

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

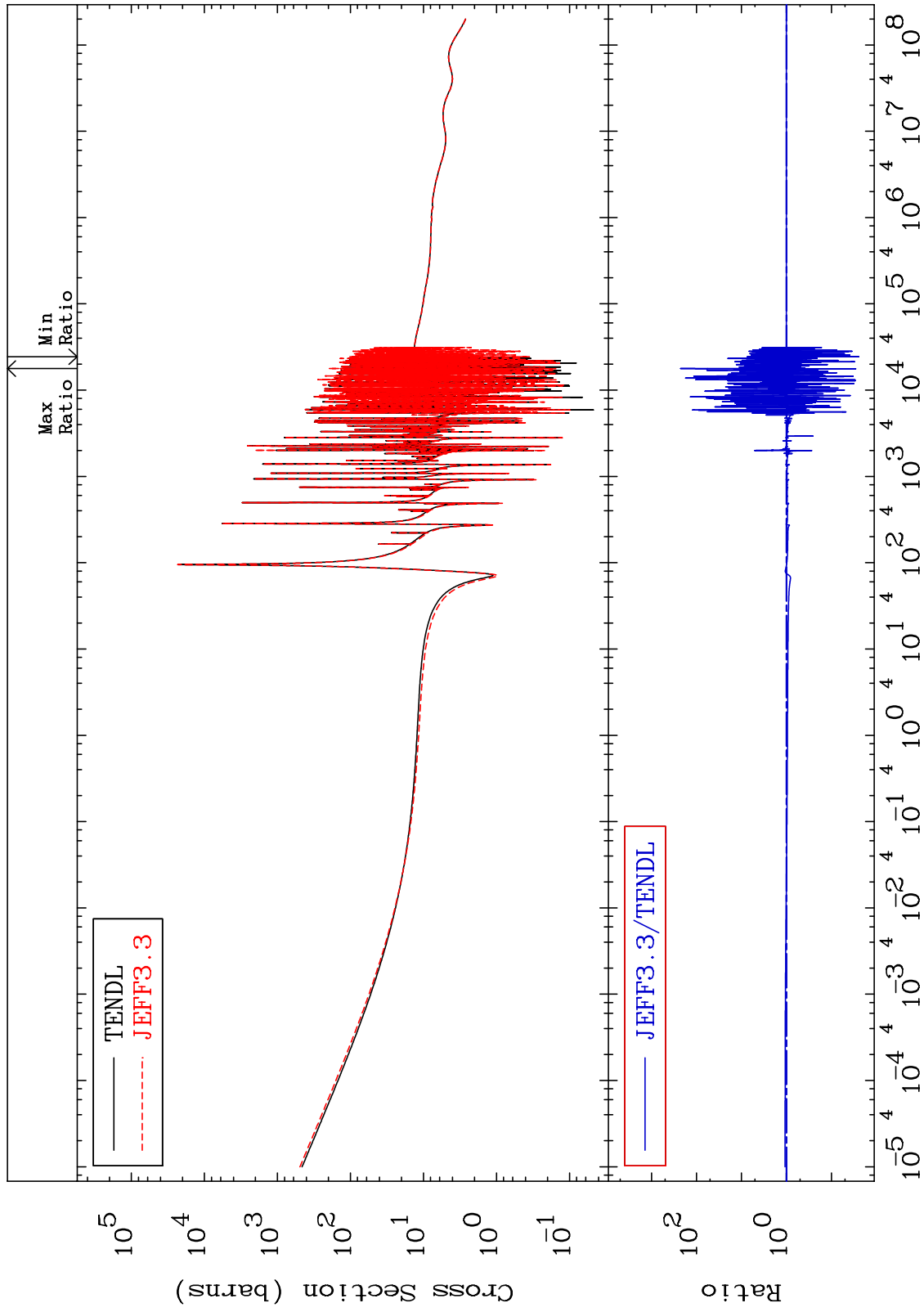
E.Mail: [redcullen1@comcast.net](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

MAT 6849

Total  
Cross Section

68-Er-170  
-97.57 To 9999. %



Incident Energy (eV)

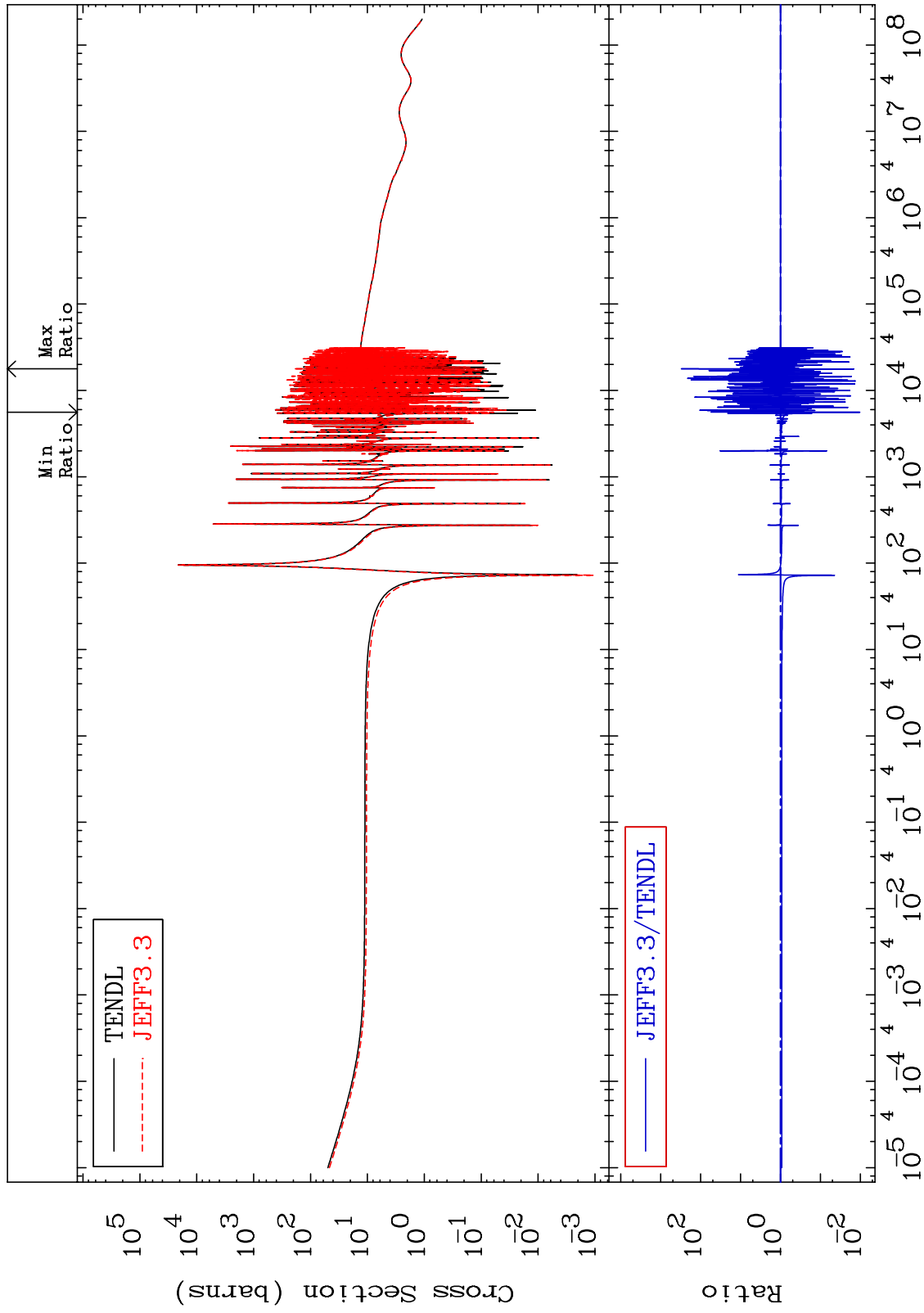
68-Er-170

1

MAT 6849

Elastic  
Cross Section

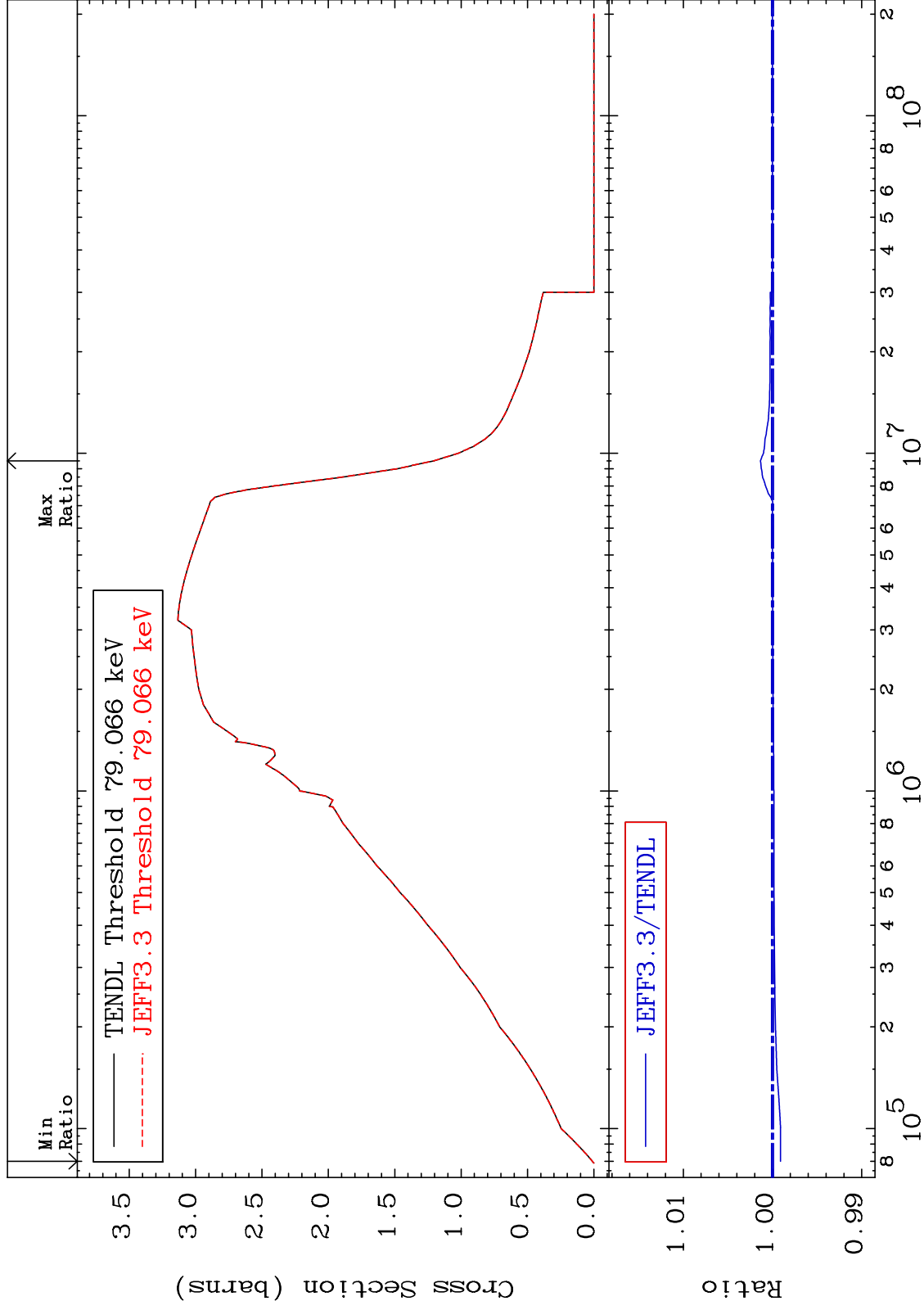
68-Er-170  
-98.96 To 9999. %



MAT 6849

Inelastic  
Cross Section

68-Er-170  
-0.090 To 0.135 %

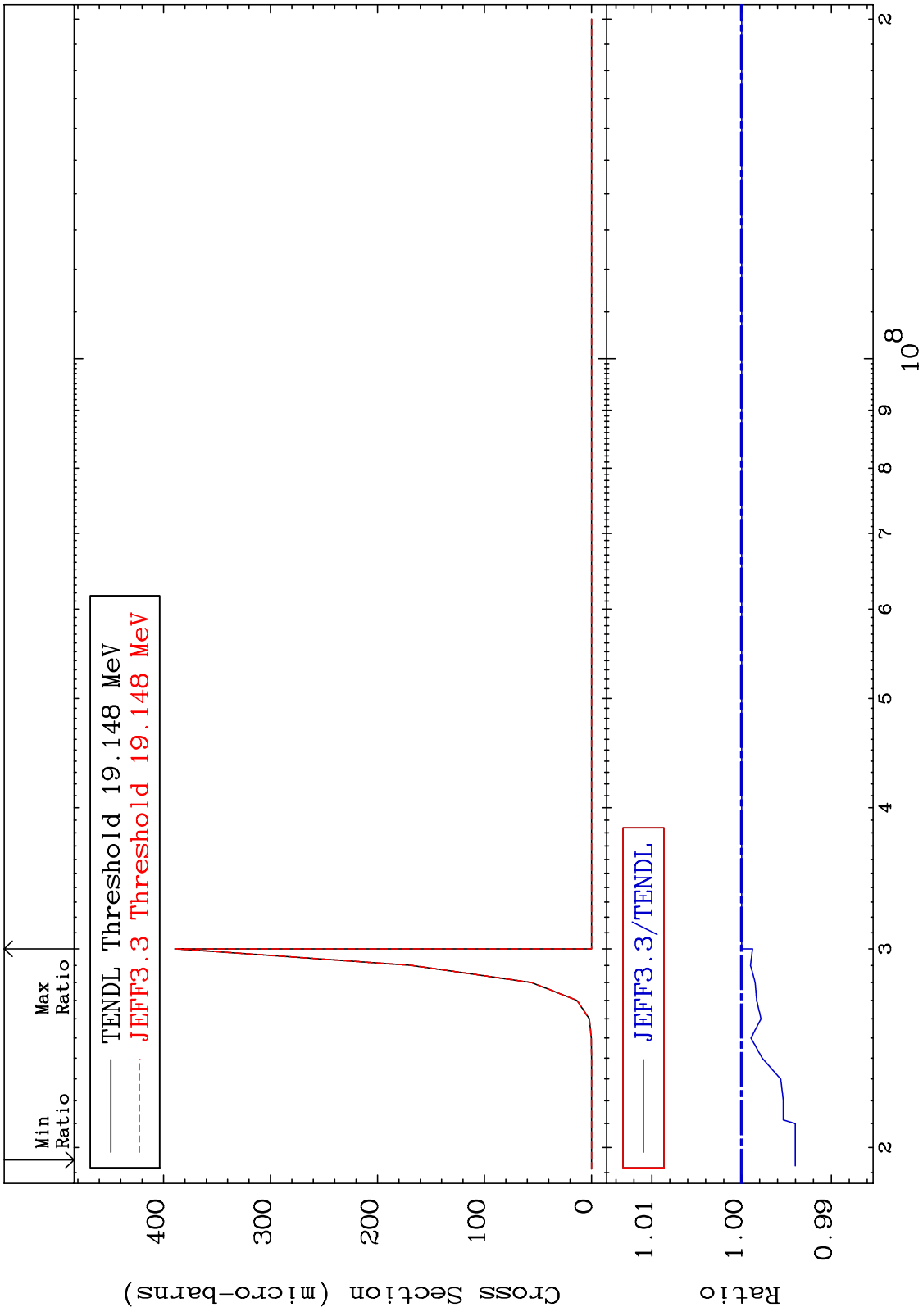


3

Incident Energy (eV)

68-Er-170

MAT 6849 (n,2n) d 68-Er-170  
 Cross Section -0.598 To 0.000 %



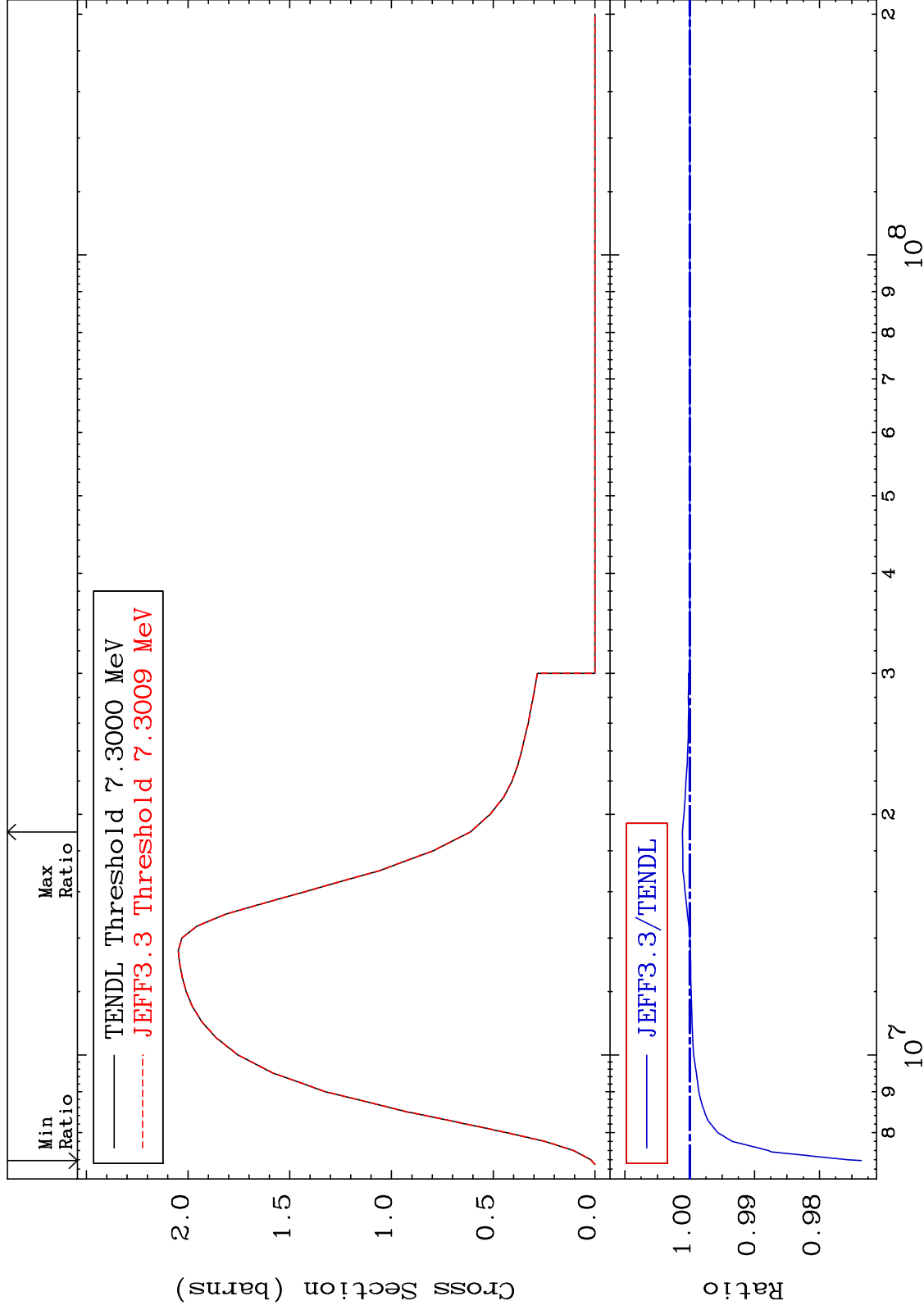
MAT 6849

(n,2n)

