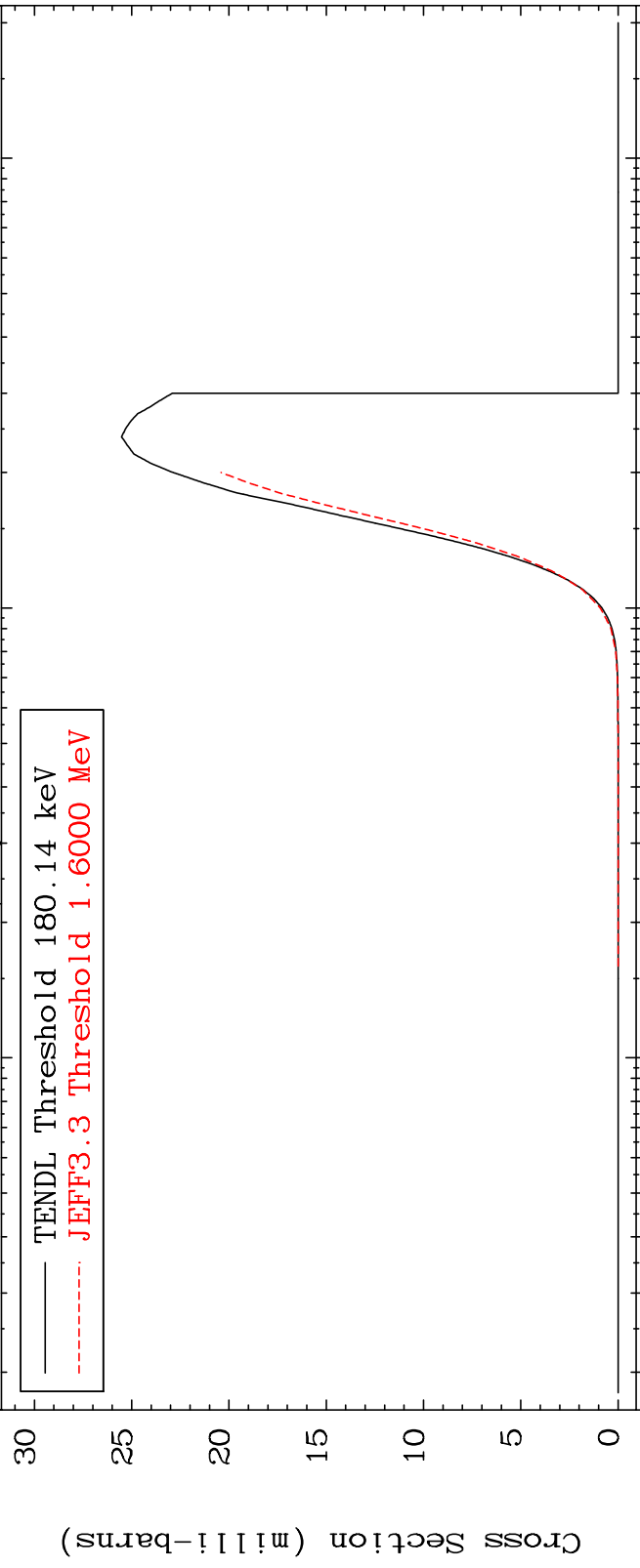
-56.63 To 178.6 %

Cross Section

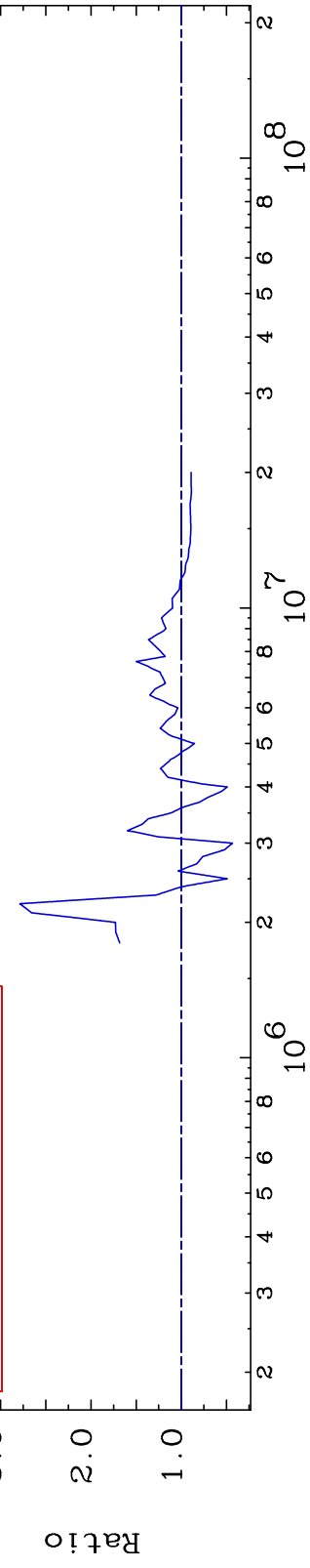
Max Ratio

Min Ratio

TENDL Threshold 180.14 keV
JEFF3.3 Threshold 1.6000 MeV



JEFF3.3/TENDL



26

Incident Energy (eV)

68-Er-164

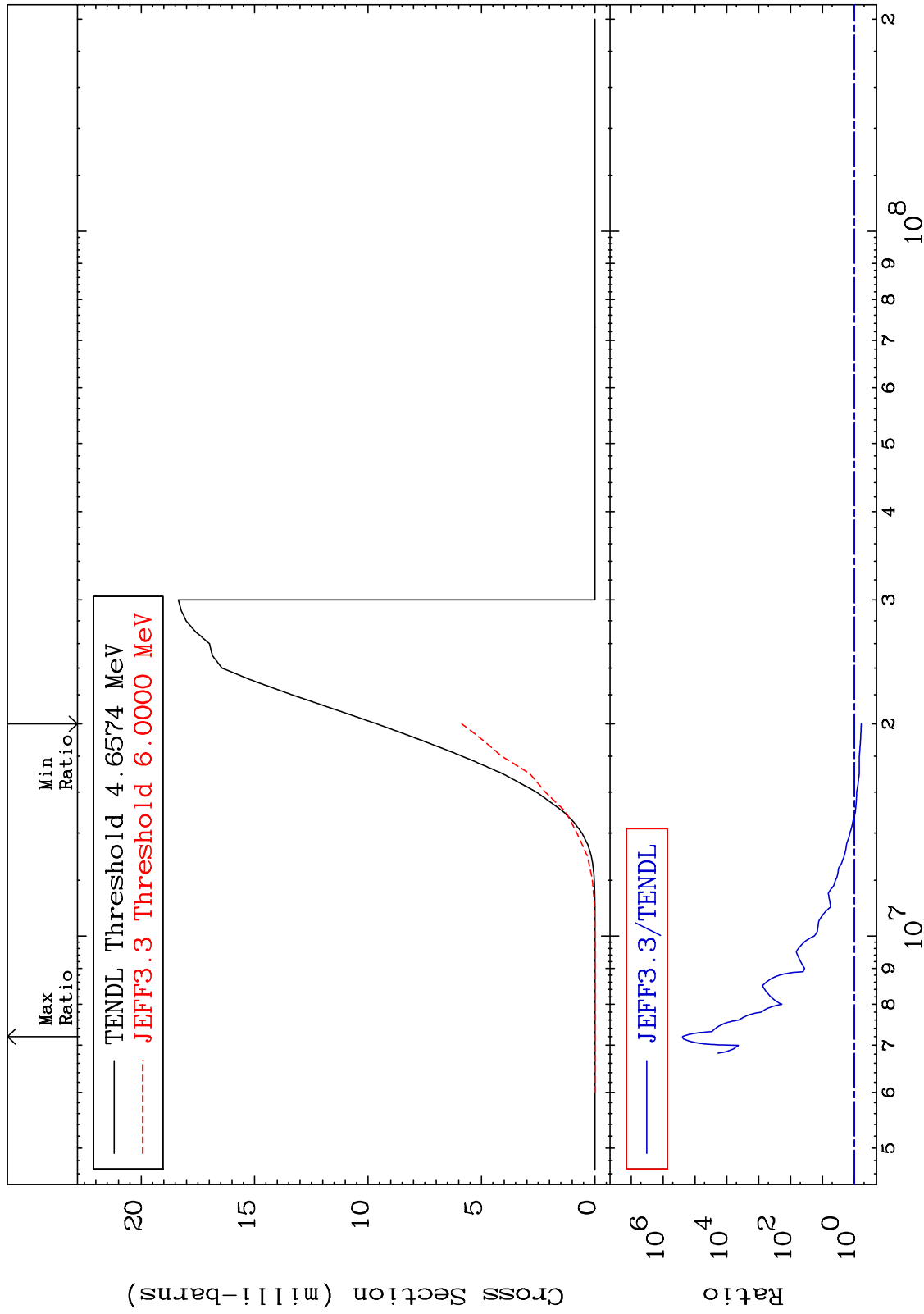
MAT 6831

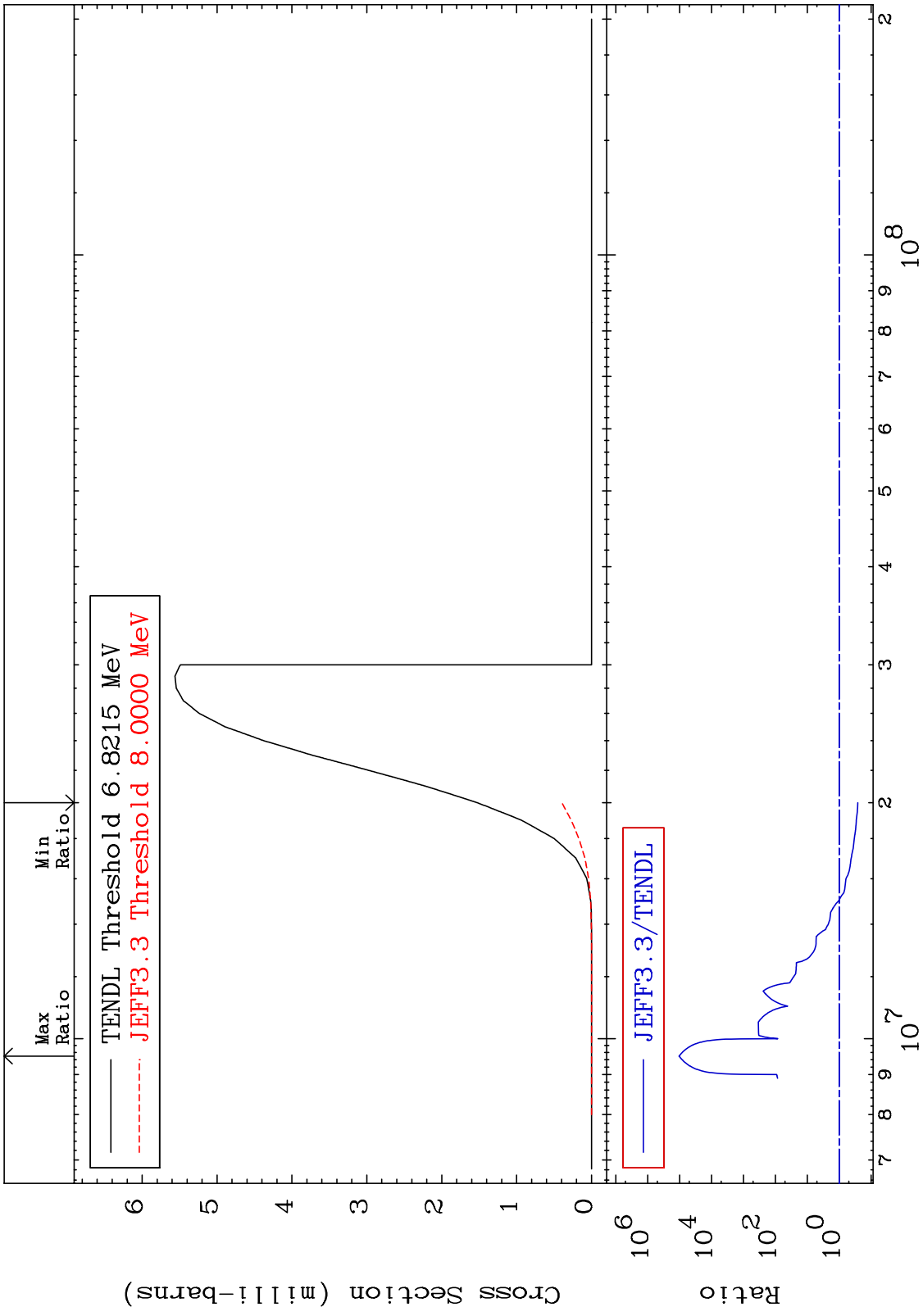
(n,d)

68-Er-164

Cross Section

-39.04 To 9999. %





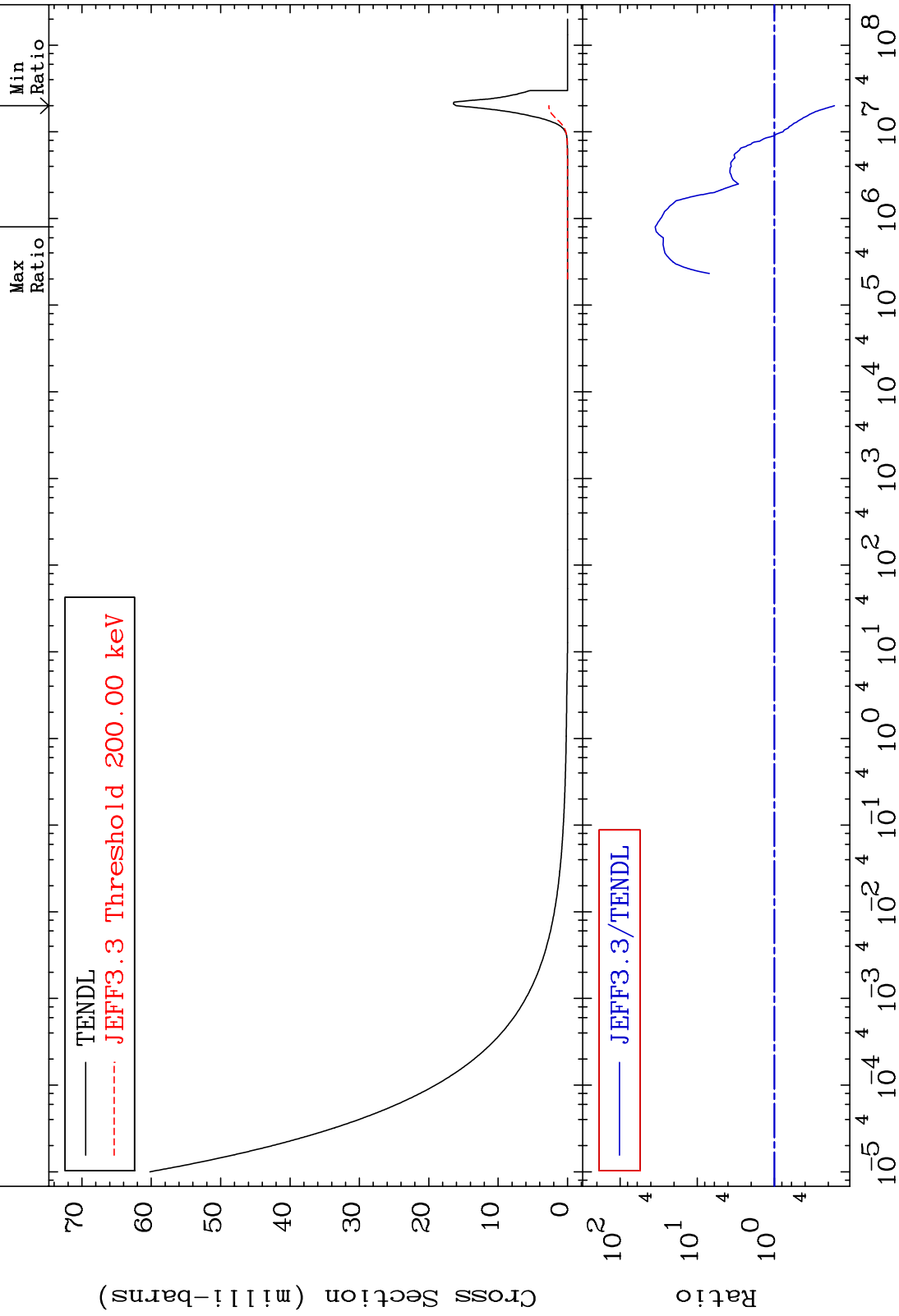
MAT 6831

(n, α)