68-Er-170

-2.646 To 0.113 %

Cross Section

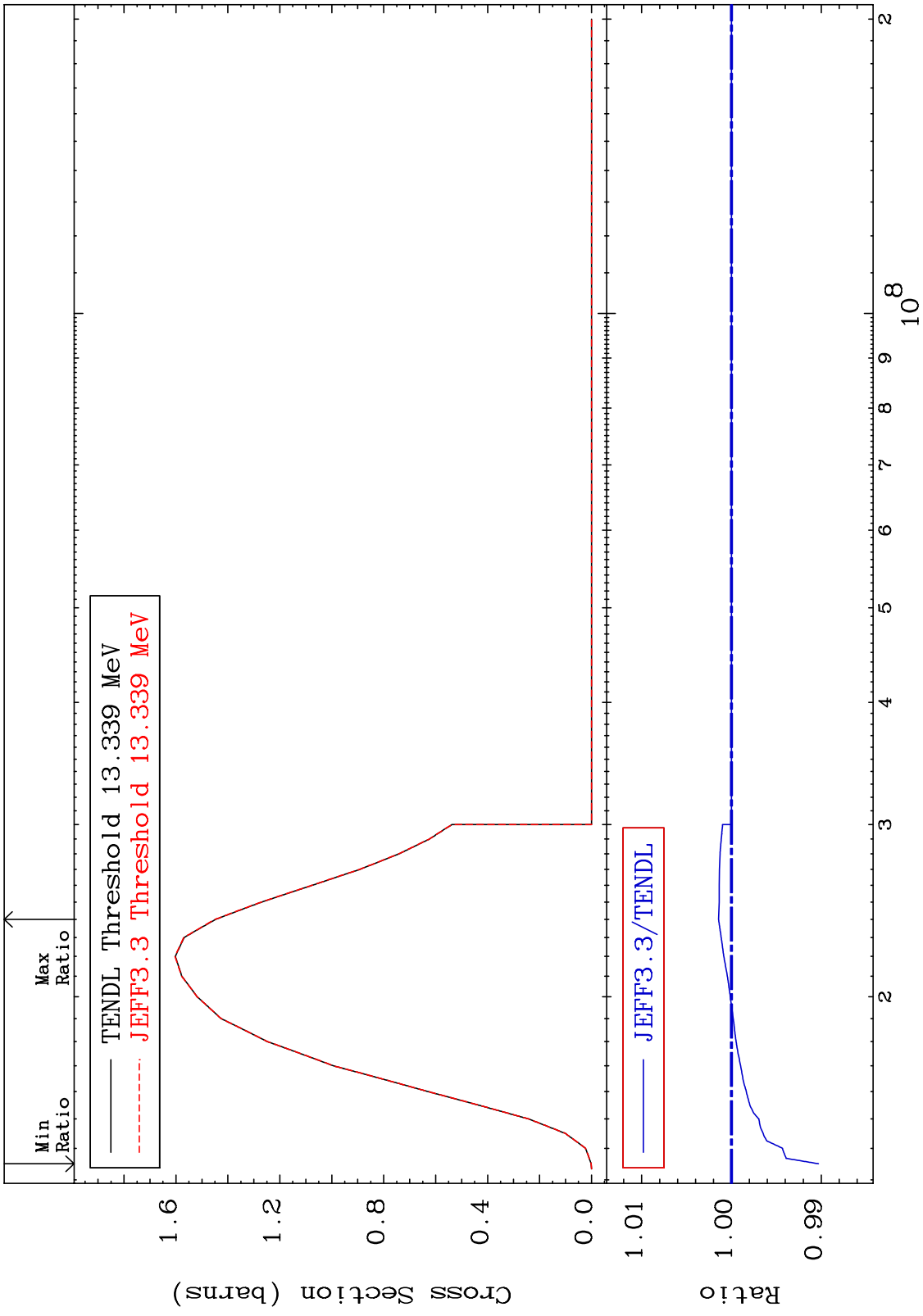


5

Incident Energy (eV)

68-Er-170

MAT 6849 68-Er-170  
(n,3n) -0.968 To 0.144 %  
Cross Section



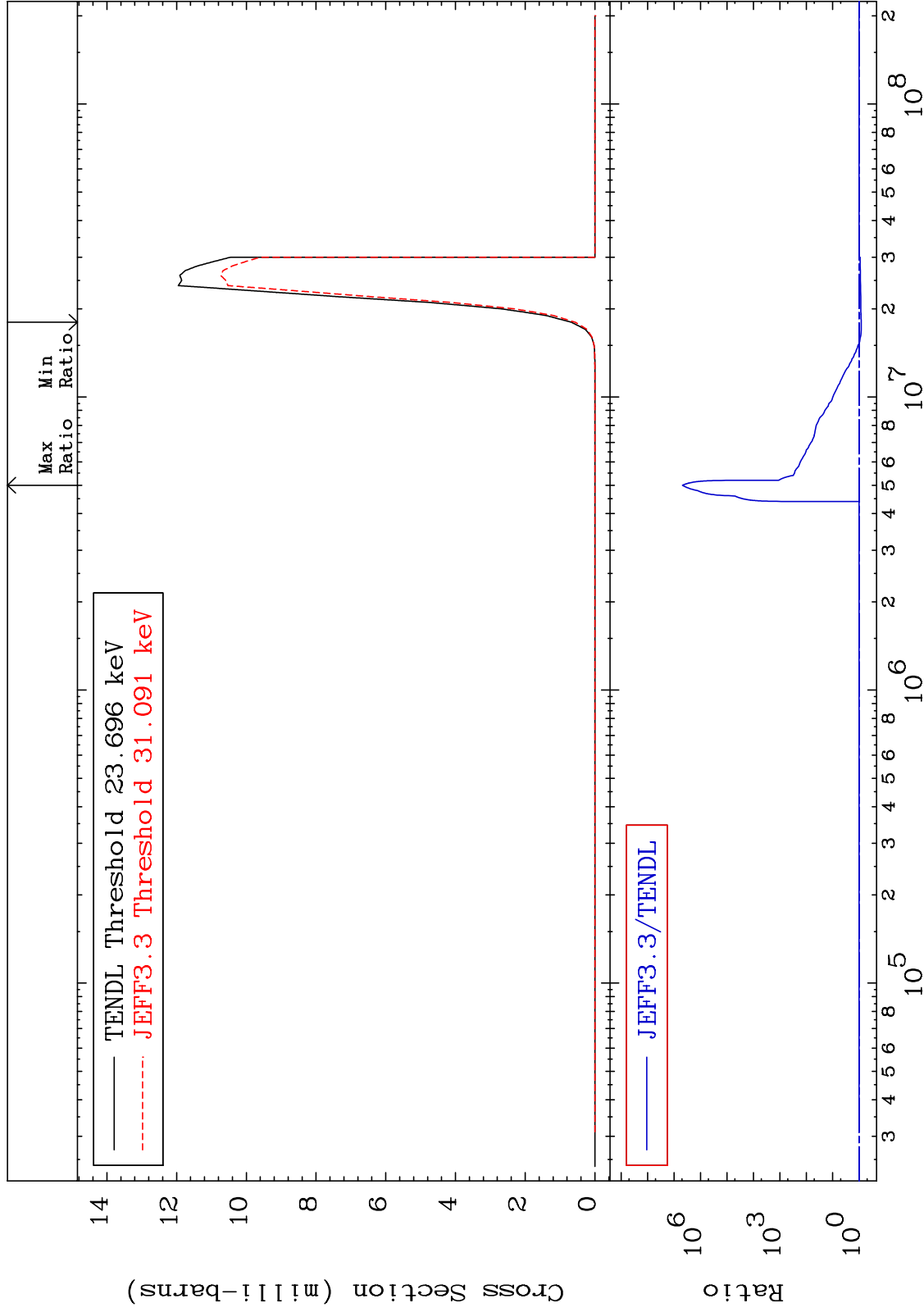
MAT 6849

$(n, n') \alpha$

68-Er-170

-16.95 To 9999. %

Cross Section



7

Incident Energy (eV)

68-Er-170



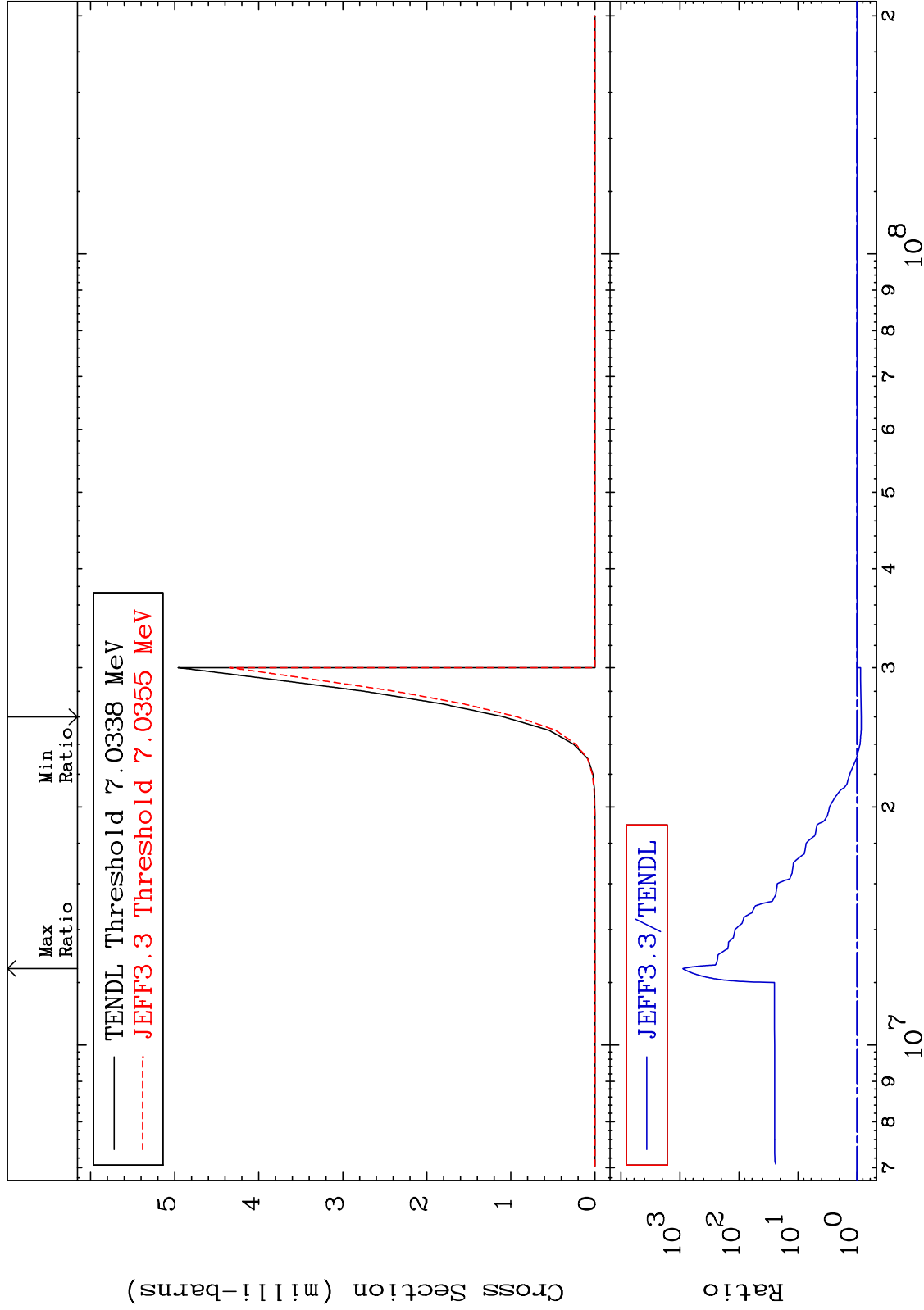
MAT 6849

(n,2n)  $\alpha$

68-Er-170

-14.94 To 9999. %

Cross Section

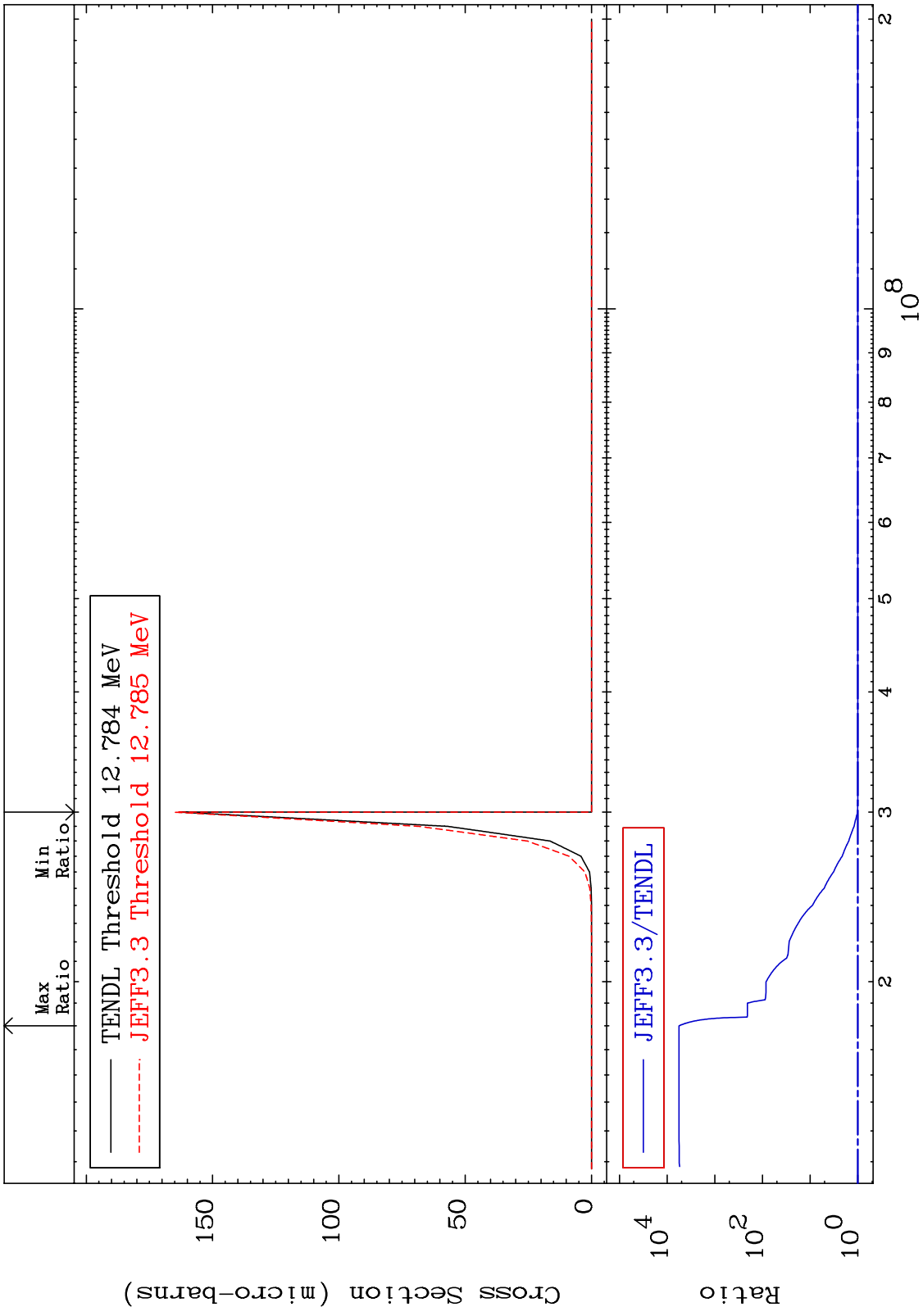


8

Incident Energy (eV)