68-Er-164

Cross Section

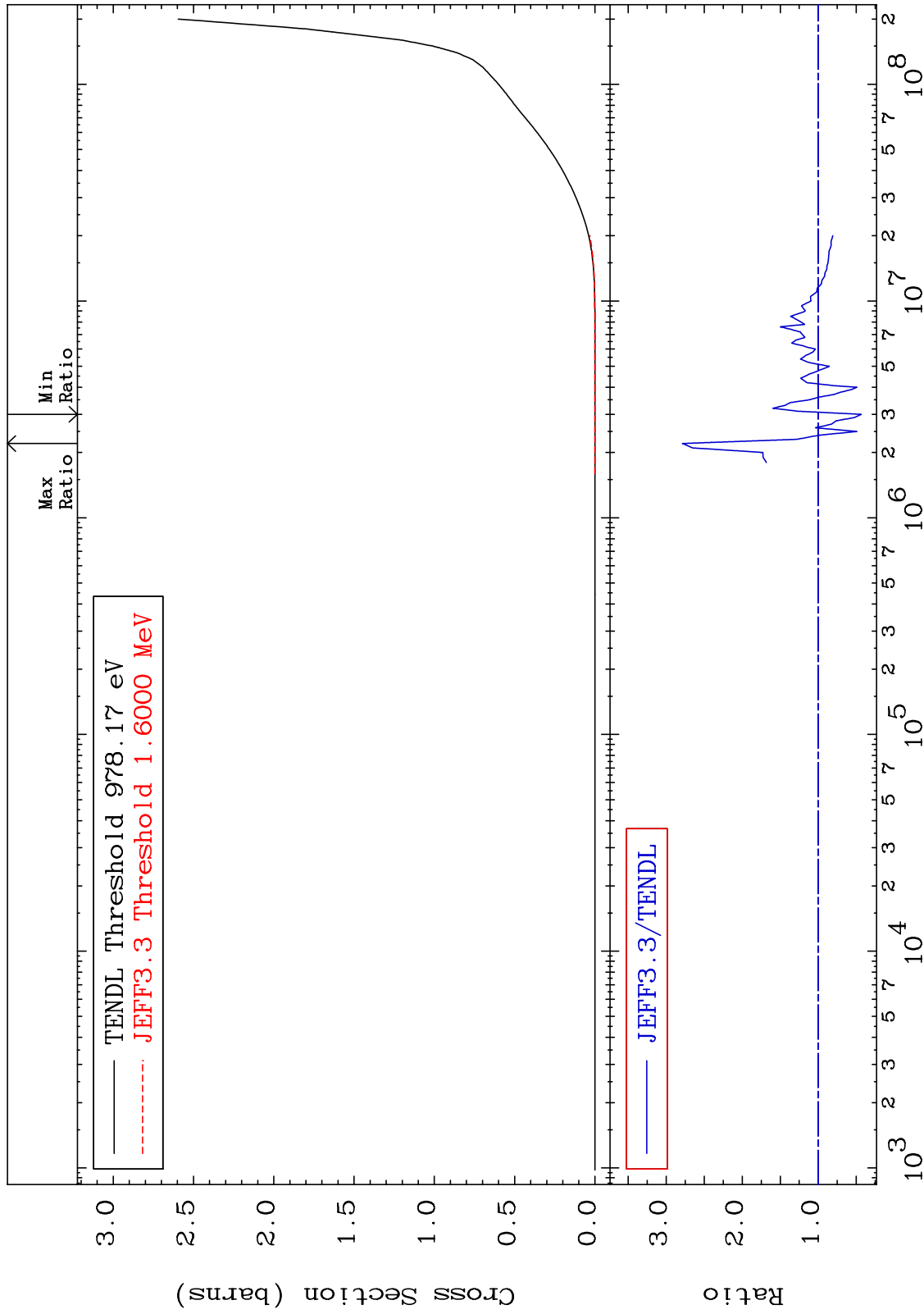
-83.37 To 3407. %



MAT 6831

Hydrogen Production
Cross Section

68-Er-164
-56.63 To 178.6 %



30

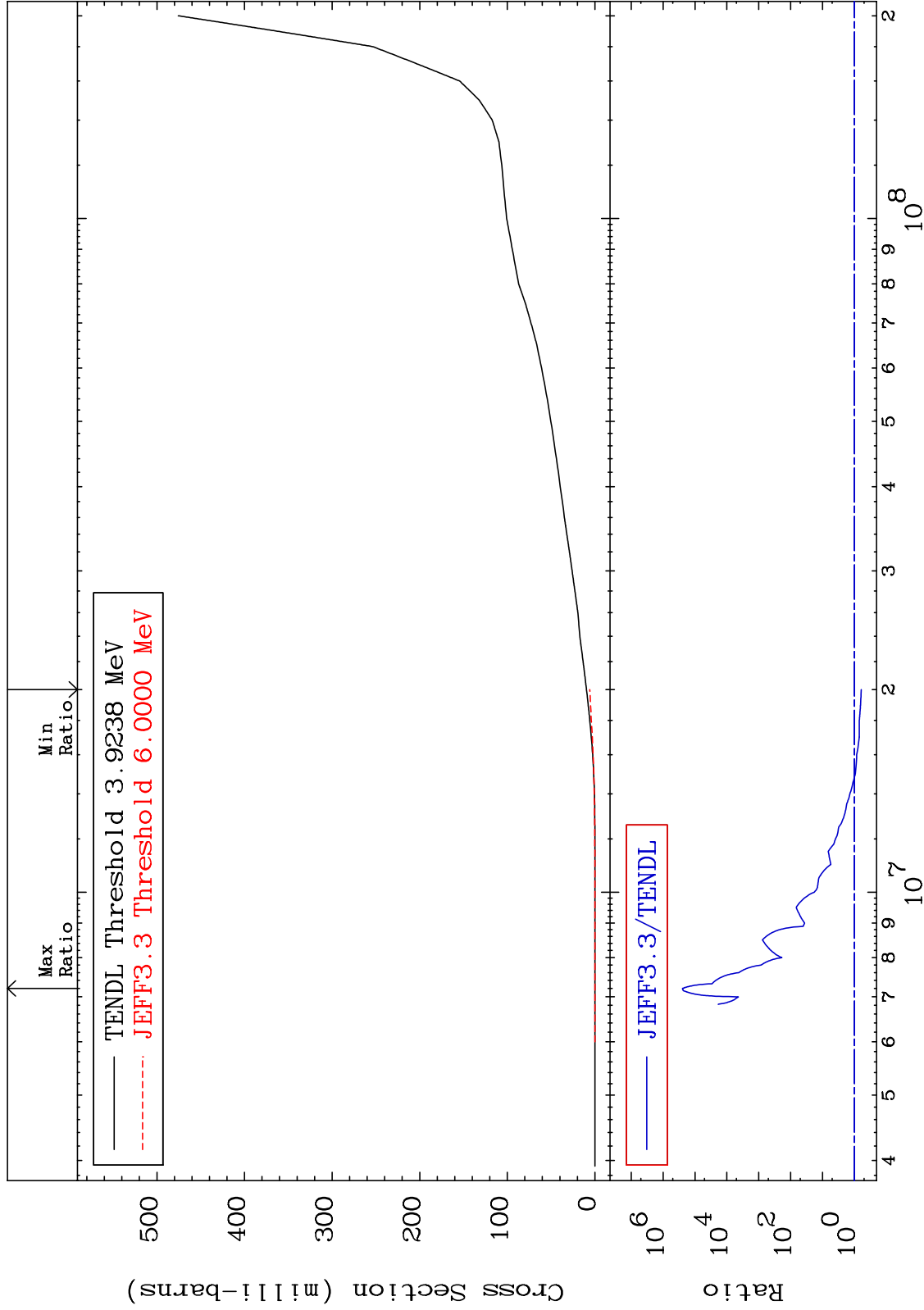
Incident Energy (eV)

68-Er-164

MAT 6831

Deuterium Production
Cross Section

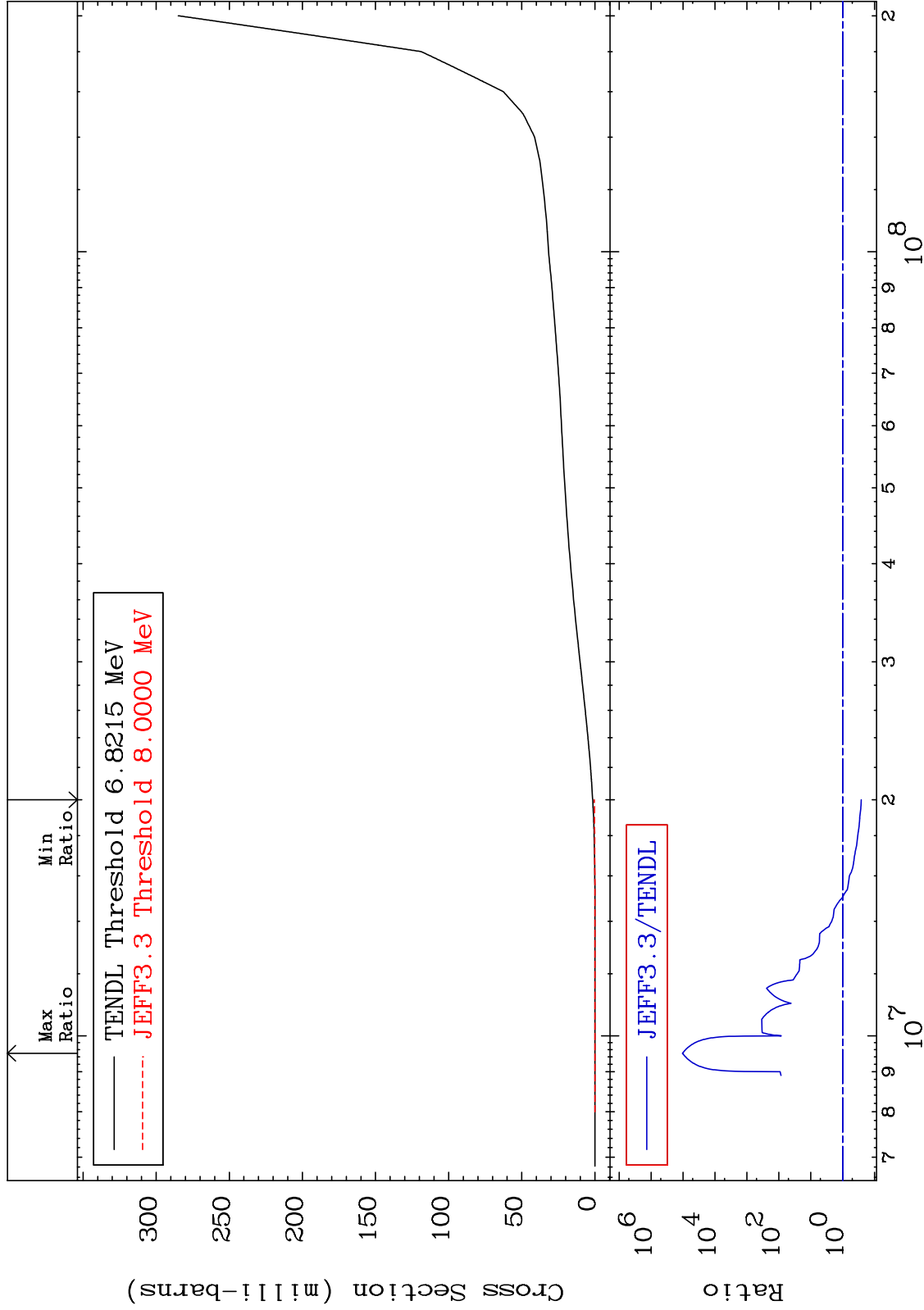
68-Er-164
-39.07 To 9999. %



MAT 6831

Tritium Production
Cross Section

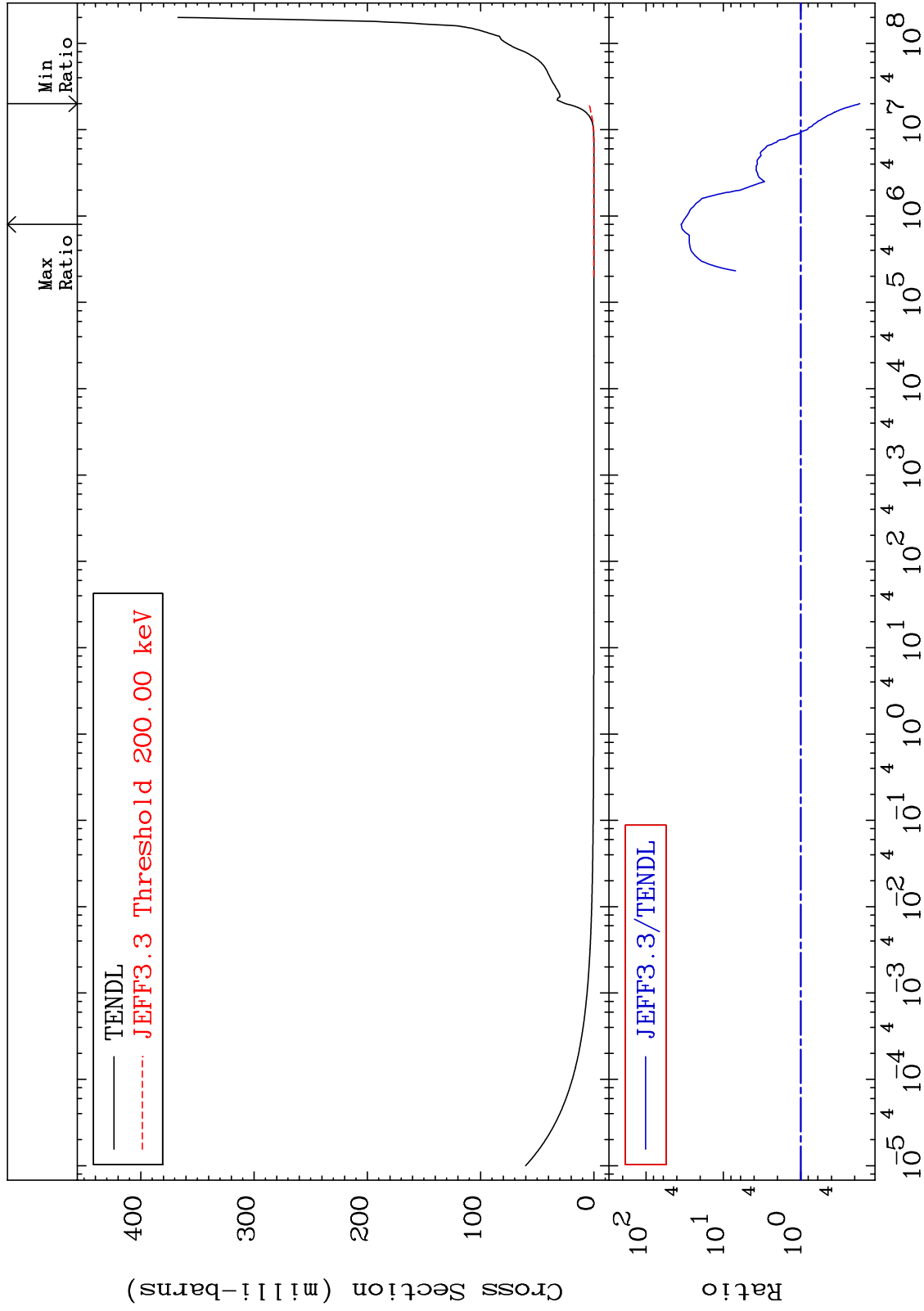
68-Er-164
-73.96 To 9999. %



MAT 6831

He-4 Production
Cross Section

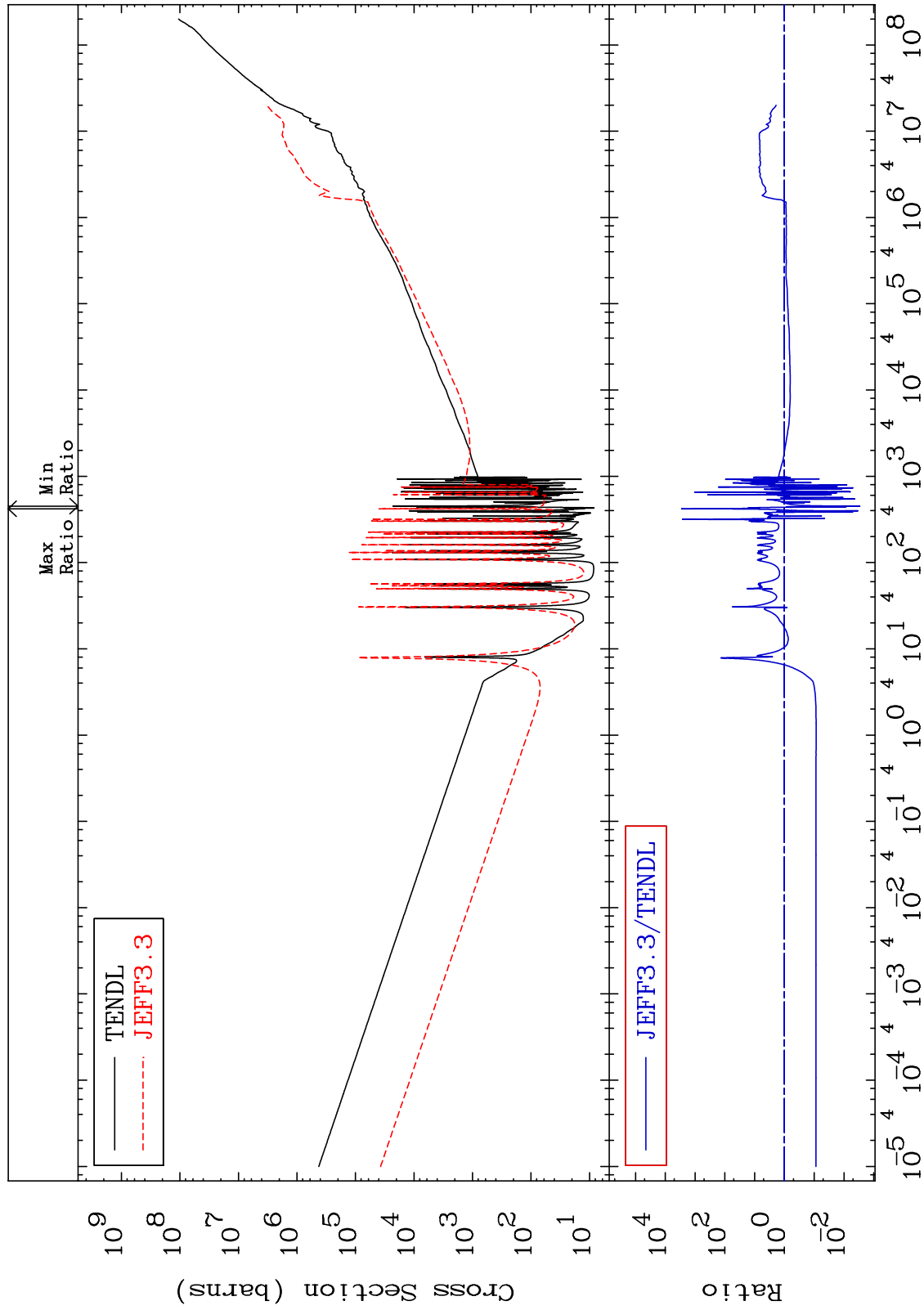
68-Er-164
-82.78 To 3407. %