68-Er-170

MAT 6849  $(n, 3n) \alpha$  68-Er-170  
 Cross Section 0.000 To 9999. %



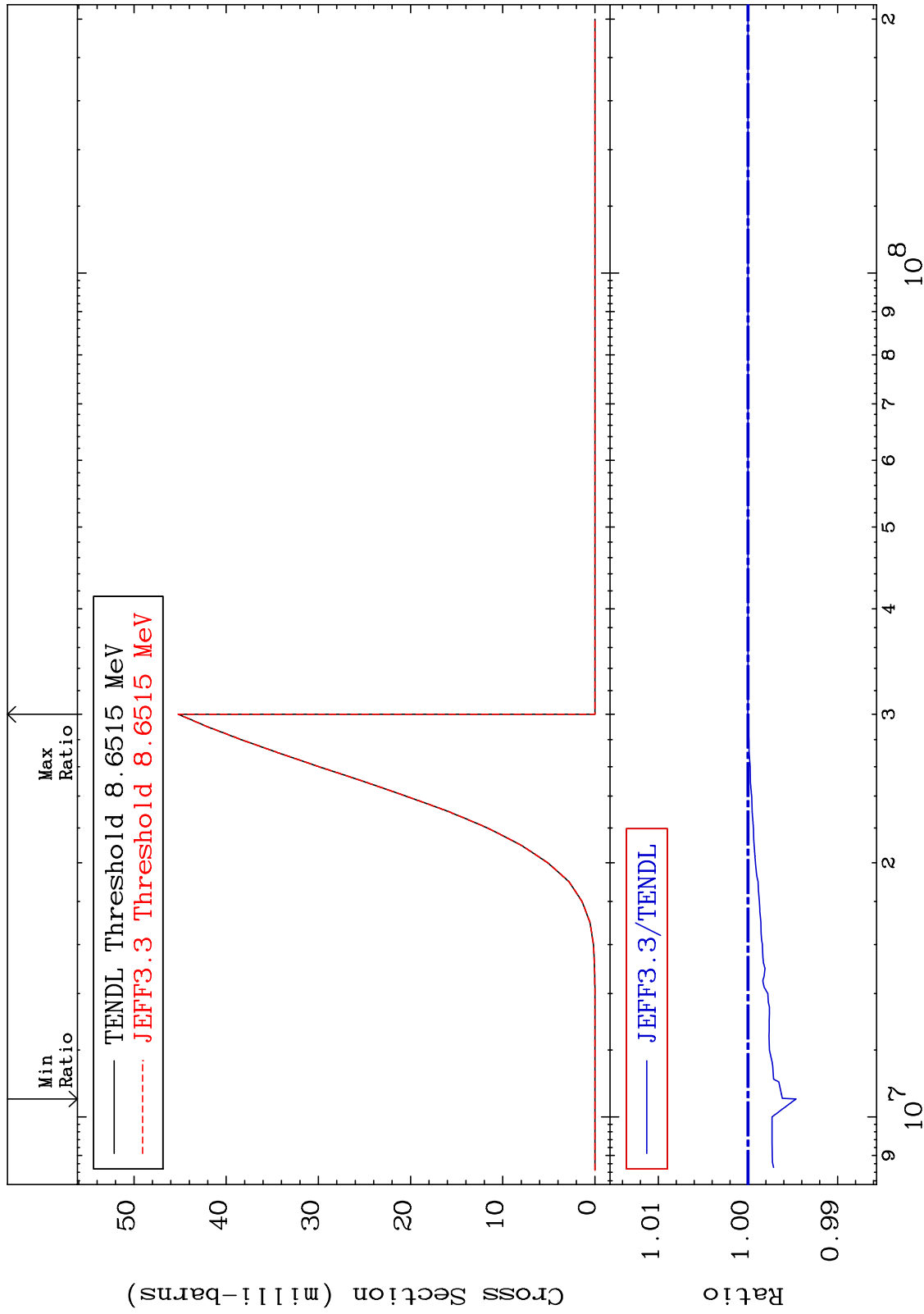
MAT 6849

(n, n') p

68-Er-170

-0.537 To 0.003 %

Cross Section

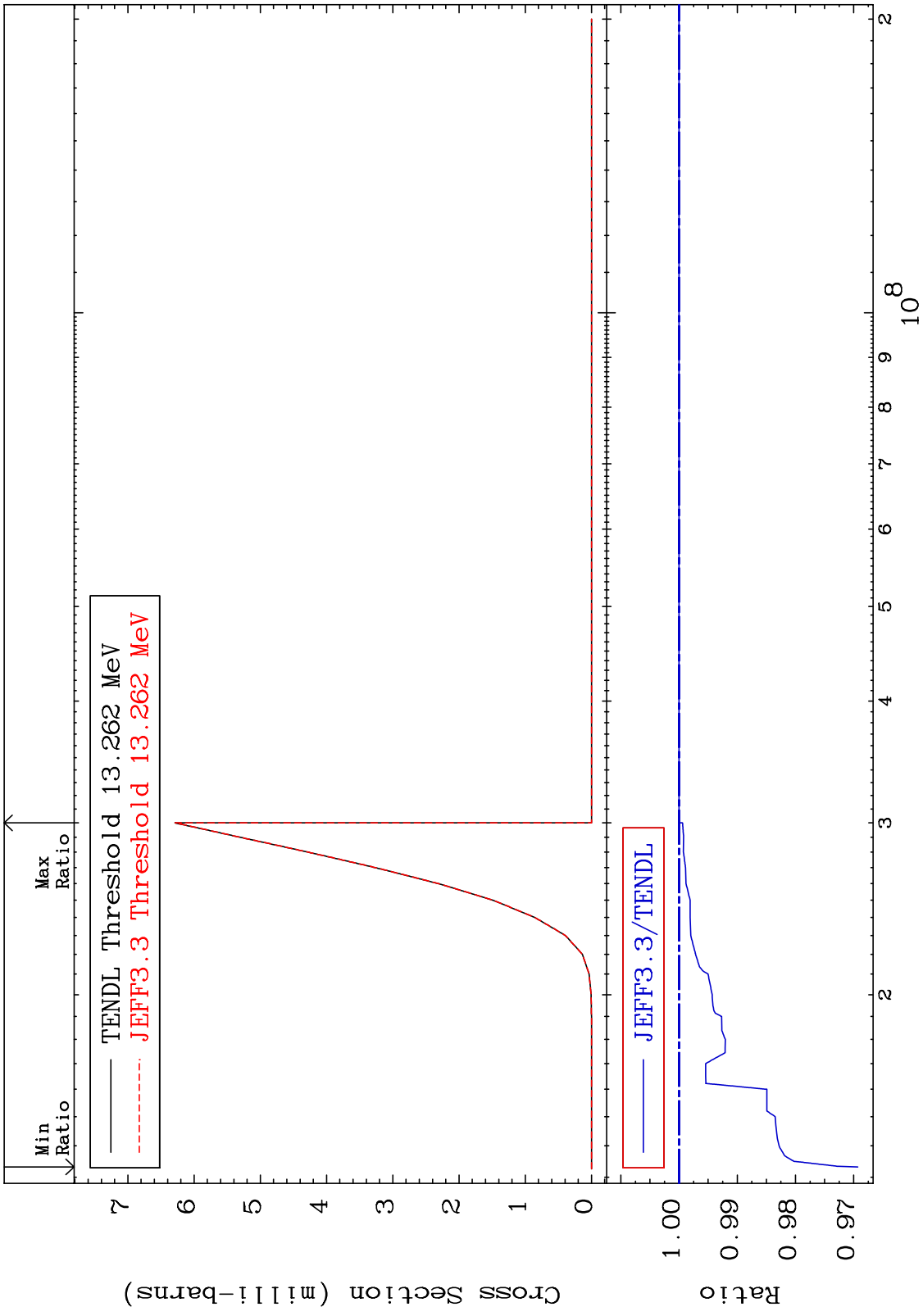


10

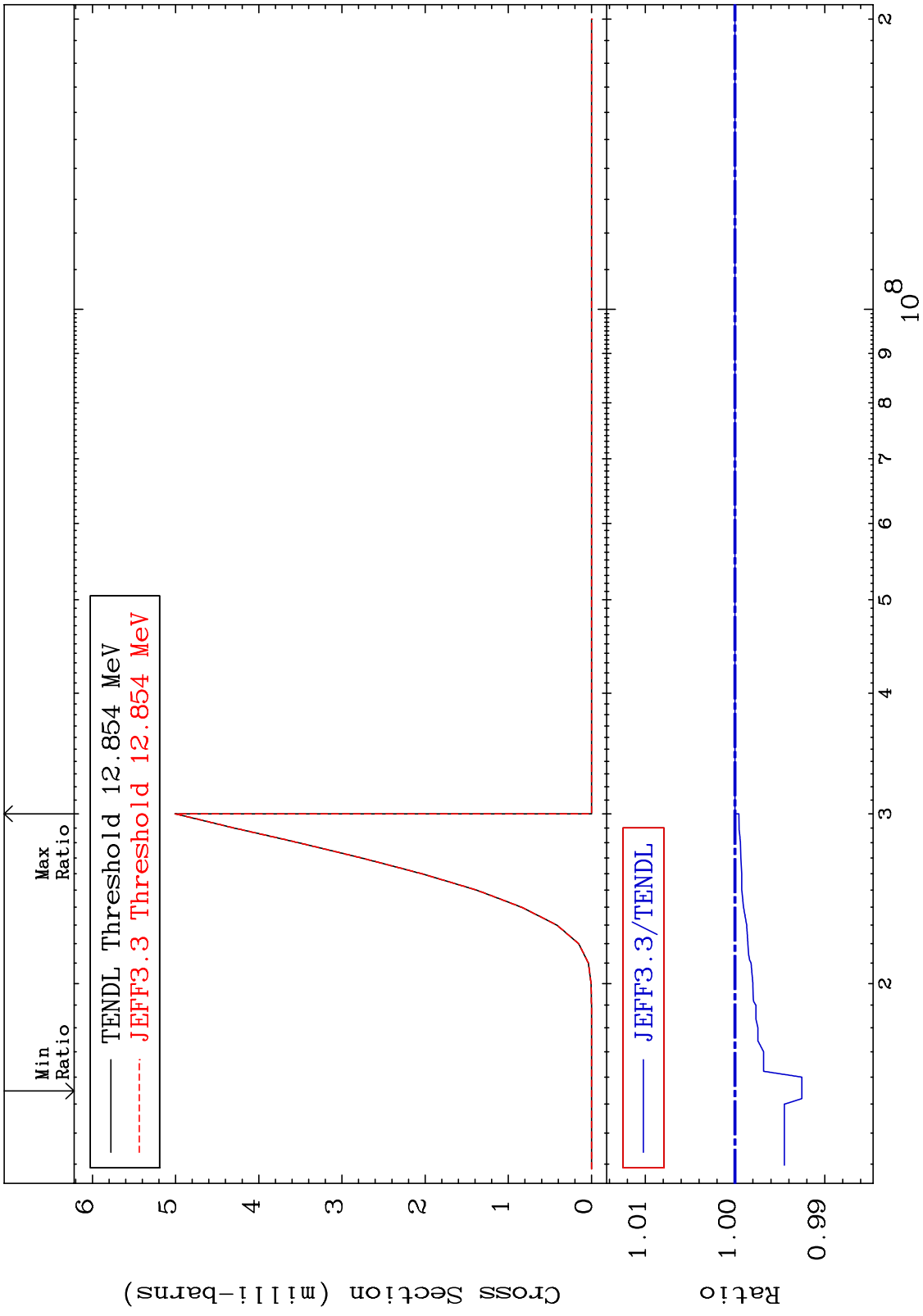
Incident Energy (eV)

68-Er-170

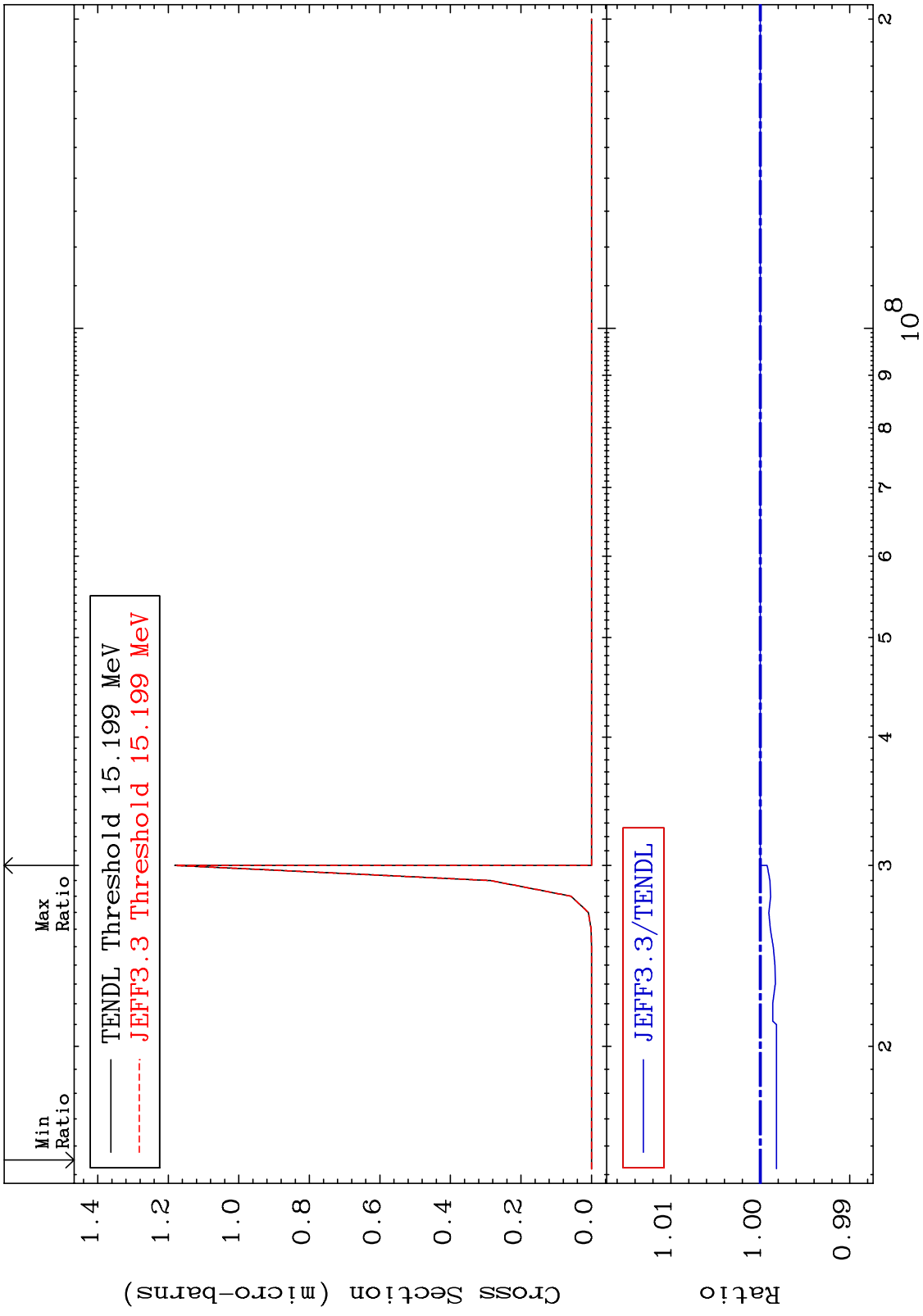
MAT 6849 (n, n') d 68-Er-170  
 Cross Section -3.071 To 0.000 %



MAT 6849  $(n, n') t$  68-Er-170  
 Cross Section -0.745 To 0.000 %



MAT 6849 (n, n') He-3 Cross Section 68-Er-170 -0.182 To 0.000 %



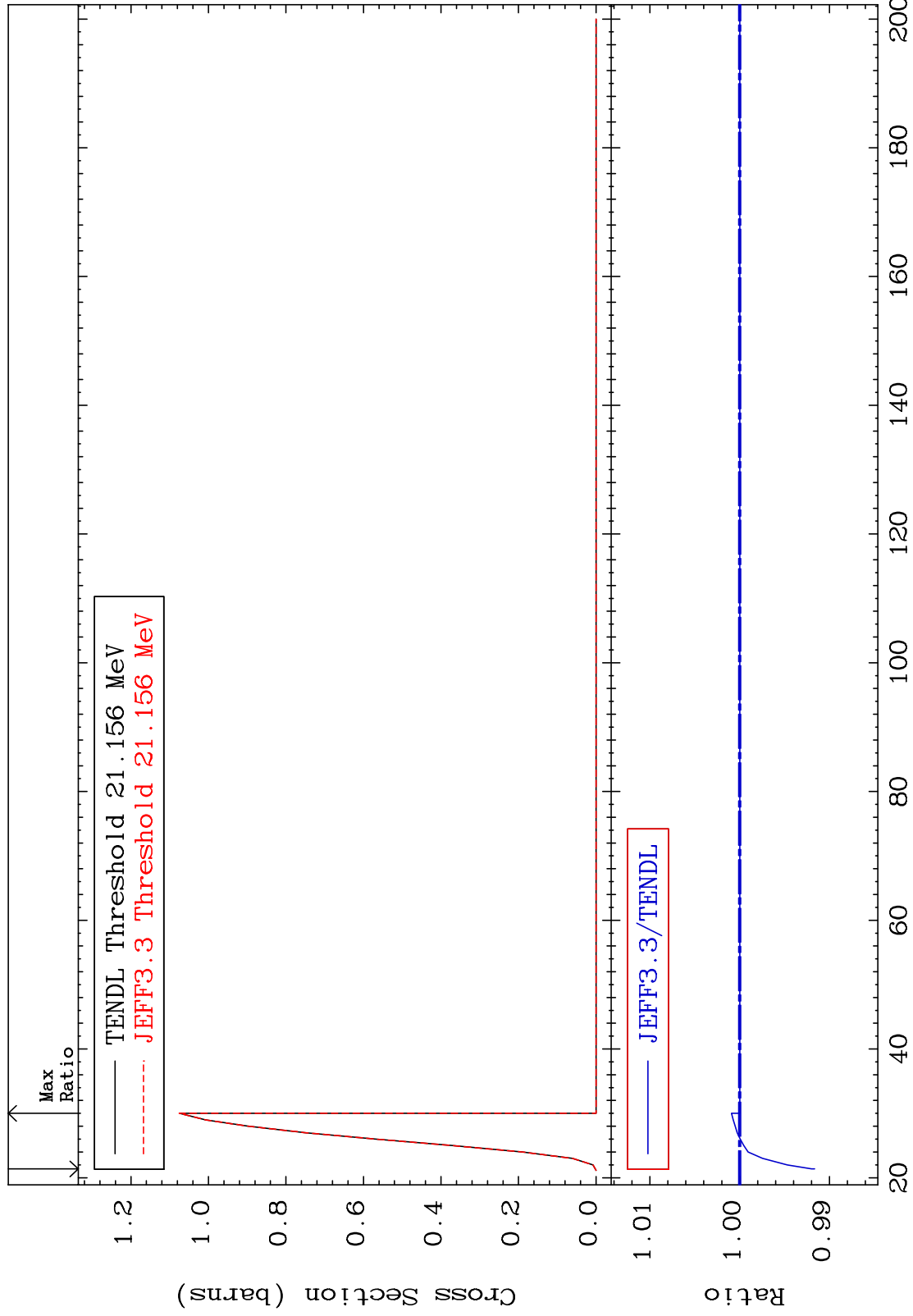
MAT 6849

(n,4n)