MAT 6831

Kerma total (eV-barns)
Cross Section

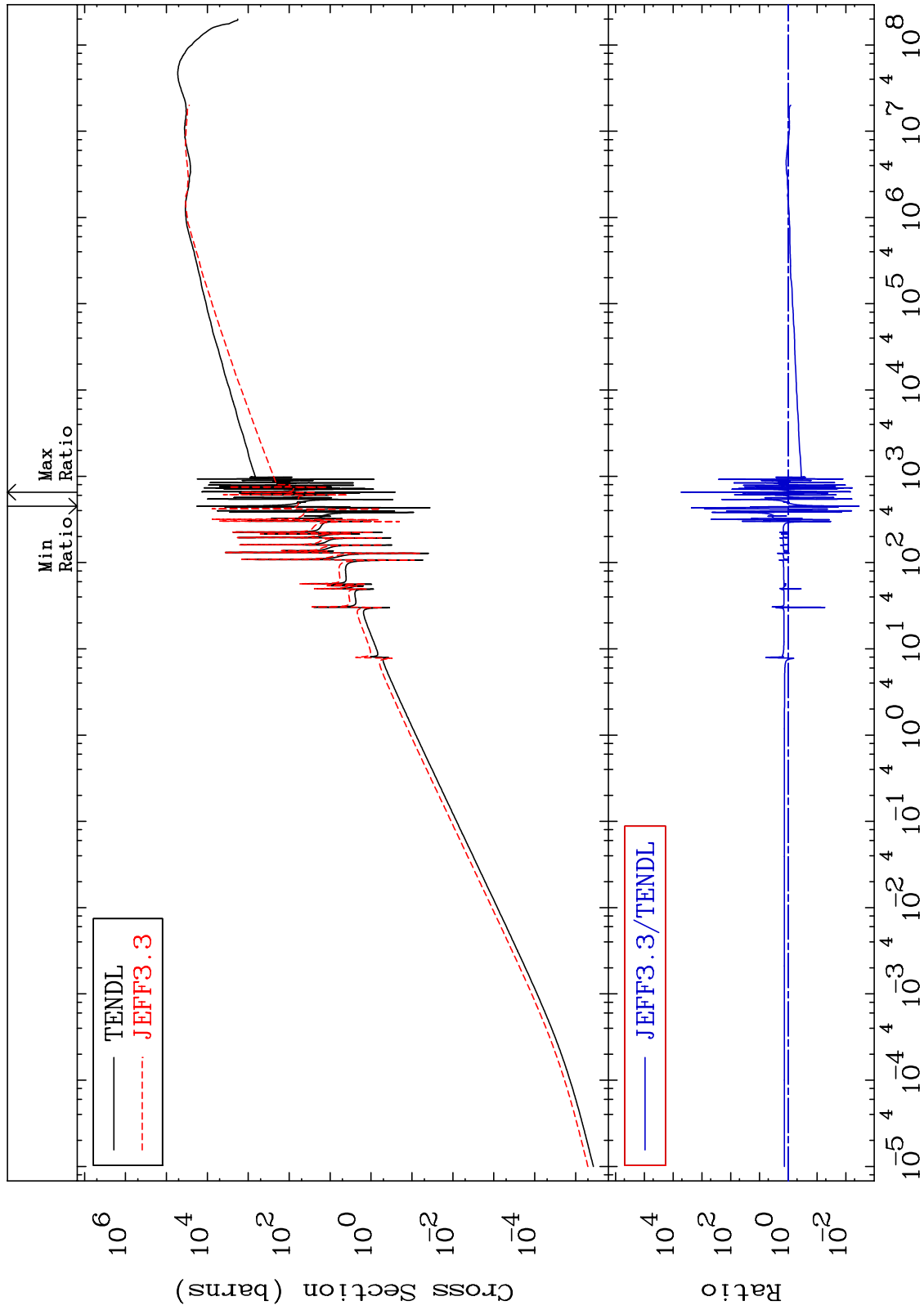
68-Er-164
-99.71 To 9999. %



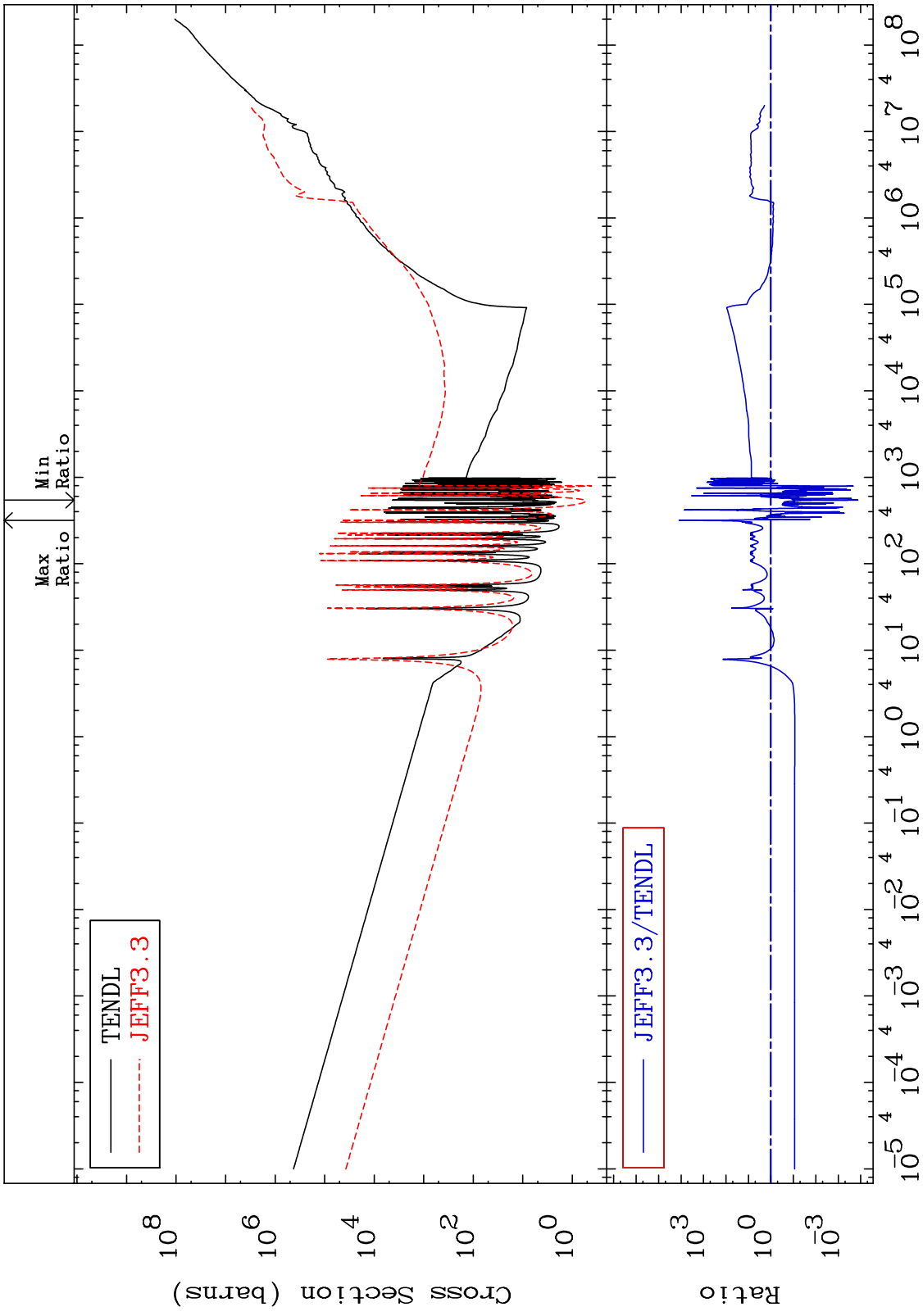
MAT 6831

Kerma elastic
Cross Section

68-Er-164
-99.65 To 9999. %



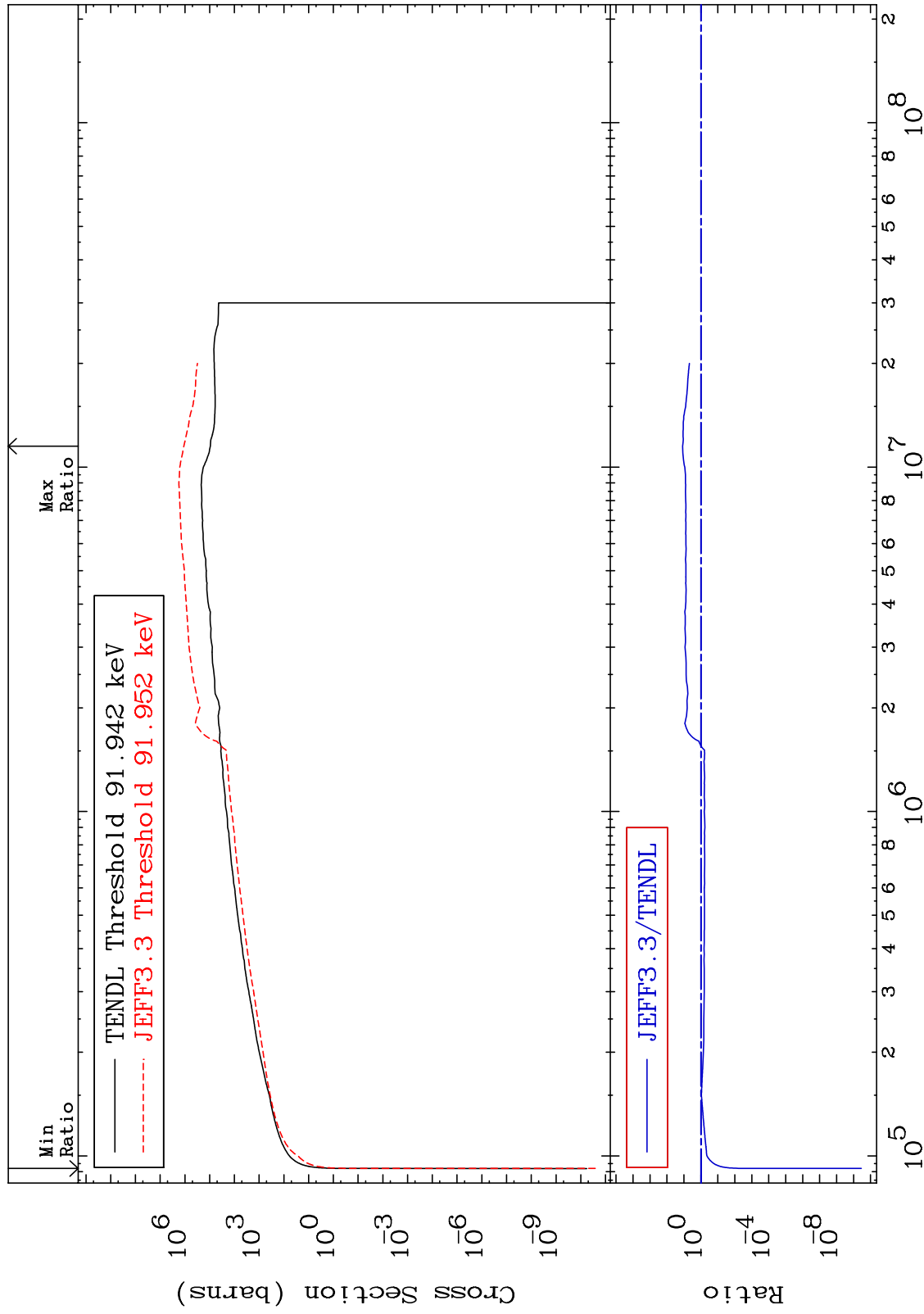
MAT 6831 Kerma non-elastic (all but mt.2) 68-Er-164
 -99.99 To 9999. %
 Cross Section



MAT 6831

Kerma inelastic (mt51-91)
Cross Section

68-Er-164
-100.0 To 1083. %



37

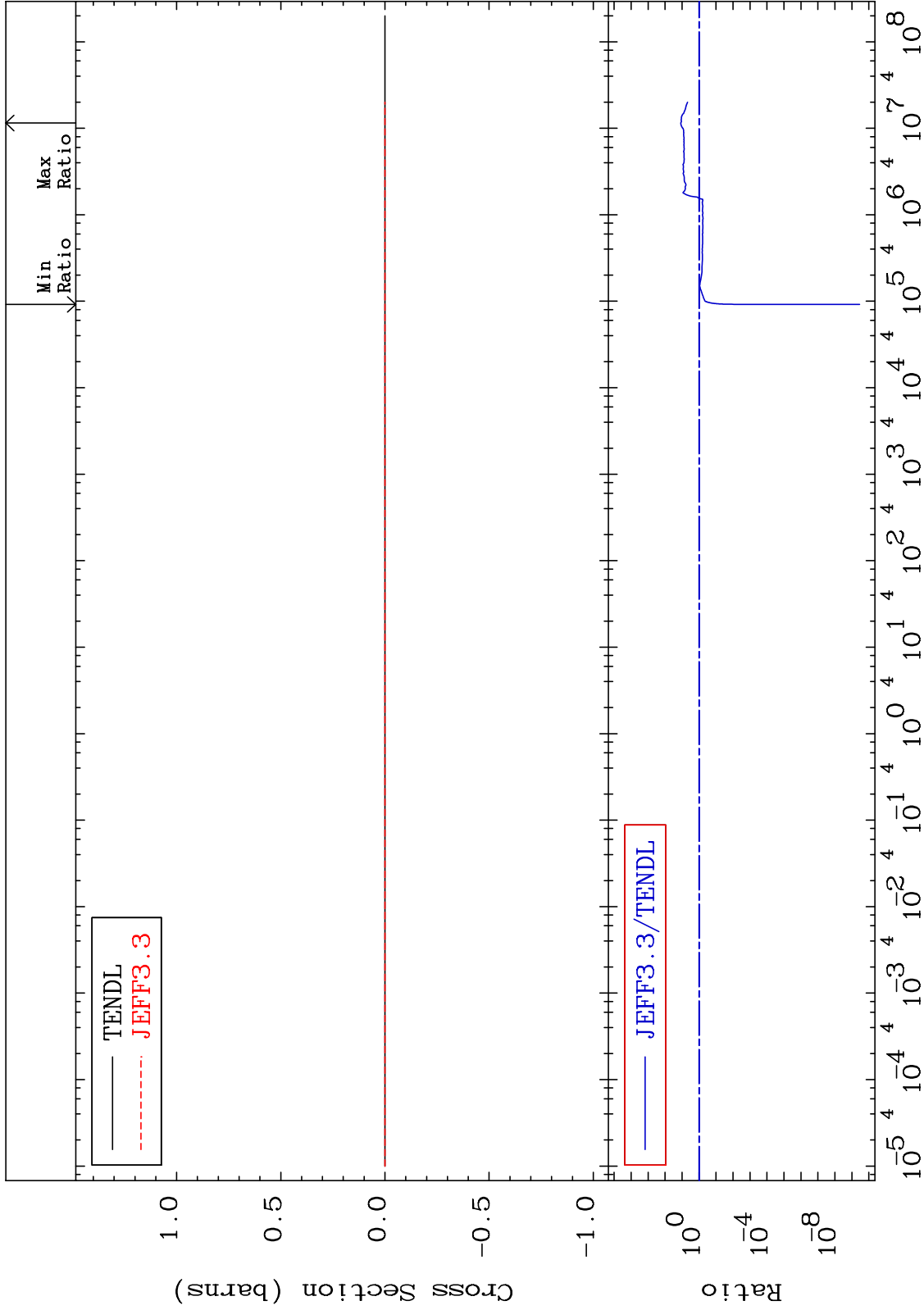
Incident Energy (eV)