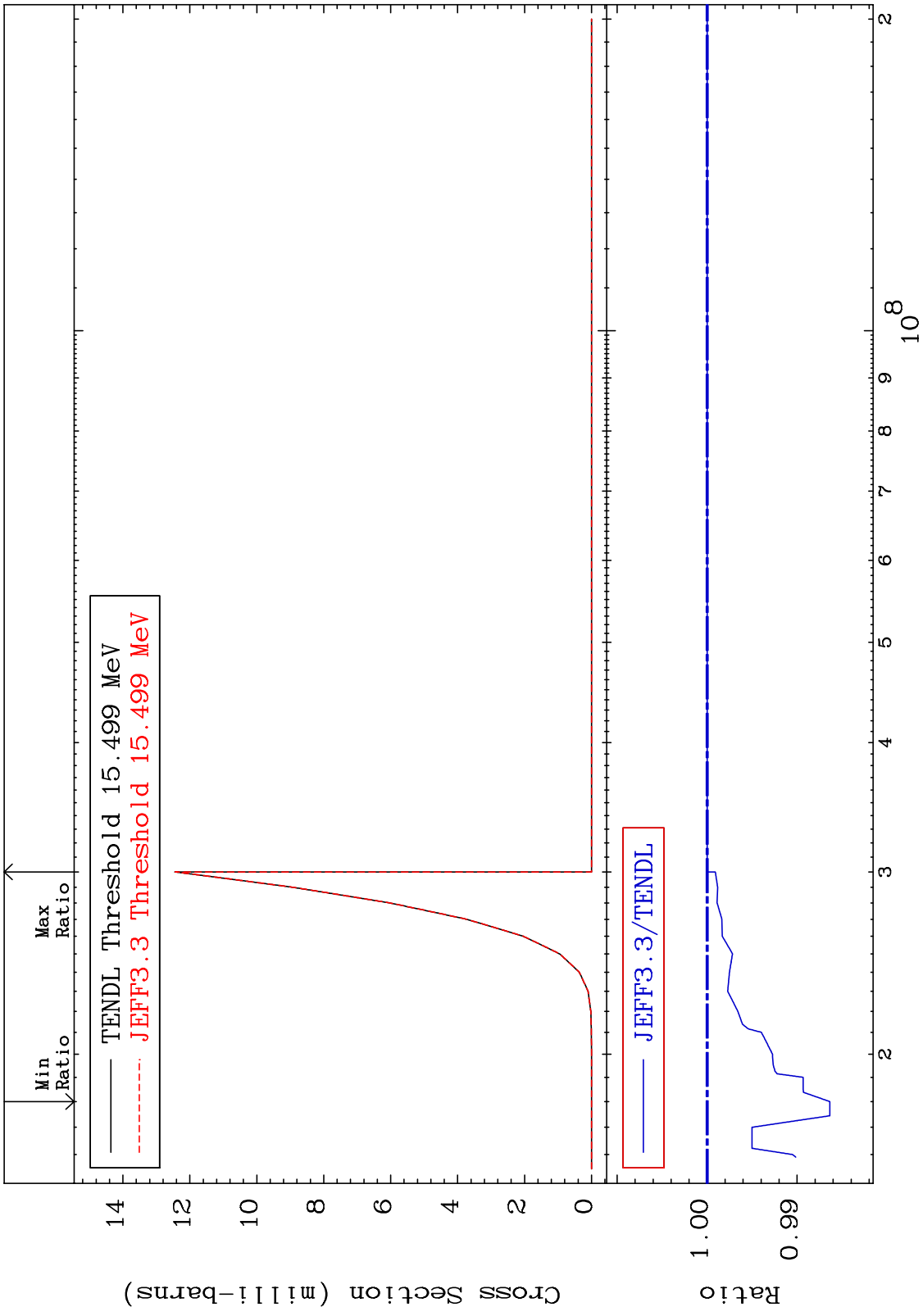
68-Er-170

Cross Section

-0.835 To 0.091 %



MAT 6849 (n,2n) p 68-Er-170  
 Cross Section -1.363 To 0.000 %

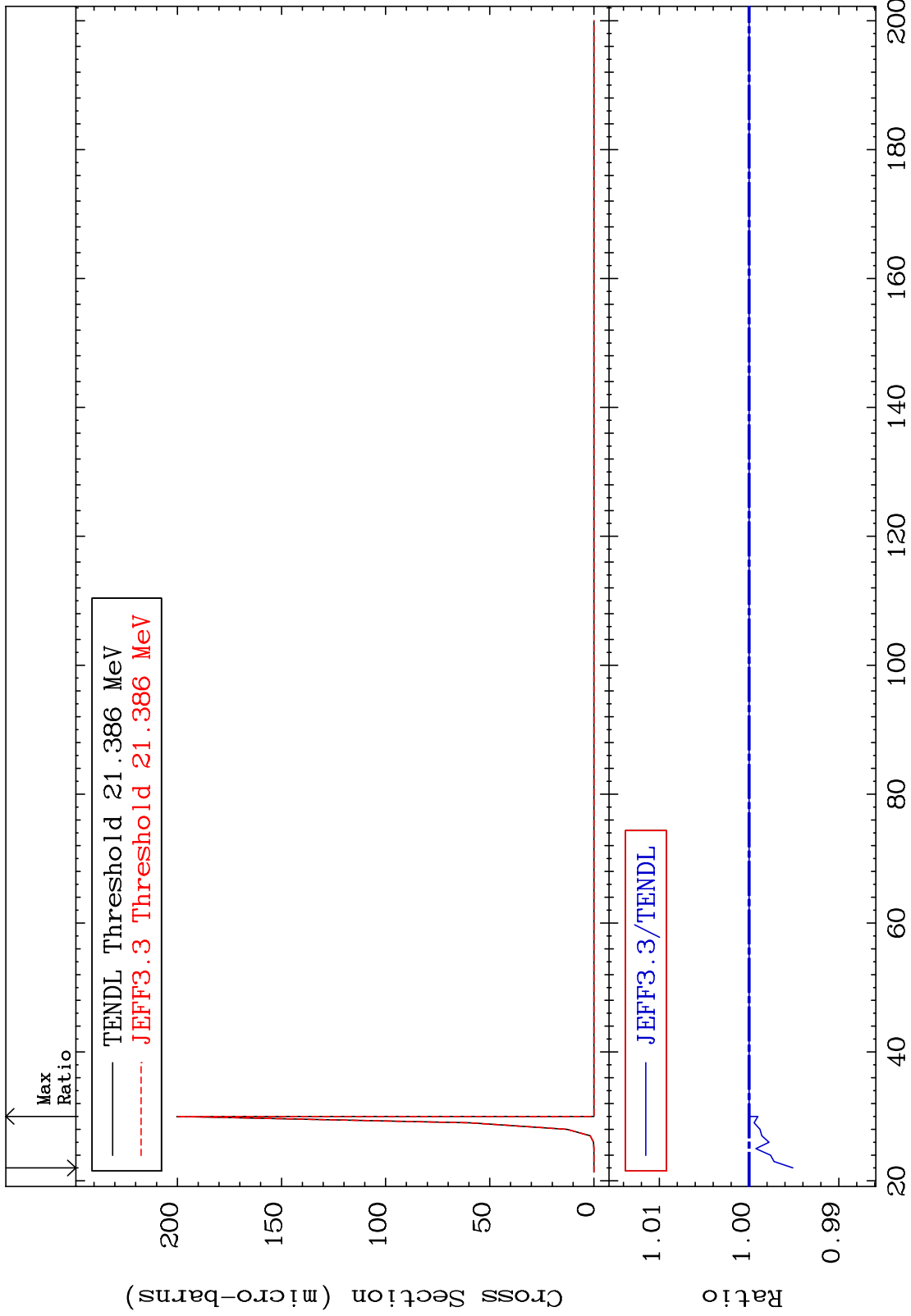




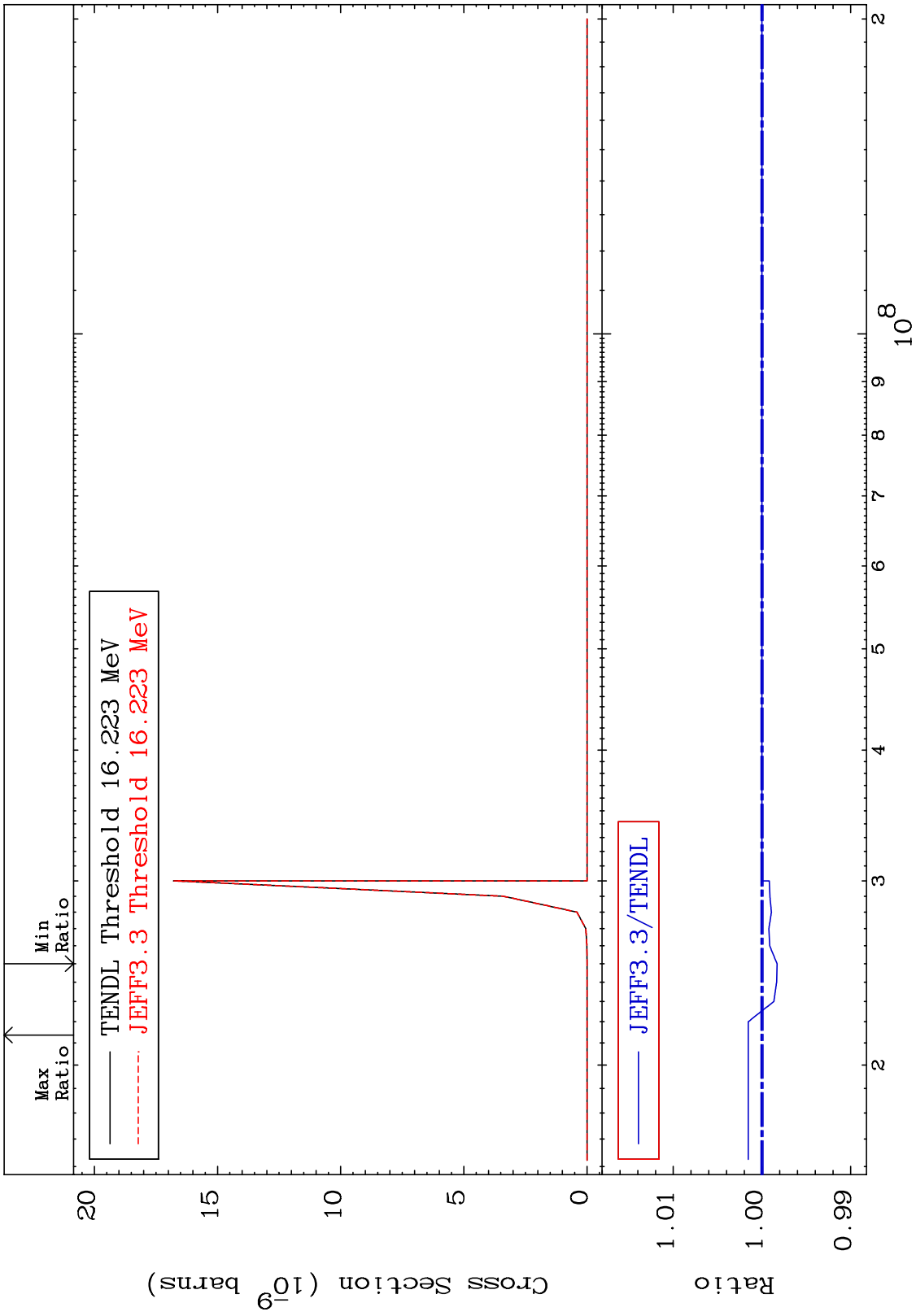
MAT 6849

(n,3n) p  
Cross Section

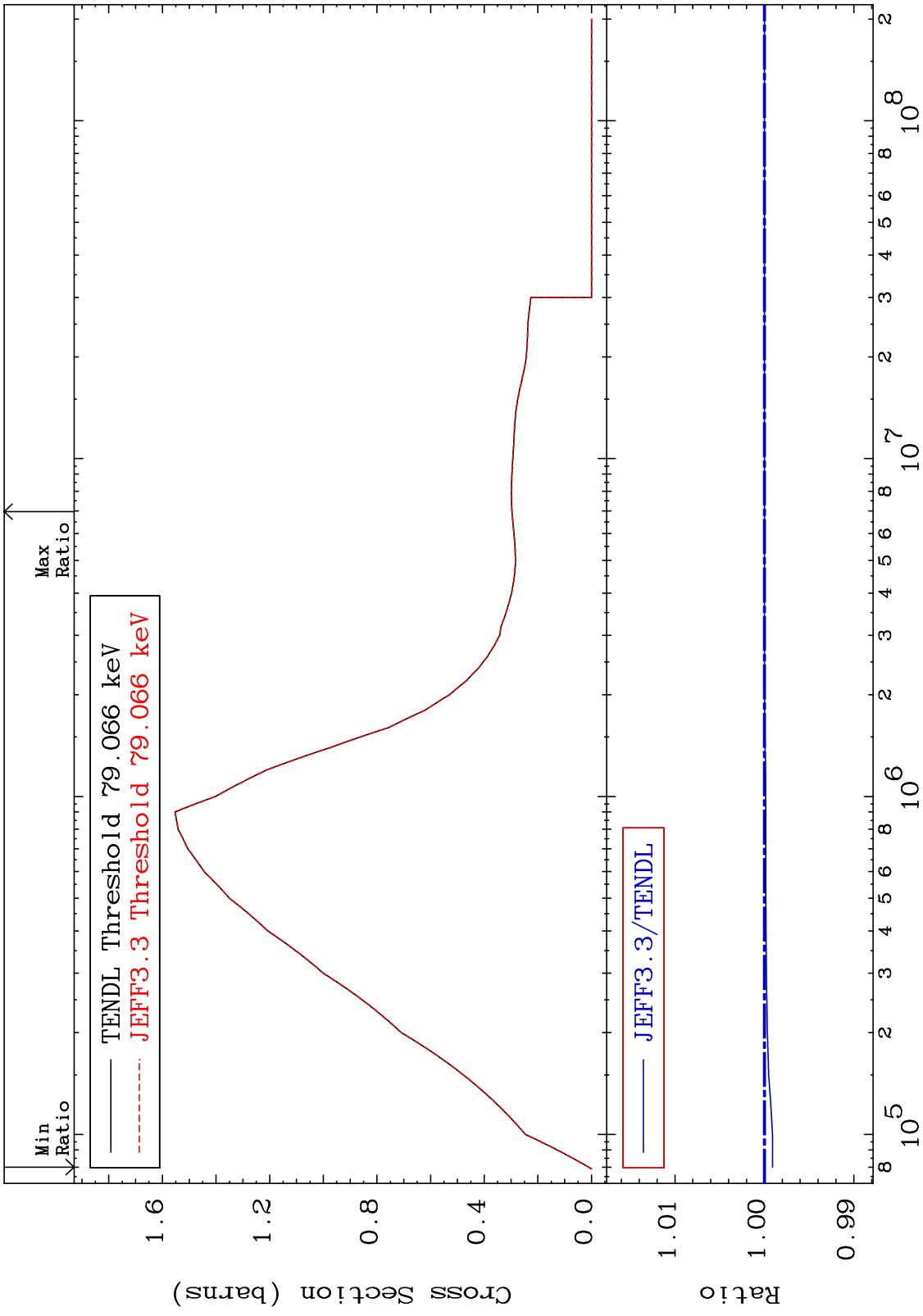
68-Er-170  
-0.488 To 0.000 %



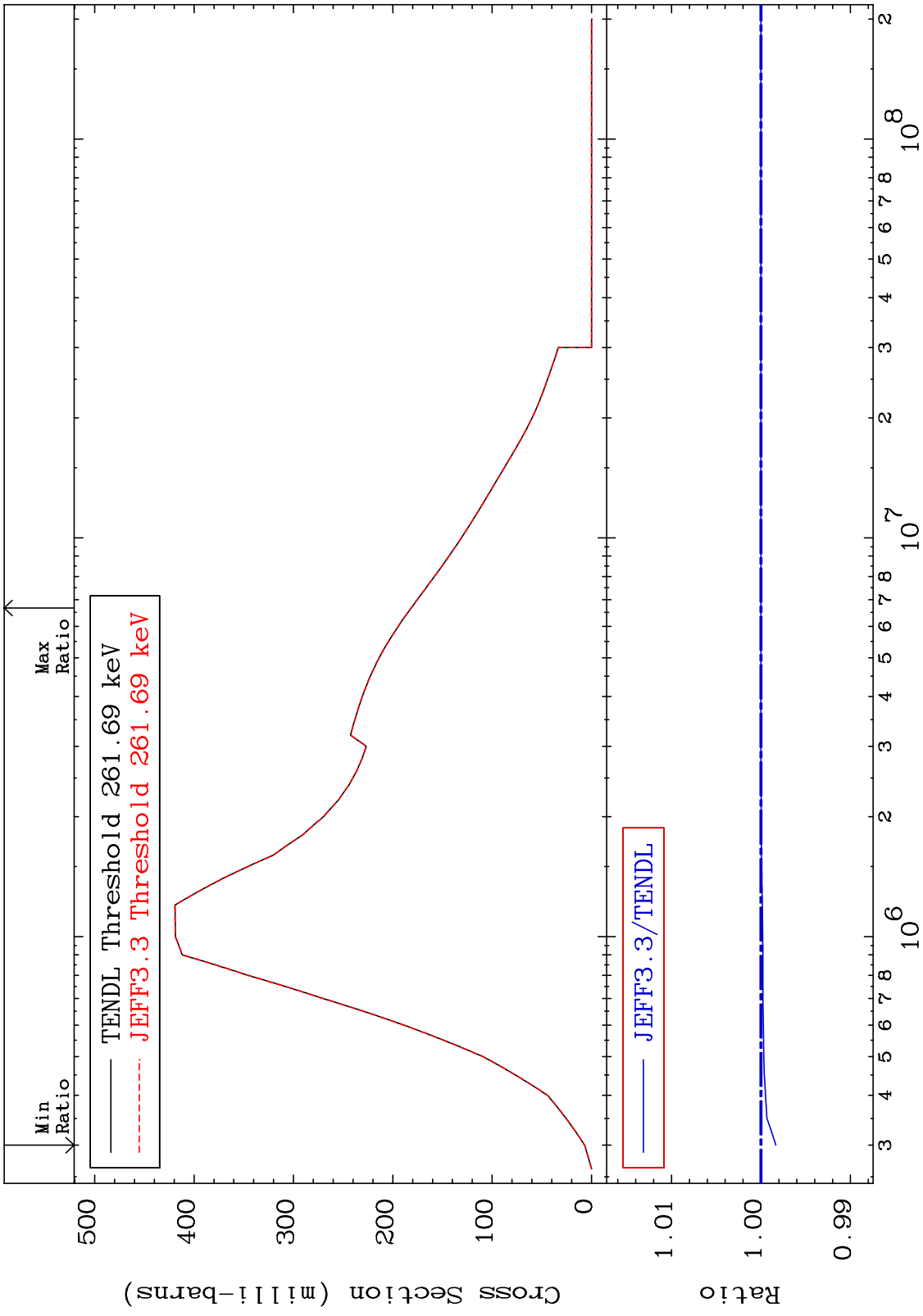
MAT 6849 (n,2n) p 68-Er-170  
 Cross Section -0.169 To 0.155 %