68-Er-164

MAT 6831

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

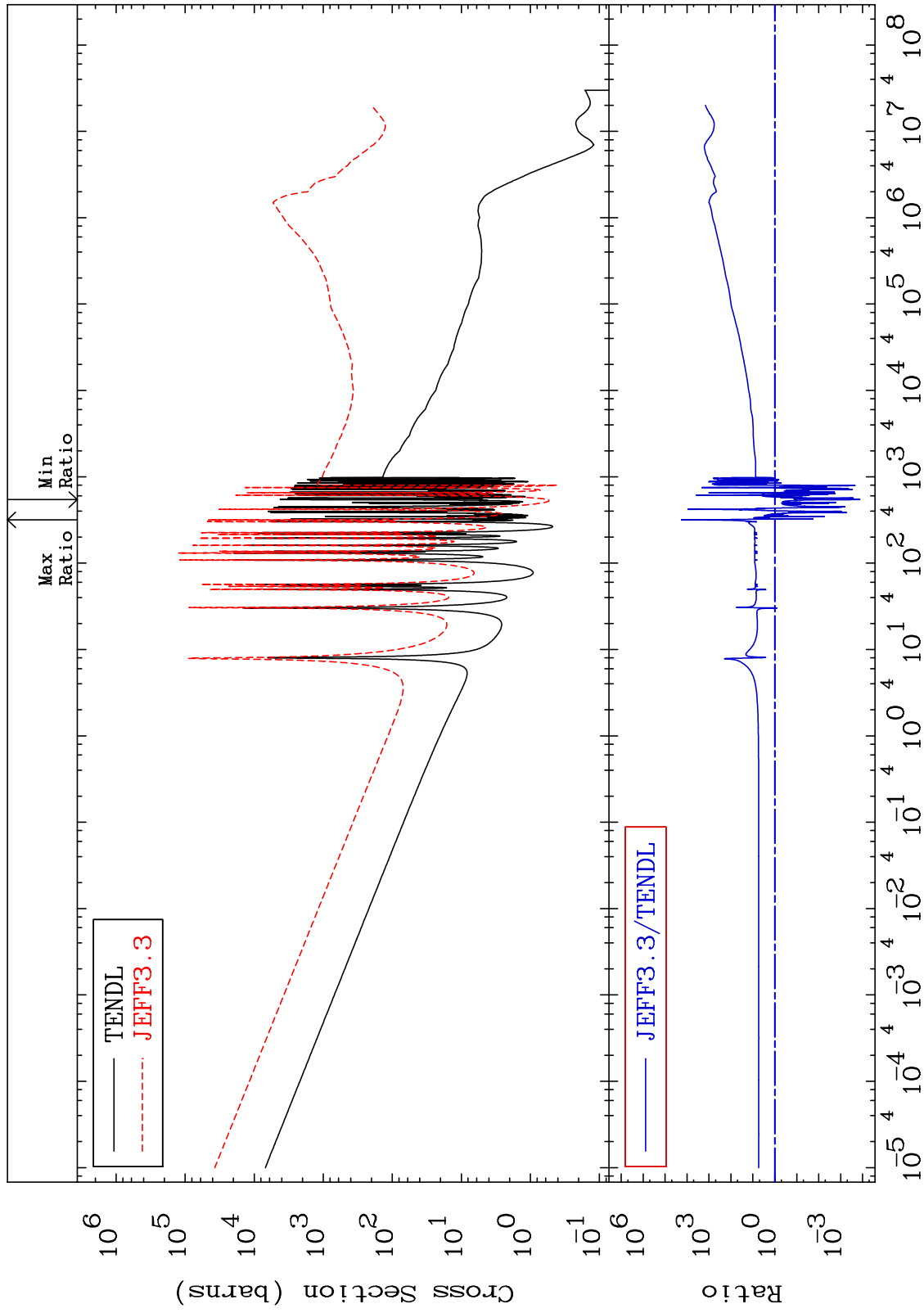
68-Er-164
-100.0 To 1083. %



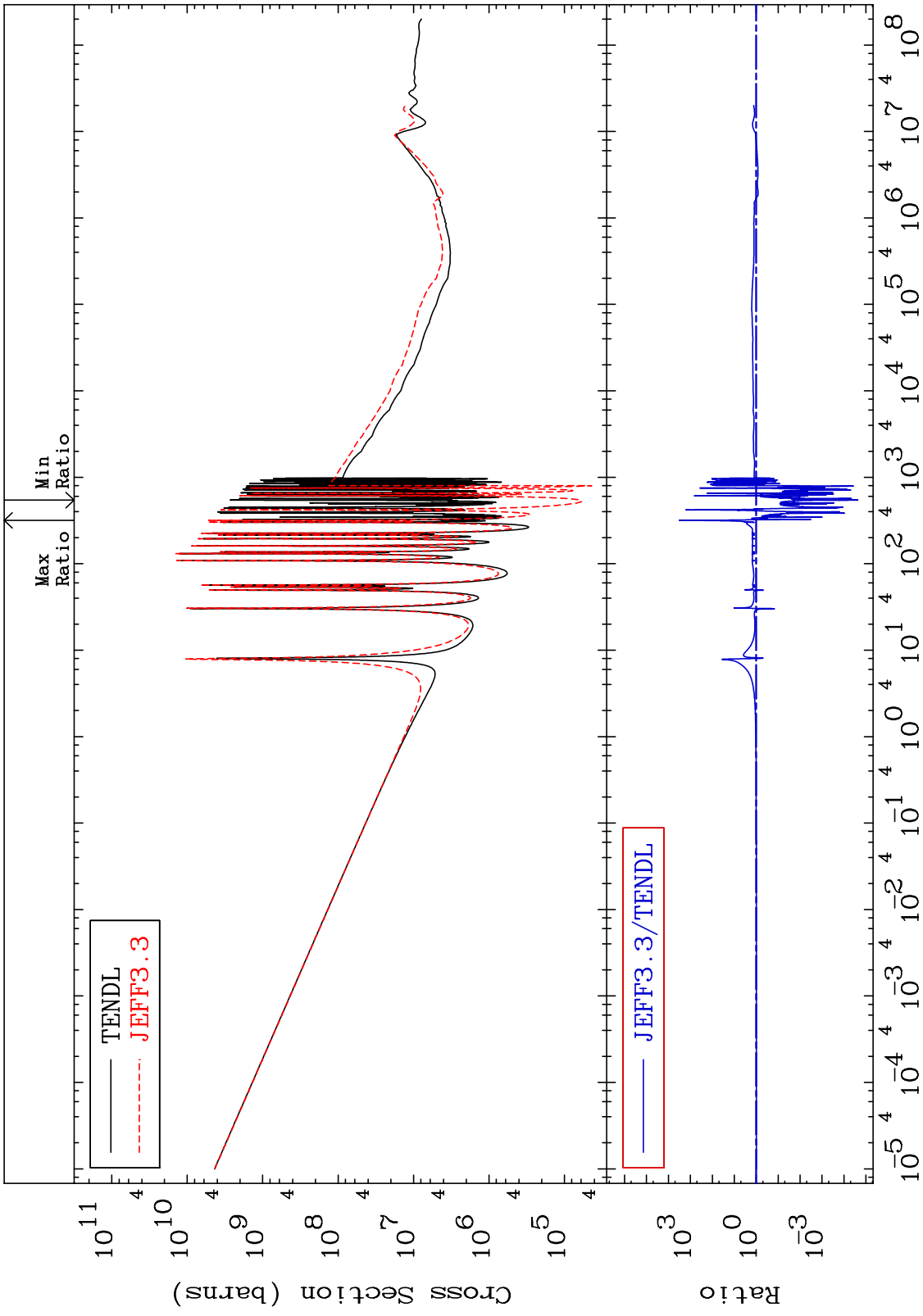
MAT 6831

Kerma capture (mt102)
Cross Section

68-Er-164
-99.99 To 9999. %

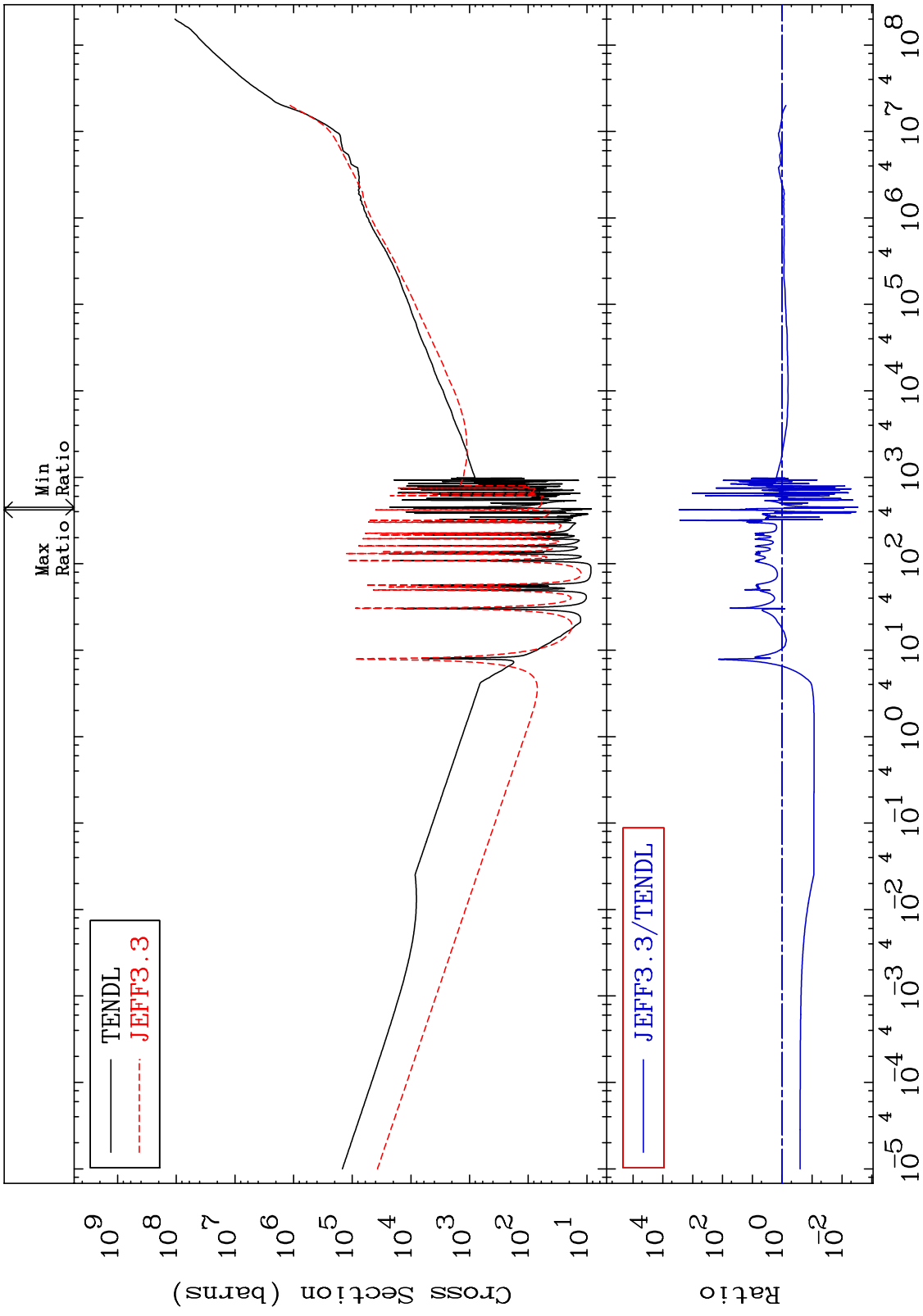


MAT 6831 68-Er-164
-100.0 To 9999. %
 Total photon (eV-barns)
 Cross Section



40 68-Er-164

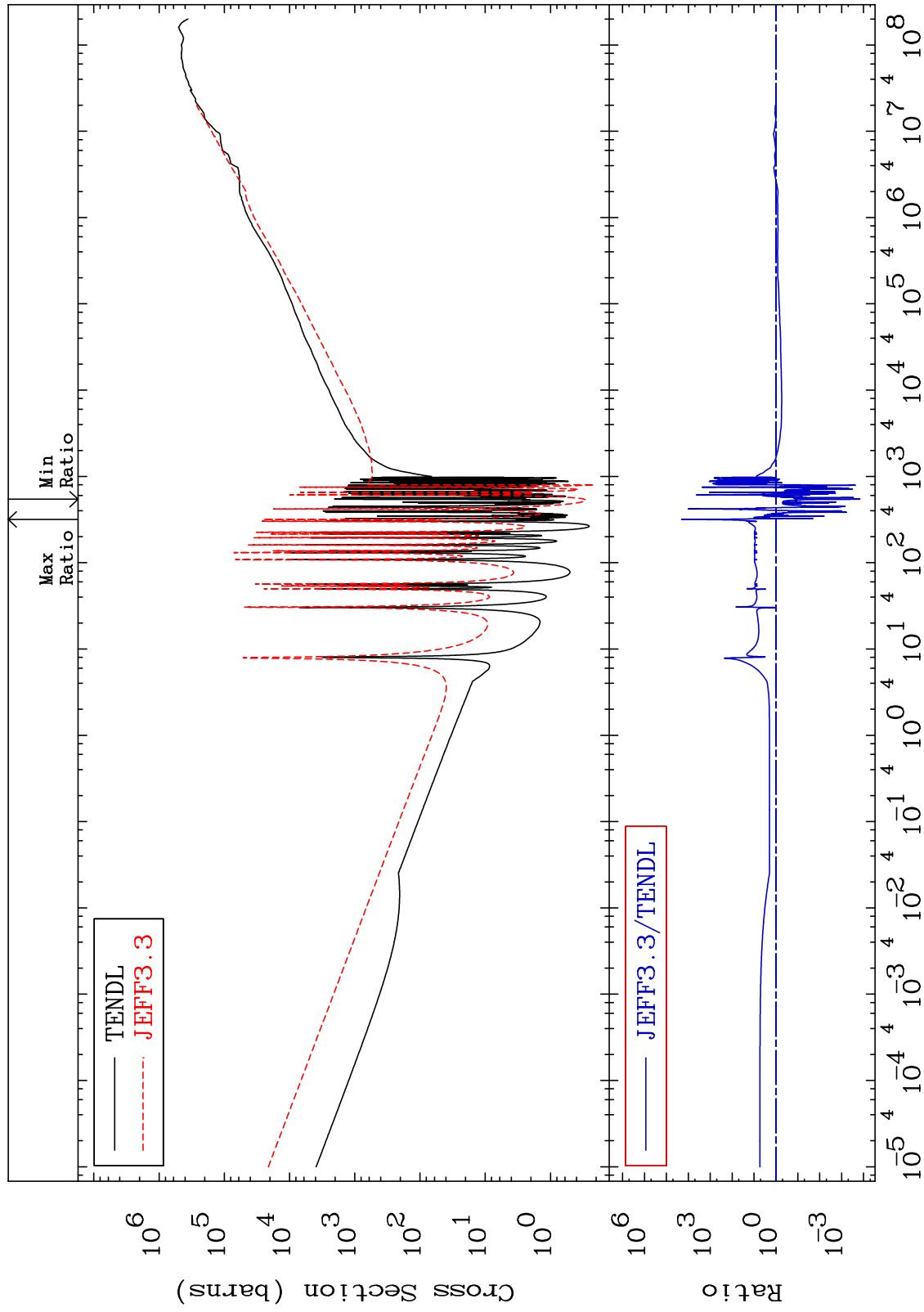
MAT 6831 Total kinematic kerma (high limit) 68-Er-164
 Cross Section -99.71 To 9999. %



MAT 6831

Dpa total (eV-barns)
Cross Section

68-Er-164
-99.99 To 9999. %

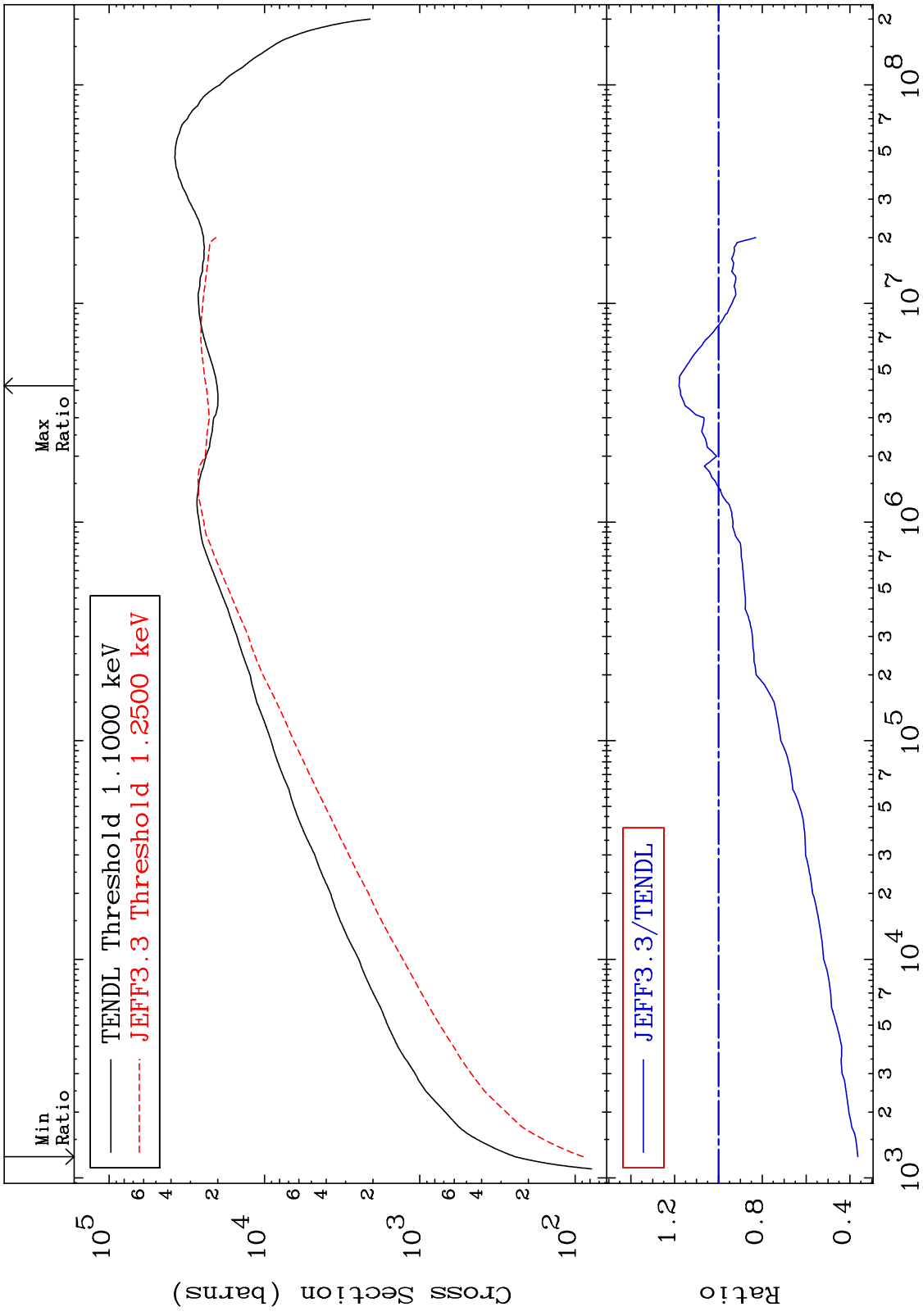


42

Incident Energy (eV)

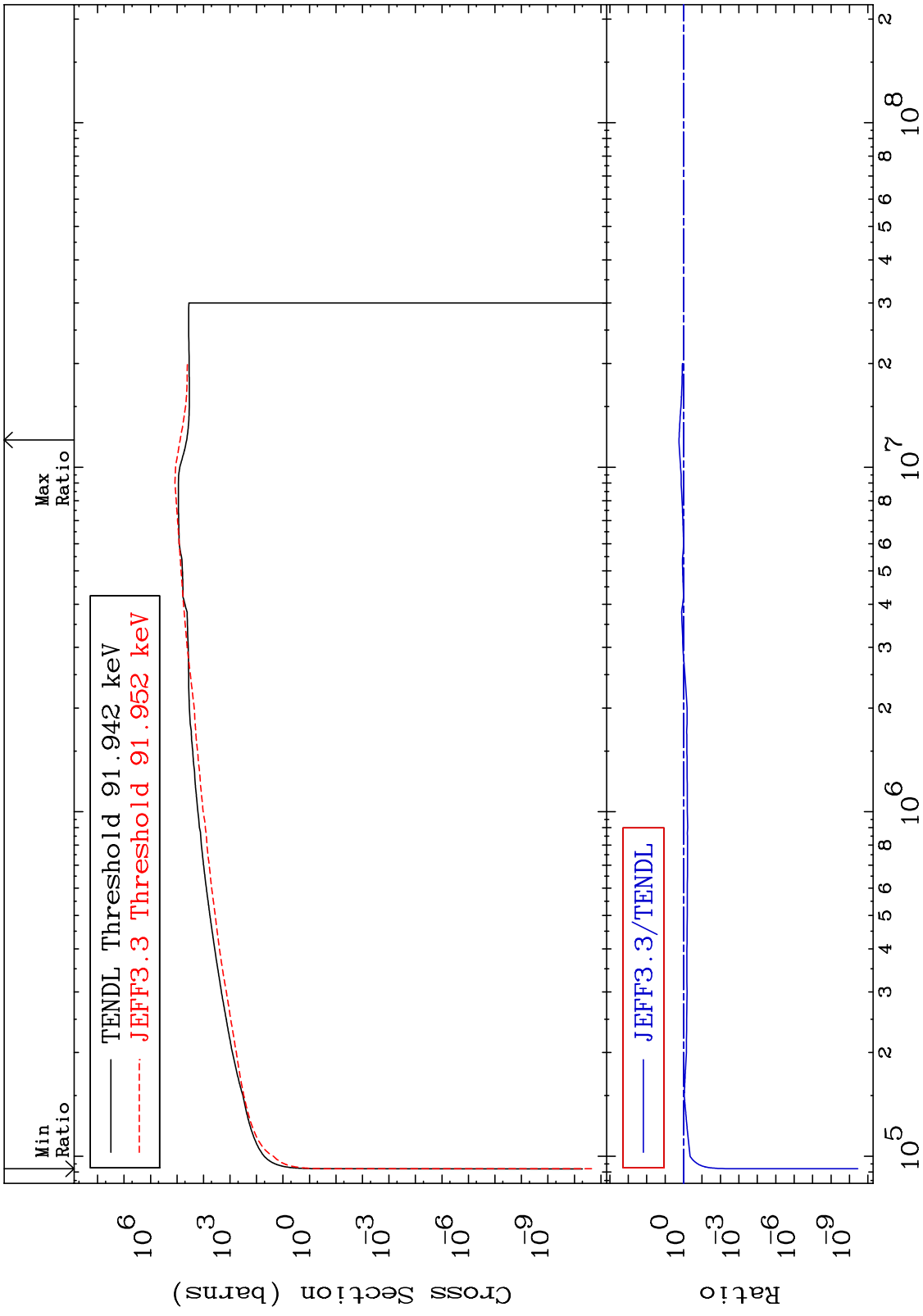
68-Er-164

MAT 6831 Dpa elastic (mt2) 68-Er-164
 Cross Section -63.58 To 17.99 %



43 Incident Energy (eV) 68-Er-164

MAT 6831 Dpa inelastic (mt51-91) 68-Er-164
 Cross Section -100.0 To 76.33 %



MAT 6831

Dpa disappearance (mt102 -120)
Cross Section

68-Er-164
-99.99 To 9999. %