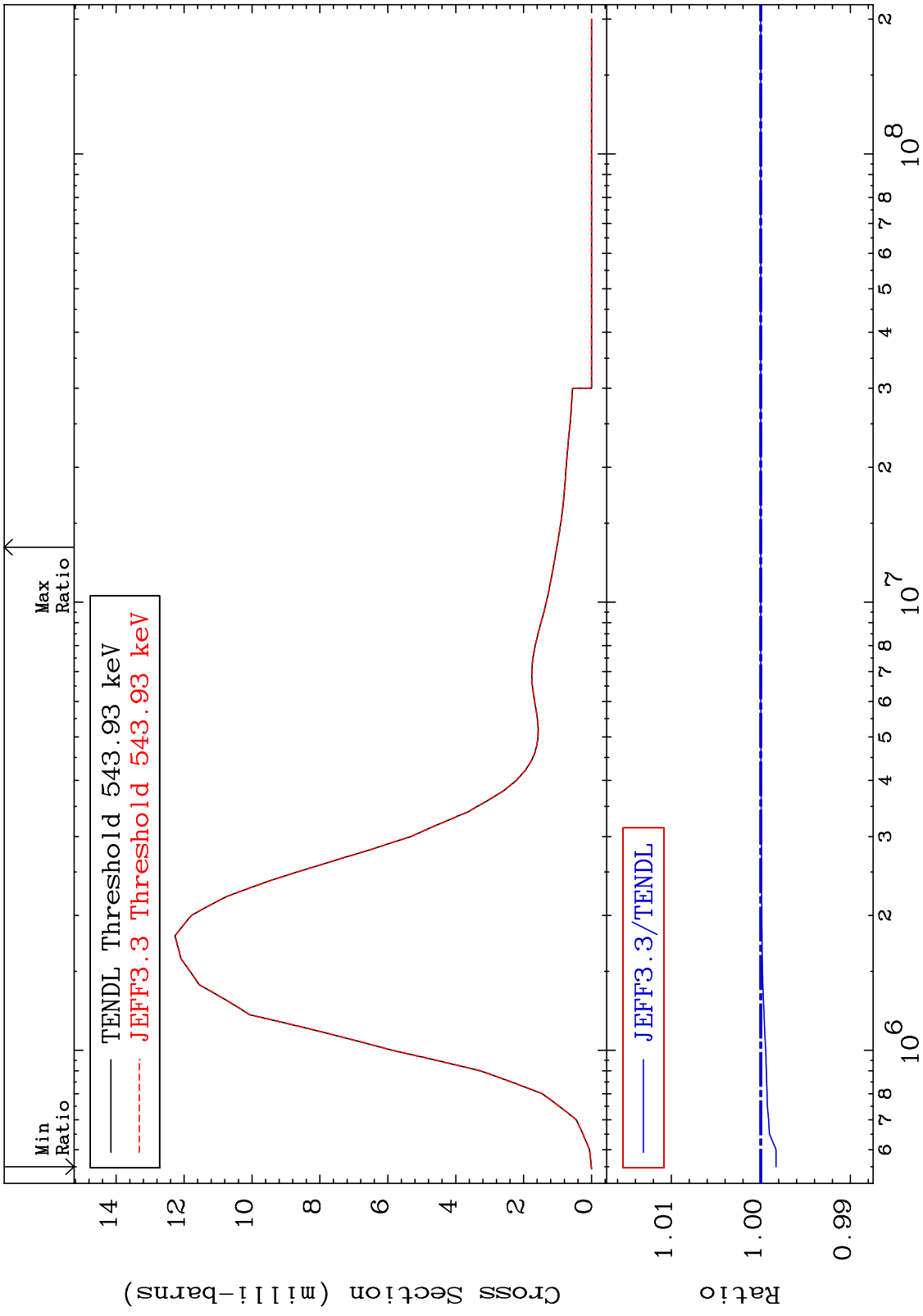
MAT 6849      MT= 51 (n,n') Level      68-Er-170  
 Cross Section      -0.090 To 0.000 %



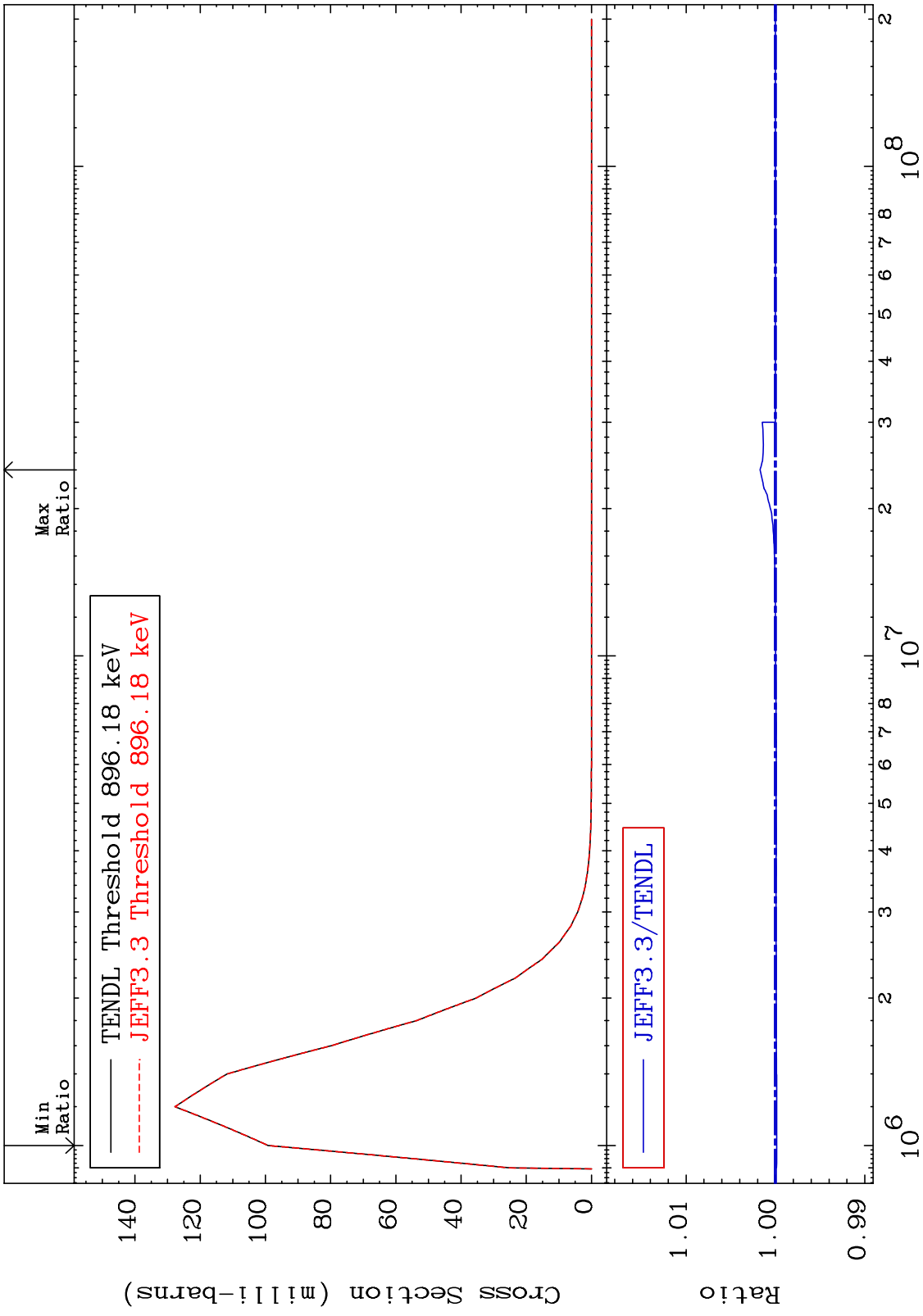
MAT 6849      MT= 52 (n,n') Level      68-Er-170  
 Cross Section      -0.167 To 0.000 %



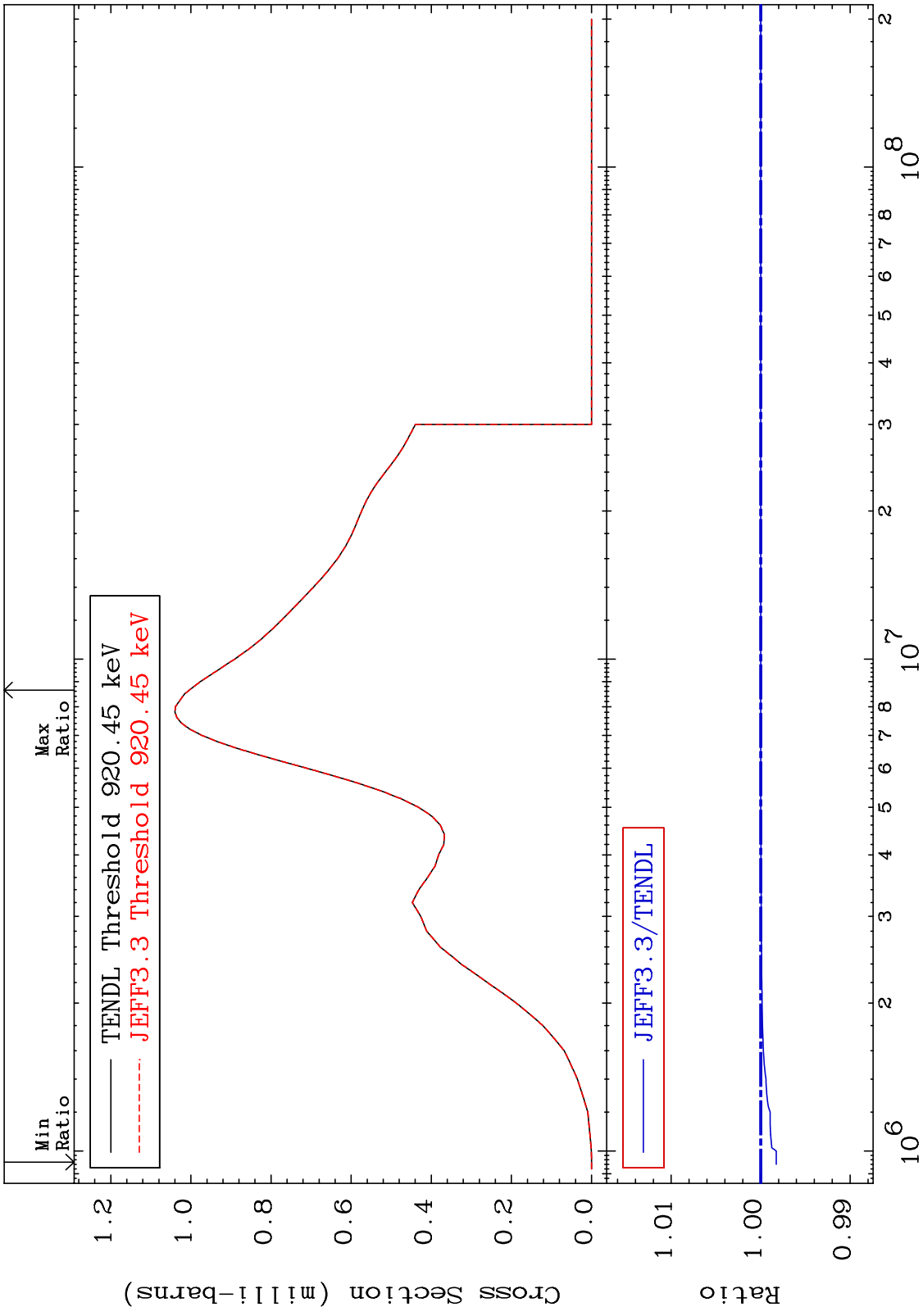
MAT 6849 MT= 53 (n,n') Level Cross Section 68-Er-170  
 -0.171 To 0.000 %



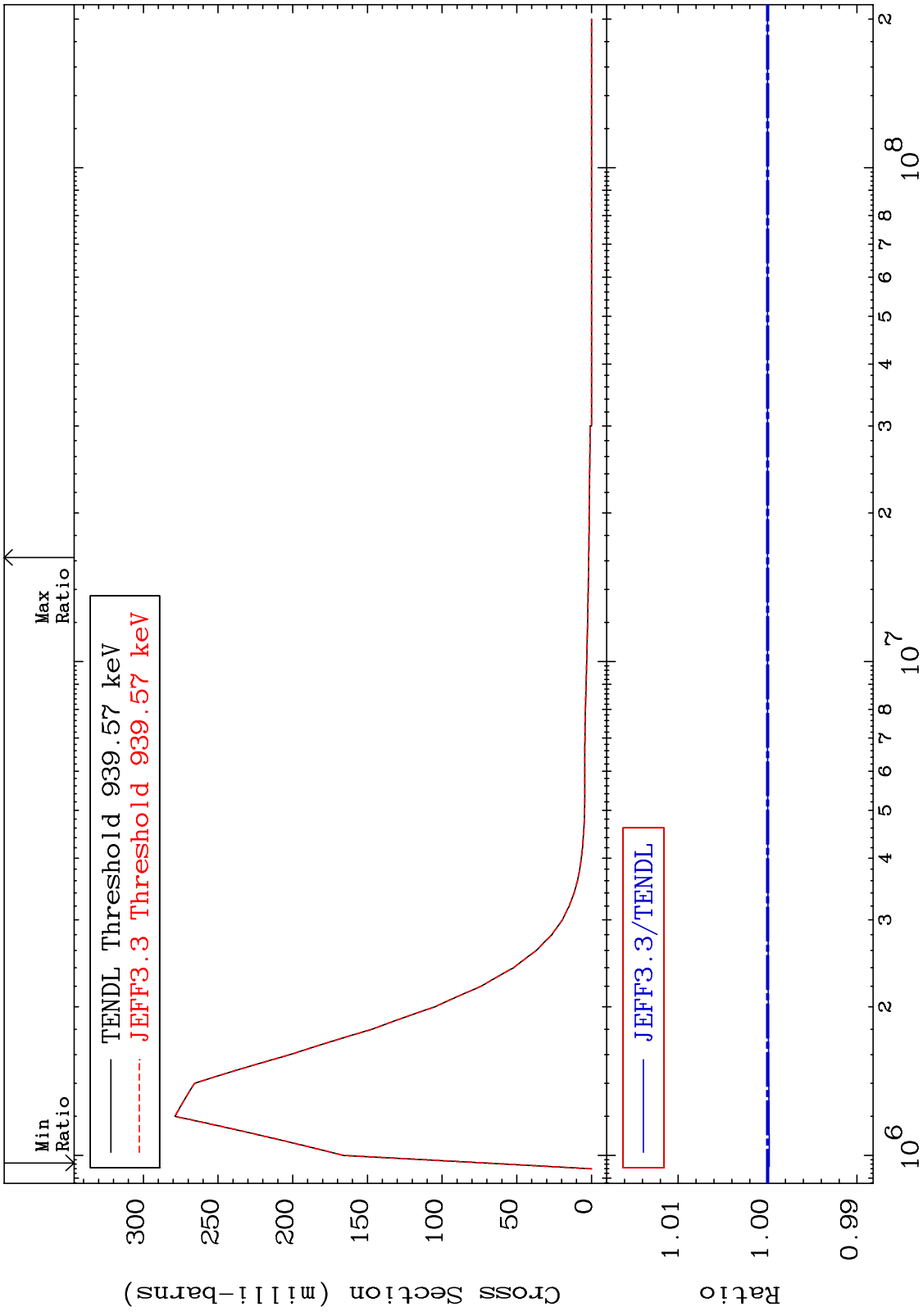
MAT 6849 MT= 54 (n,n') Level Cross Section 68-Er-170 -0.015 To 0.172 %



MAT 6849      MT= 55 (n,n') Level      68-Er-170  
 Cross Section      -0.174 To 0.000 %

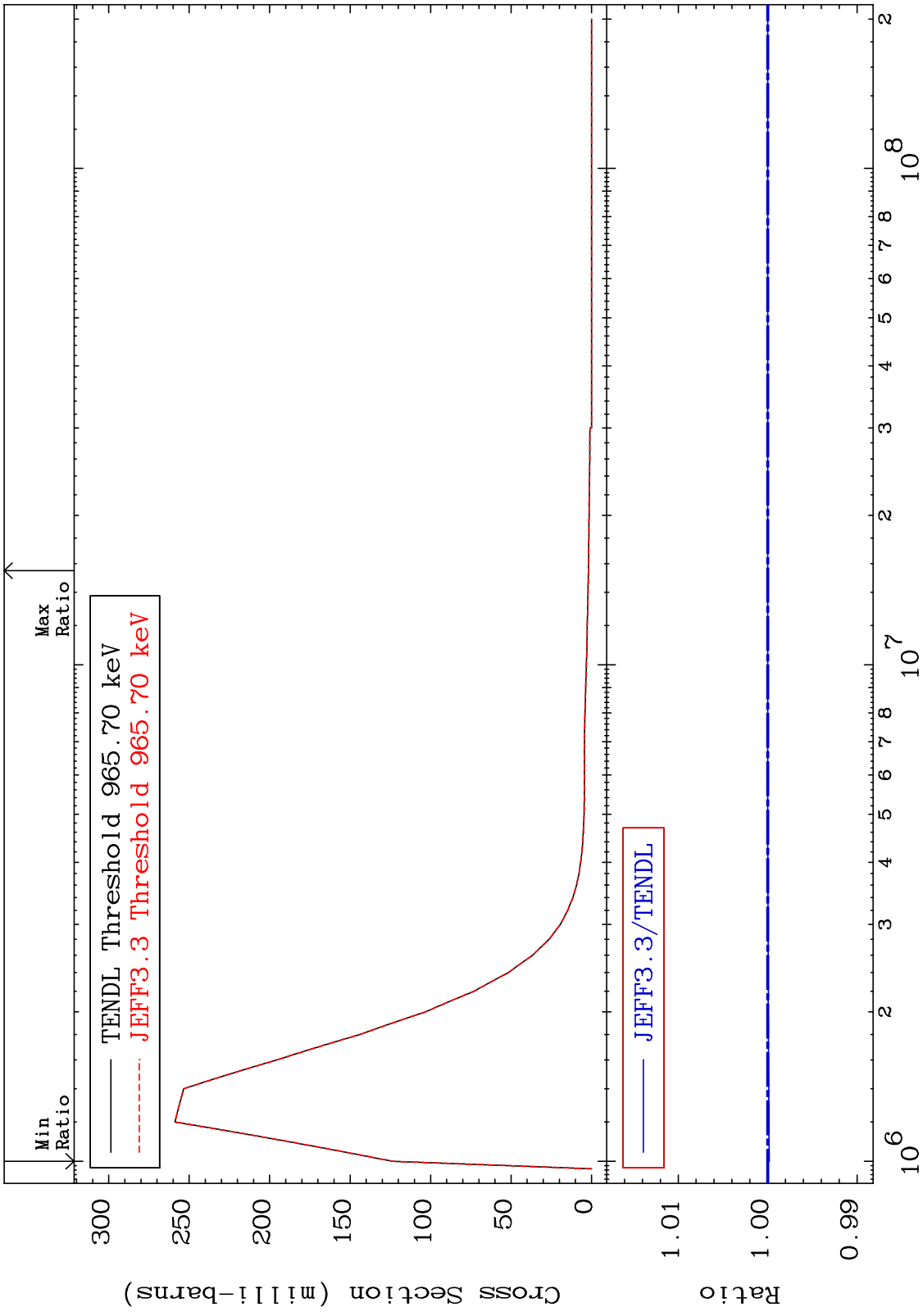


MAT 6849      MT= 56 (n,n') Level      68-Er-170  
 Cross Section      -0.019 To 0.000 %

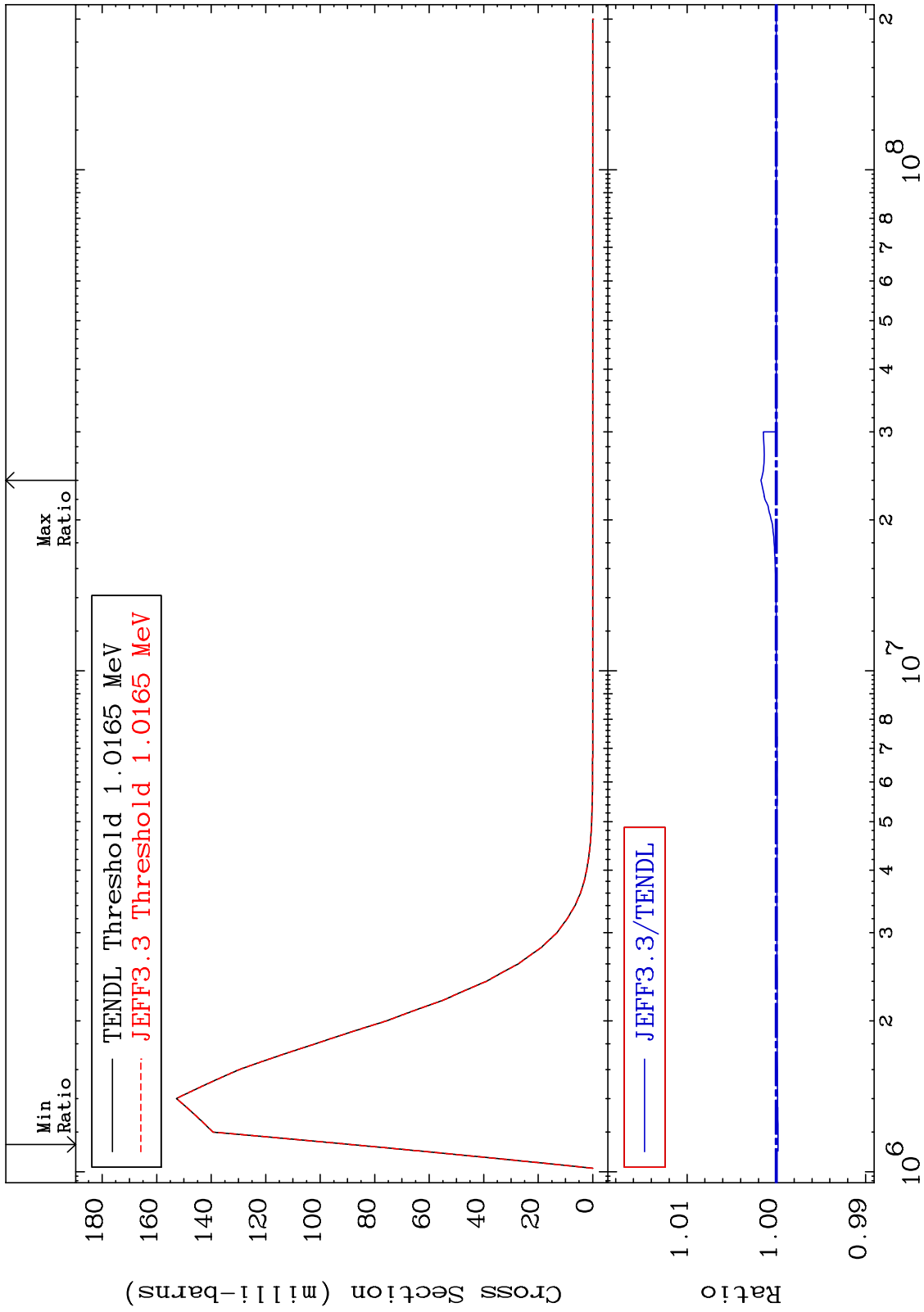




MAT 6849      MT= 57 (n,n') Level      68-Er-170  
 Cross Section      -0.018 To 0.000 %

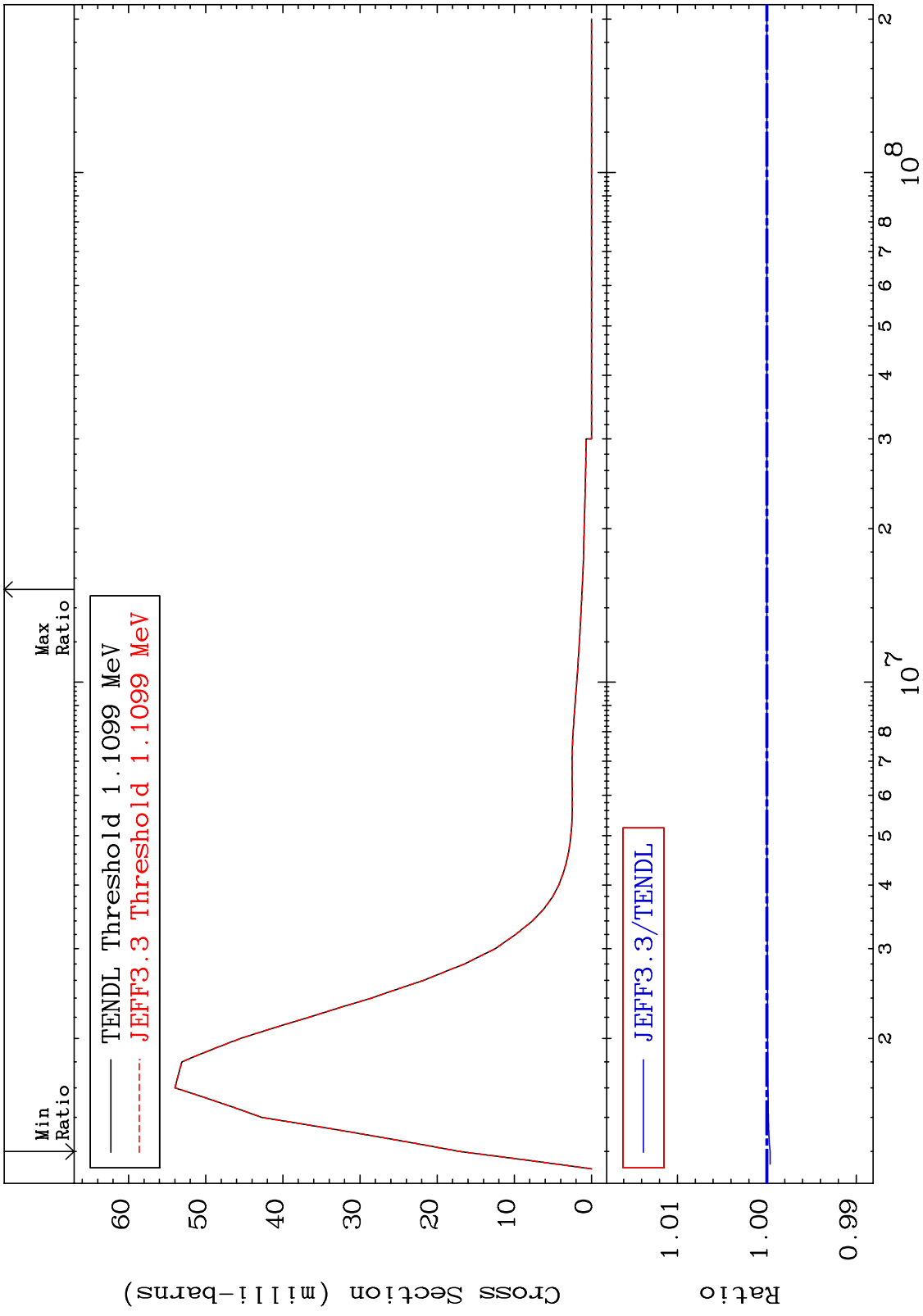


MAT 6849 MT= 58 (n,n') Level Cross Section 68-Er-170  
 -0.019 To 0.171 %

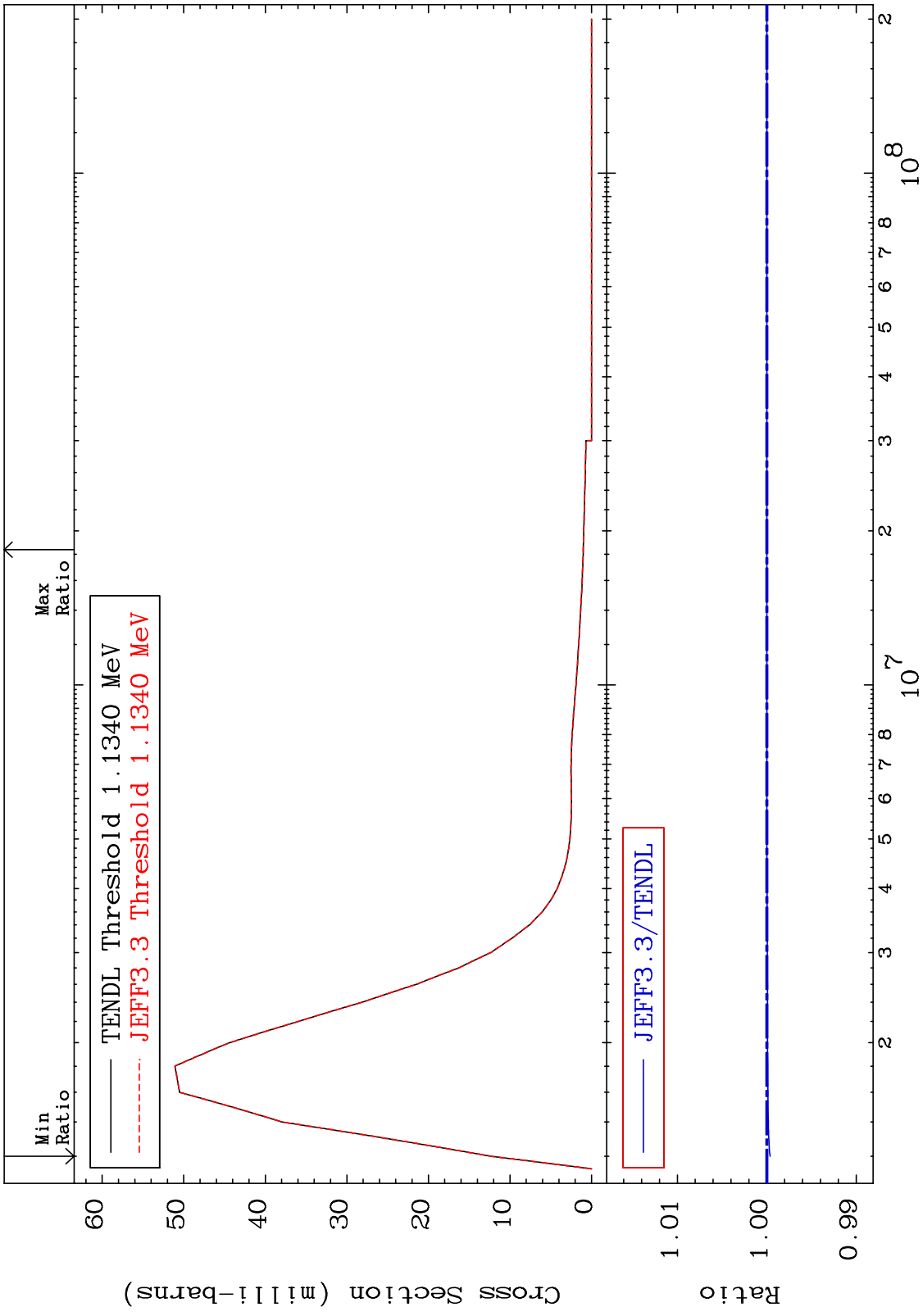


25 Incident Energy (eV) 68-Er-170

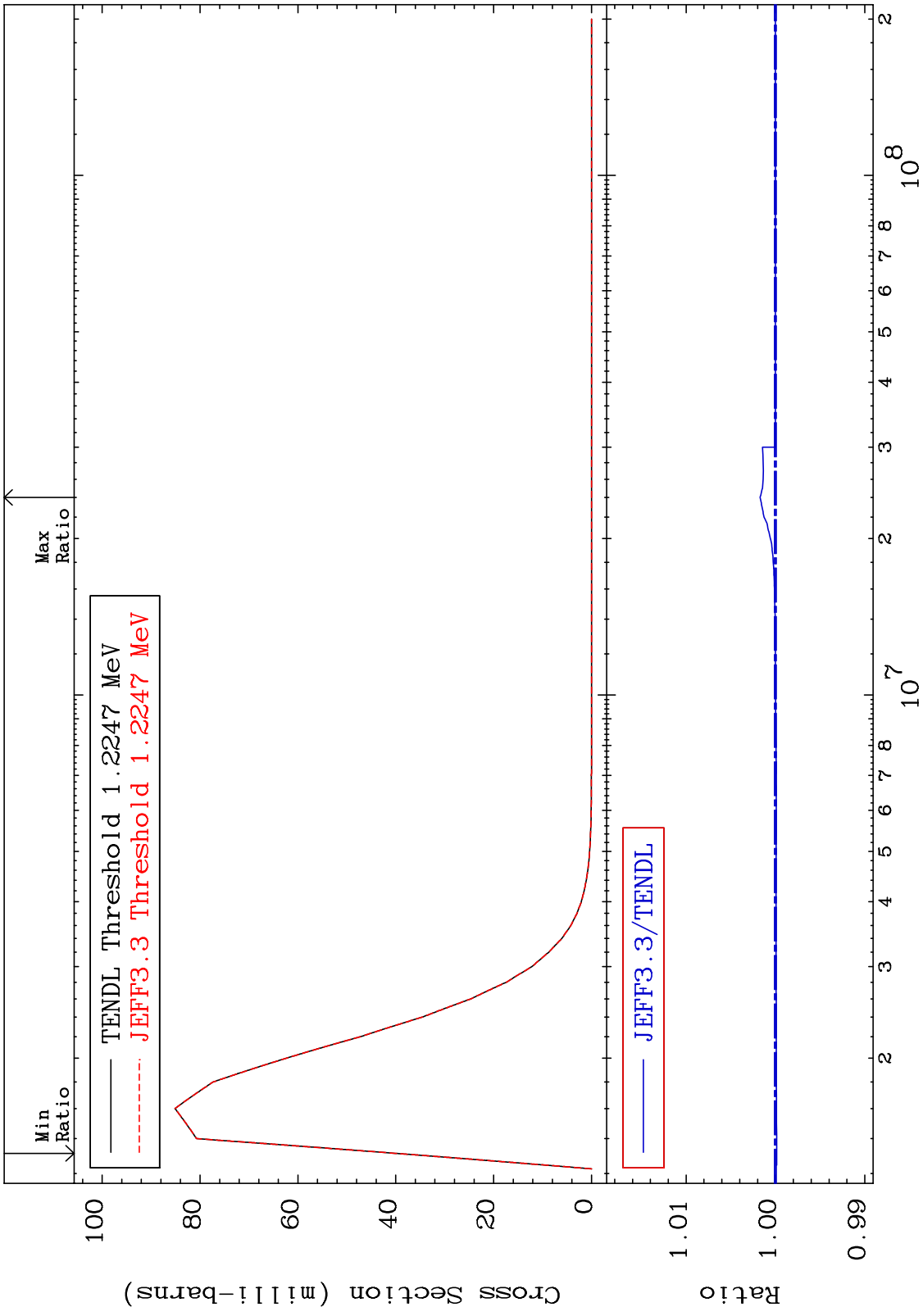
MAT 6849      MT= 59 (n,n') Level Cross Section      68-Er-170  
 -0.036 To 0.000 %



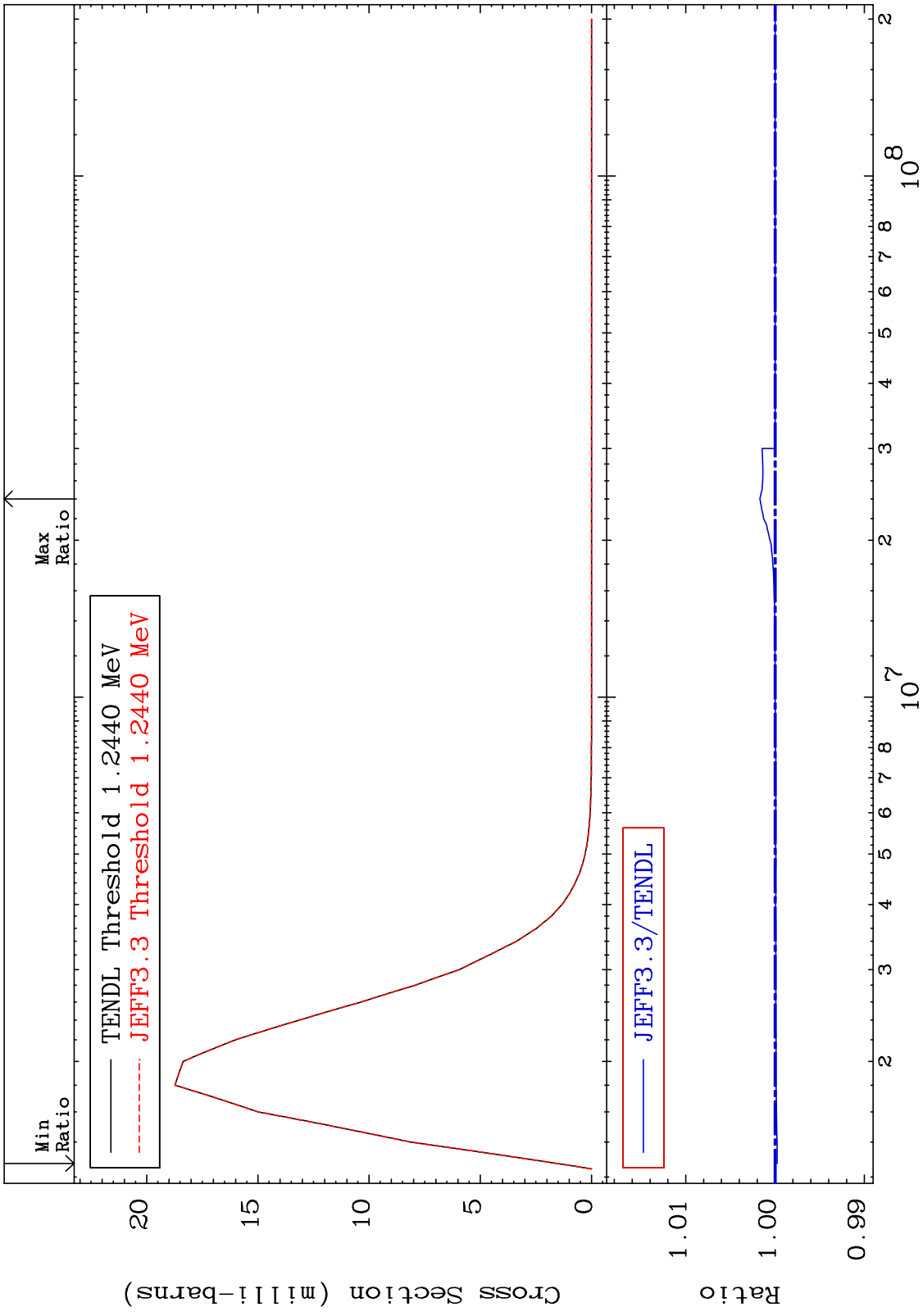
MAT 6849 MT= 60 (n,n') Level Cross Section 68-Er-170 -0.037 To 0.000 %



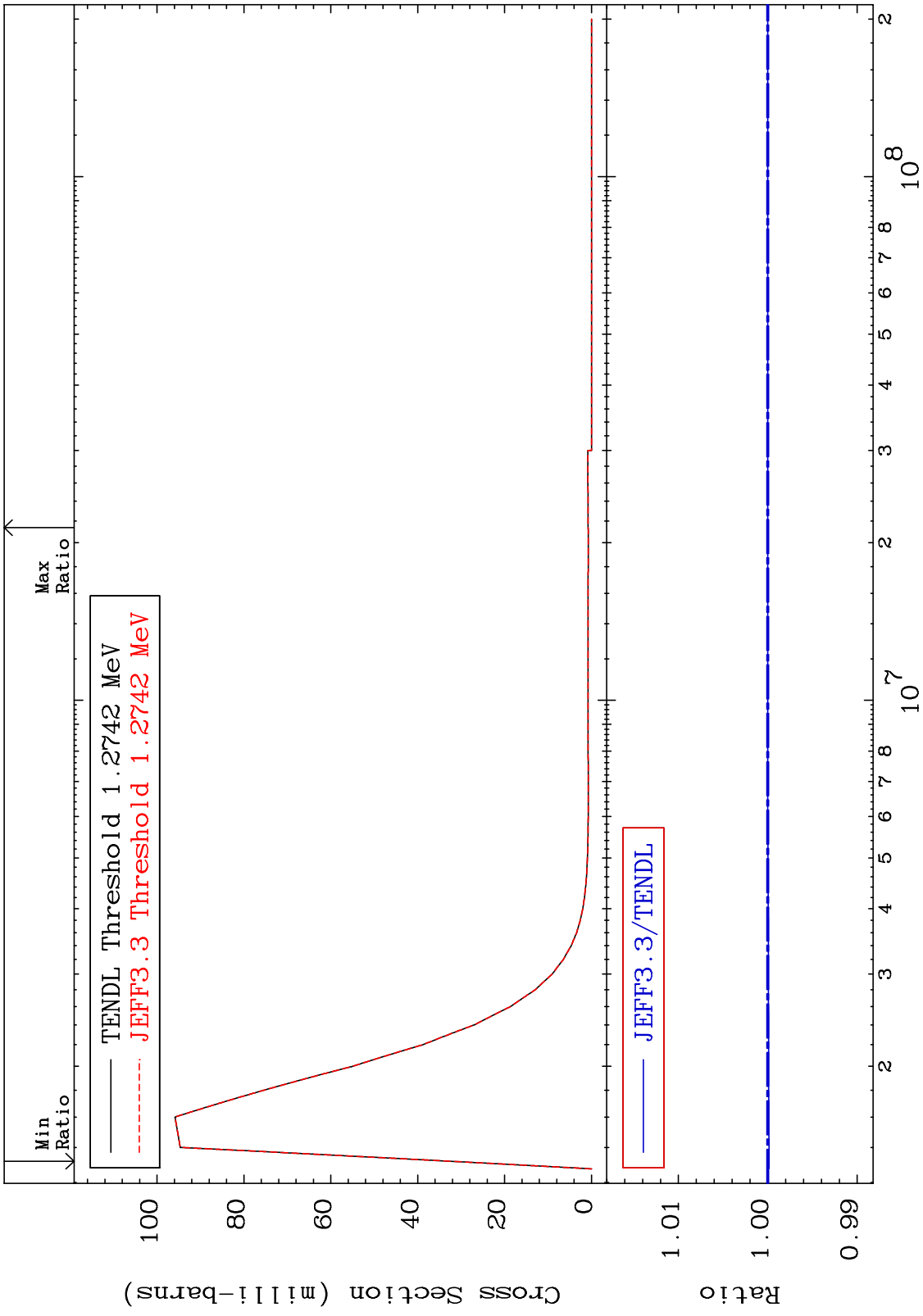
MAT 6849 MT= 61 (n,n') Level Cross Section 68-Er-170  
 -0.014 To 0.171 %



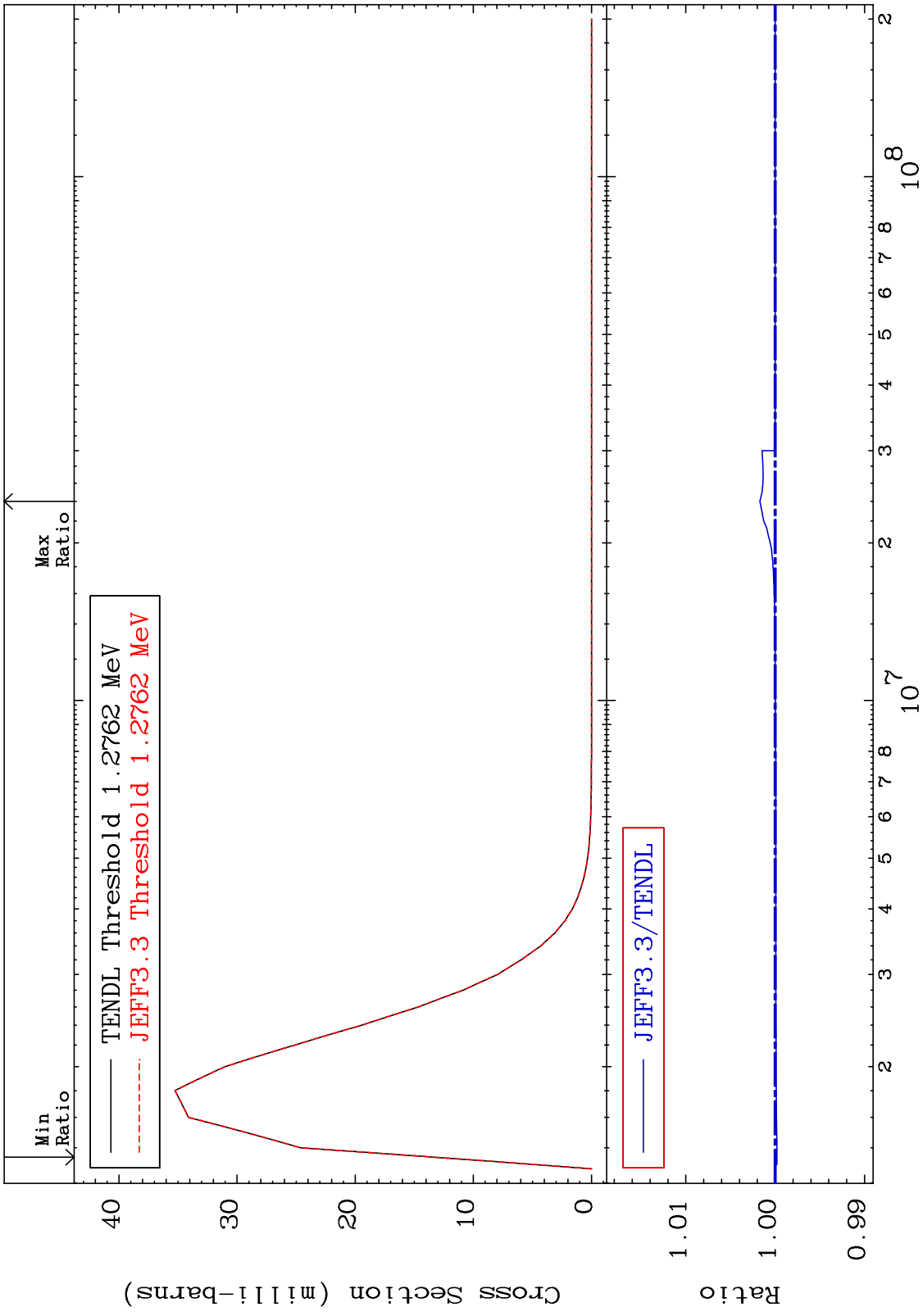
MAT 6849      MT= 62 (n,n') Level Cross Section      68-Er-170  
 -0.022 To 0.171 %



MAT 6849 MT= 63 (n, n') Level Cross Section 68-Er-170  
 -0.014 To 0.000 %

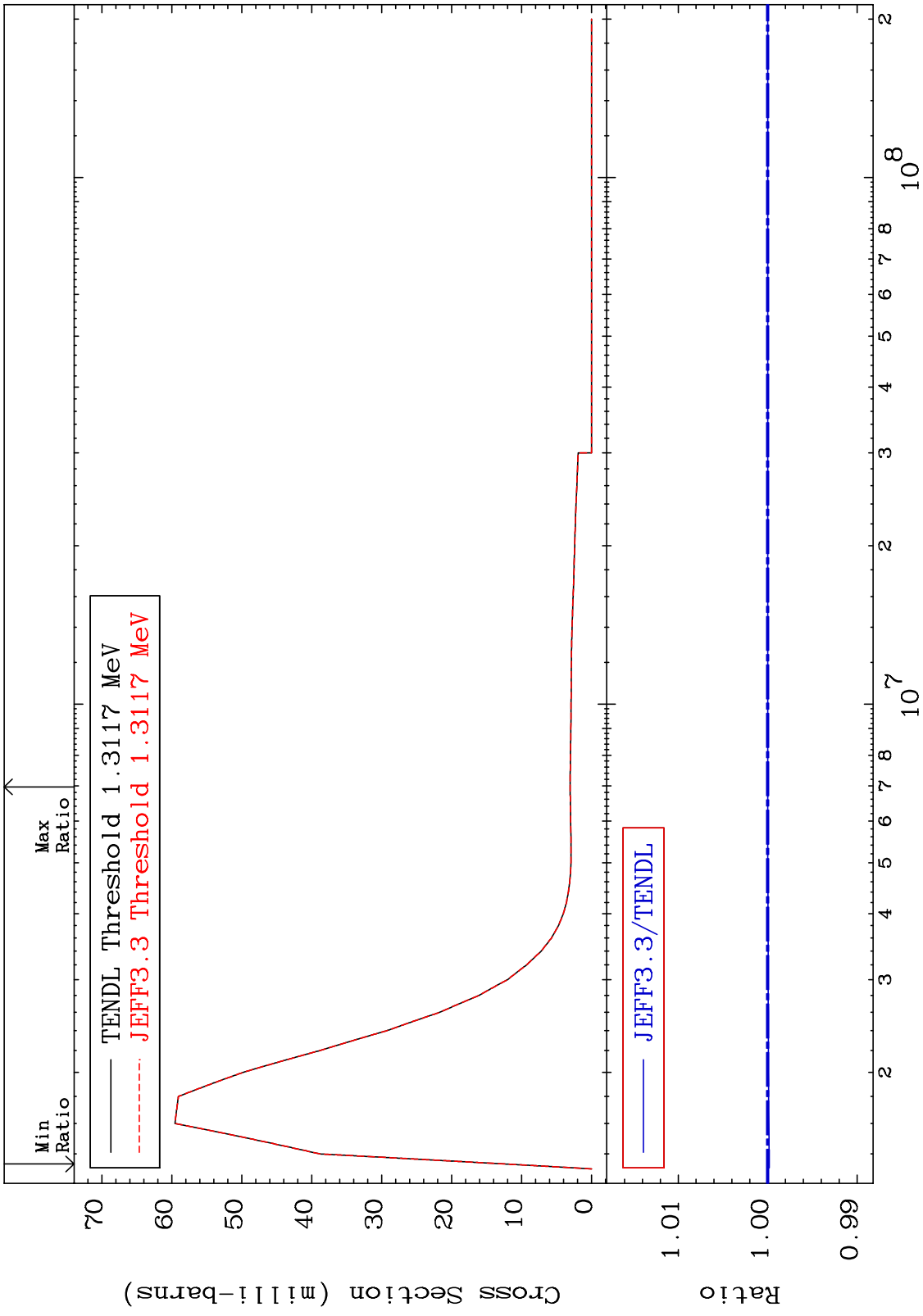


MAT 6849 MT= 64 (n, n') Level Cross Section 68-Er-170  
 -0.020 To 0.171 %

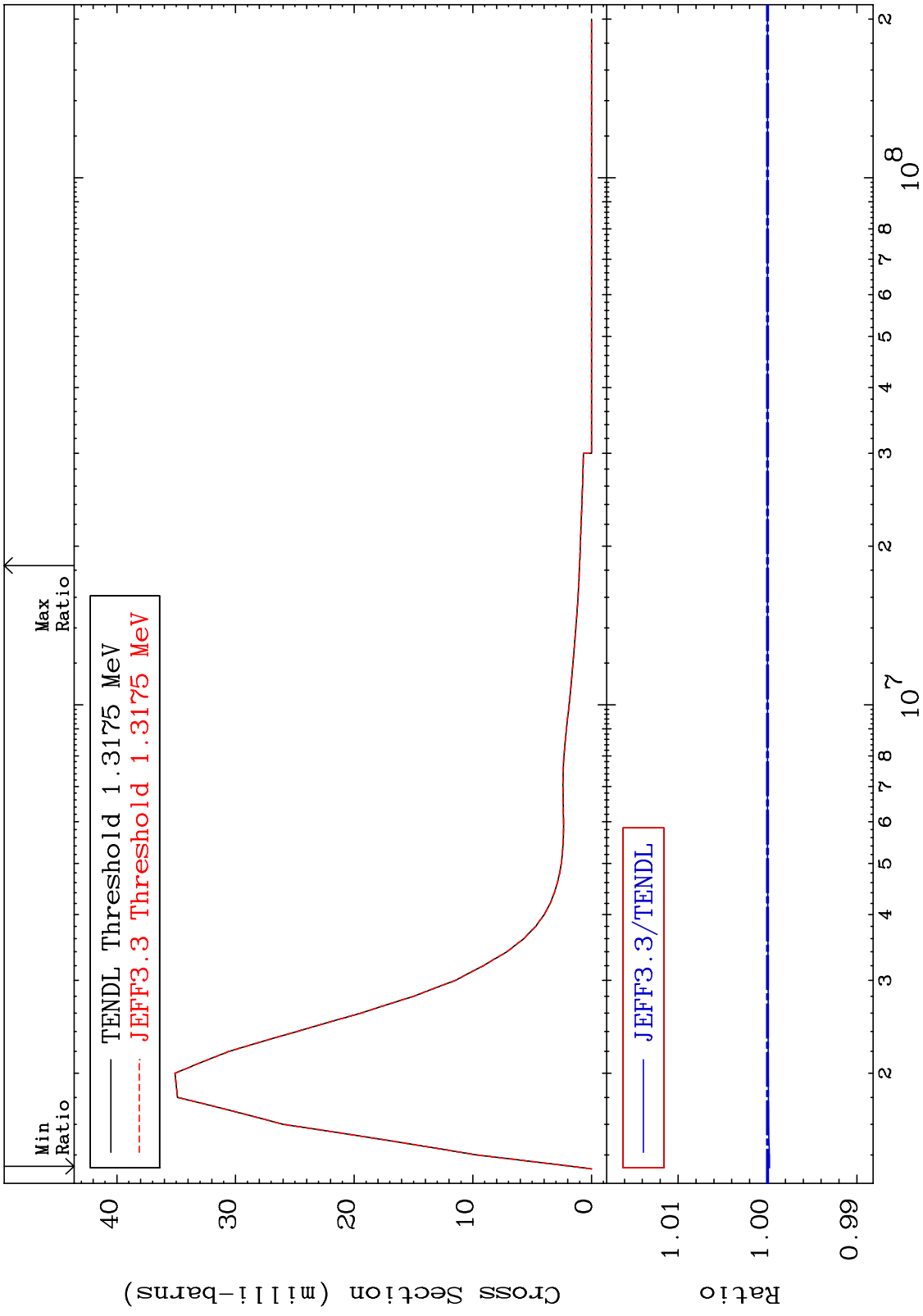




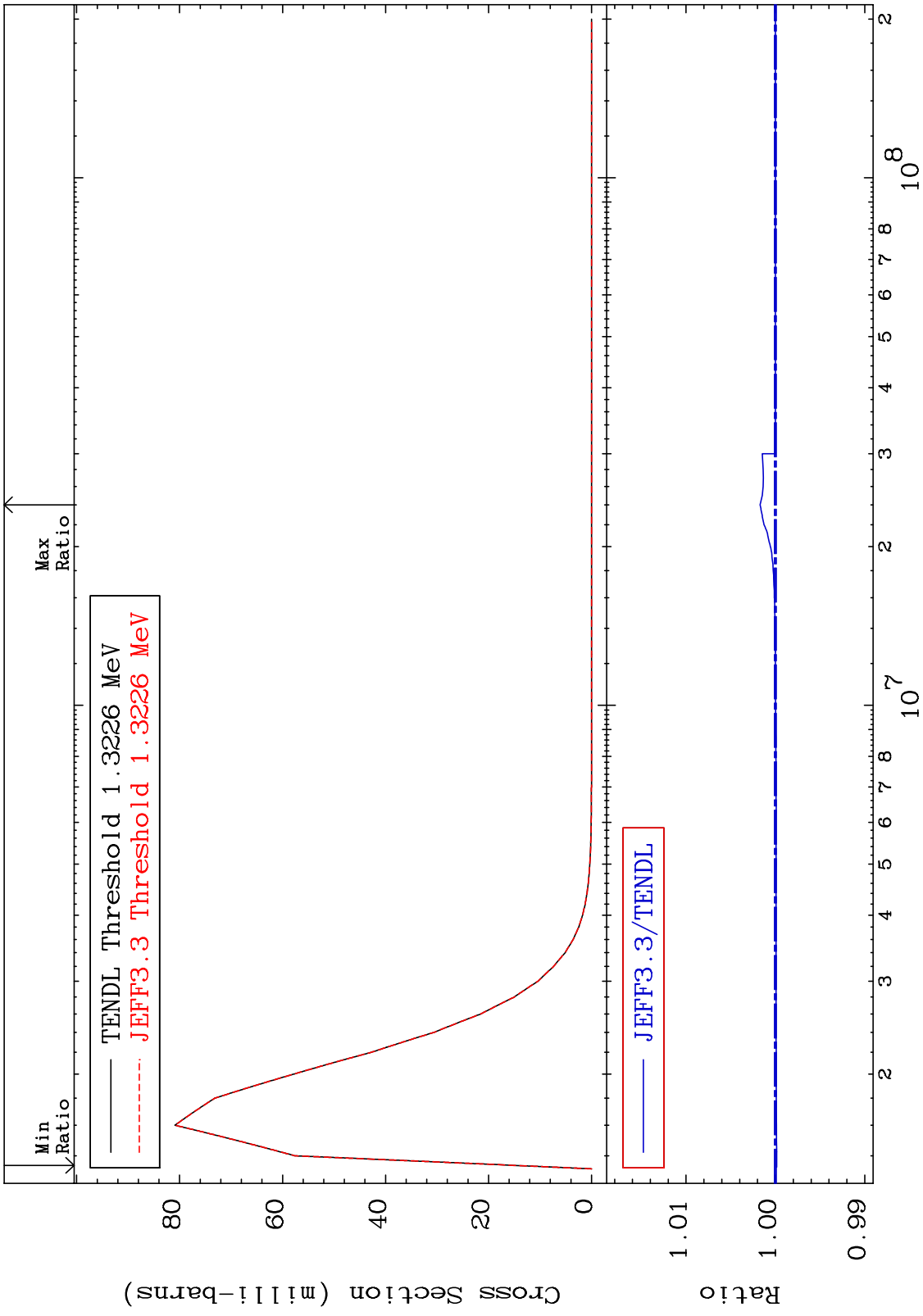
MAT 6849 MT= 65 (n,n') Level Cross Section 68-Er-170  
 -0.018 To 0.000 %



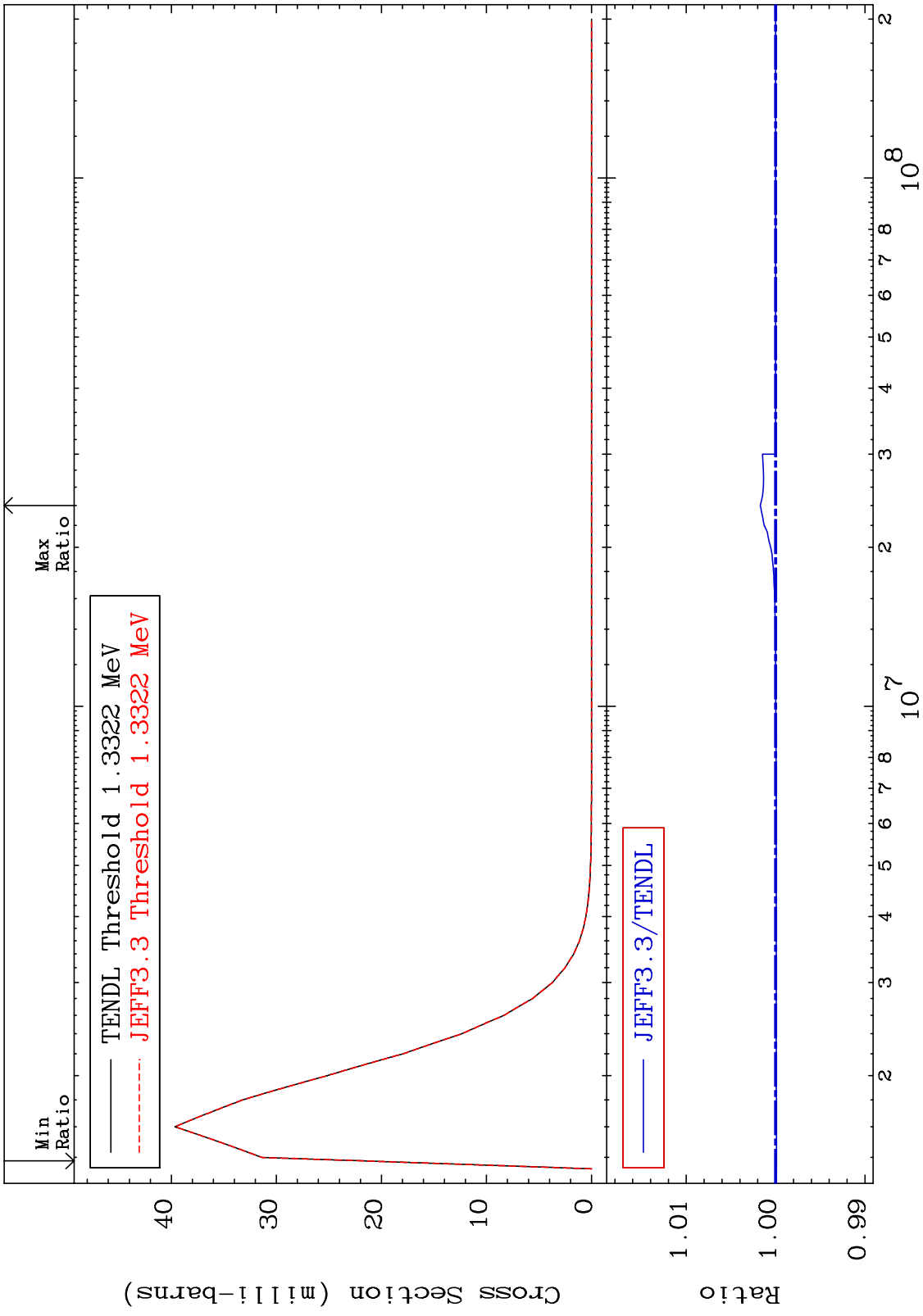
MAT 6849      MT= 66 (n,n') Level      68-Er-170  
 Cross Section      -0.021 To 0.000 %



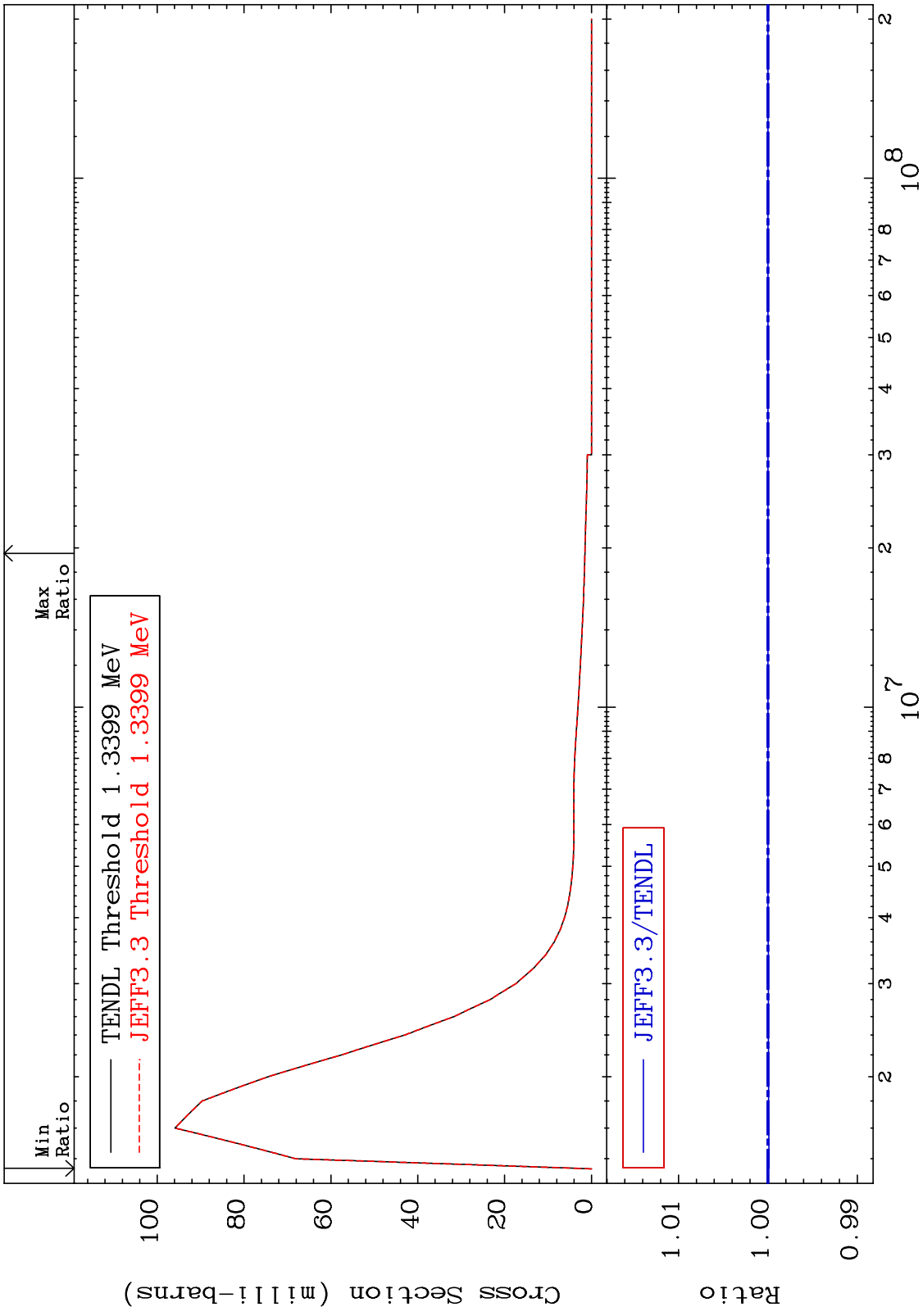
MAT 6849 MT= 67 (n,n') Level Cross Section 68-Er-170  
 -0.015 To 0.171 %



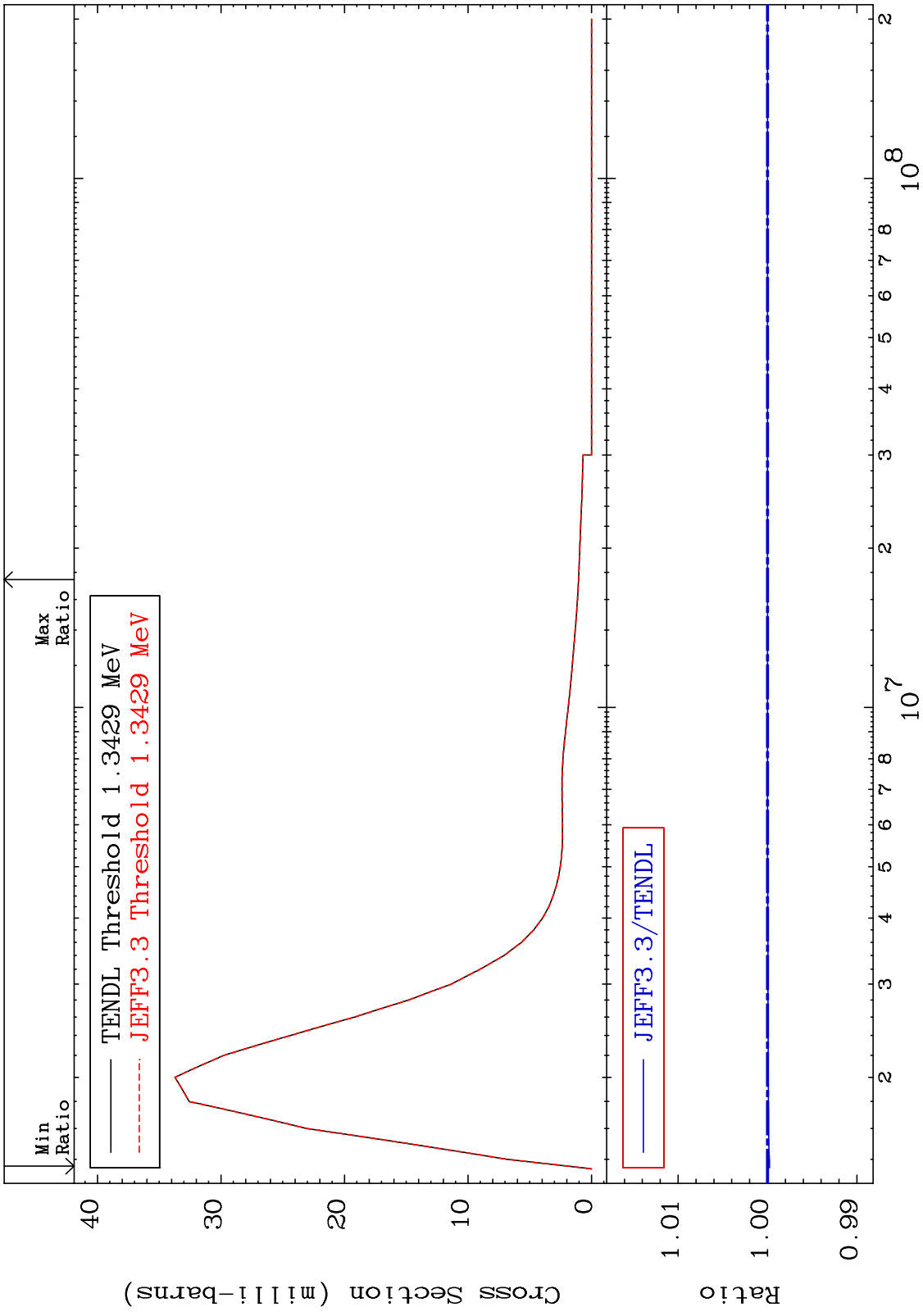
MAT 6849 MT= 68 (n,n') Level Cross Section 68-Er-170  
 -0.011 To 0.171 %



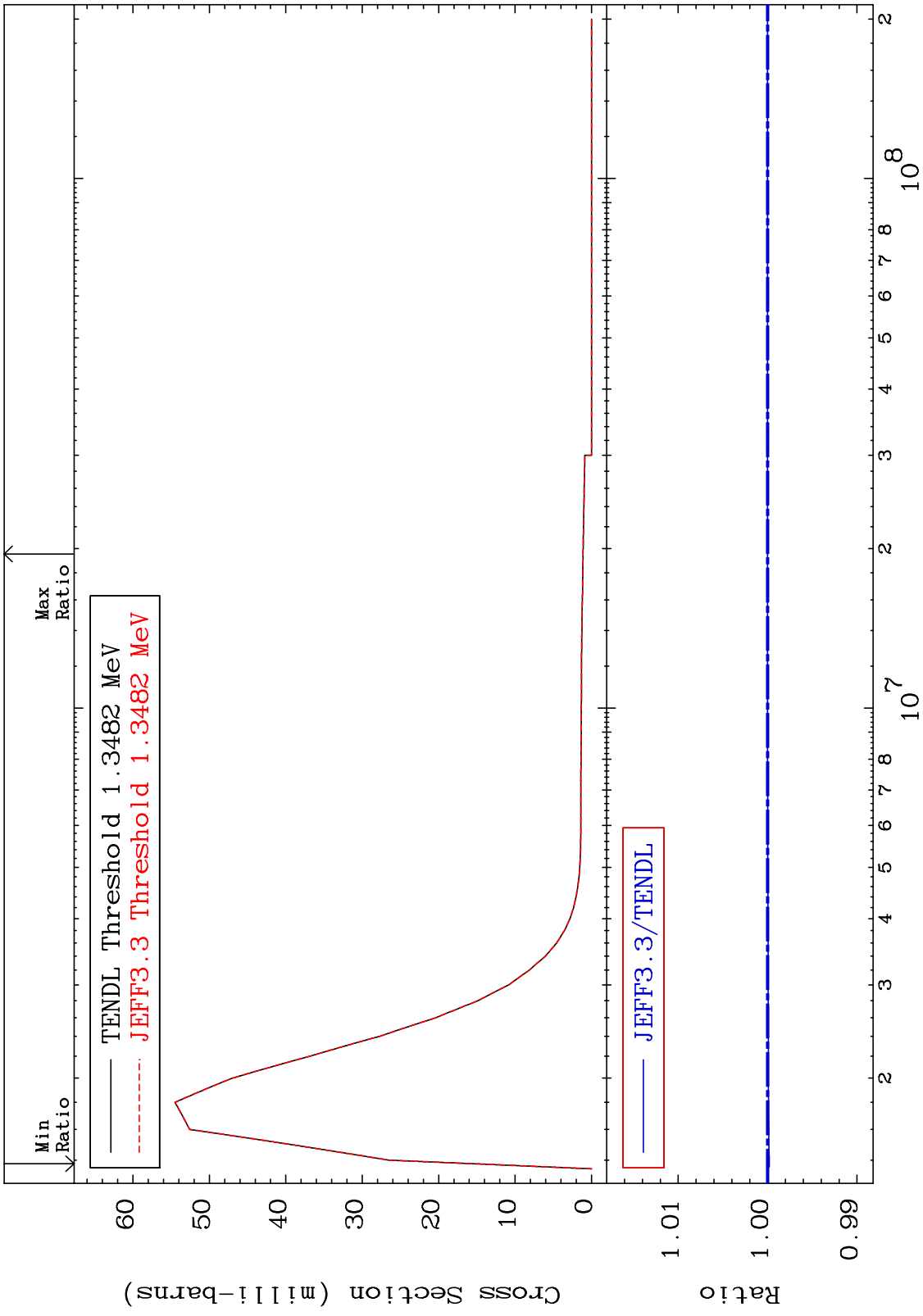
MAT 6849 MT= 69 (n, n') Level Cross Section 68-Er-170  
 -0.012 To 0.000 %



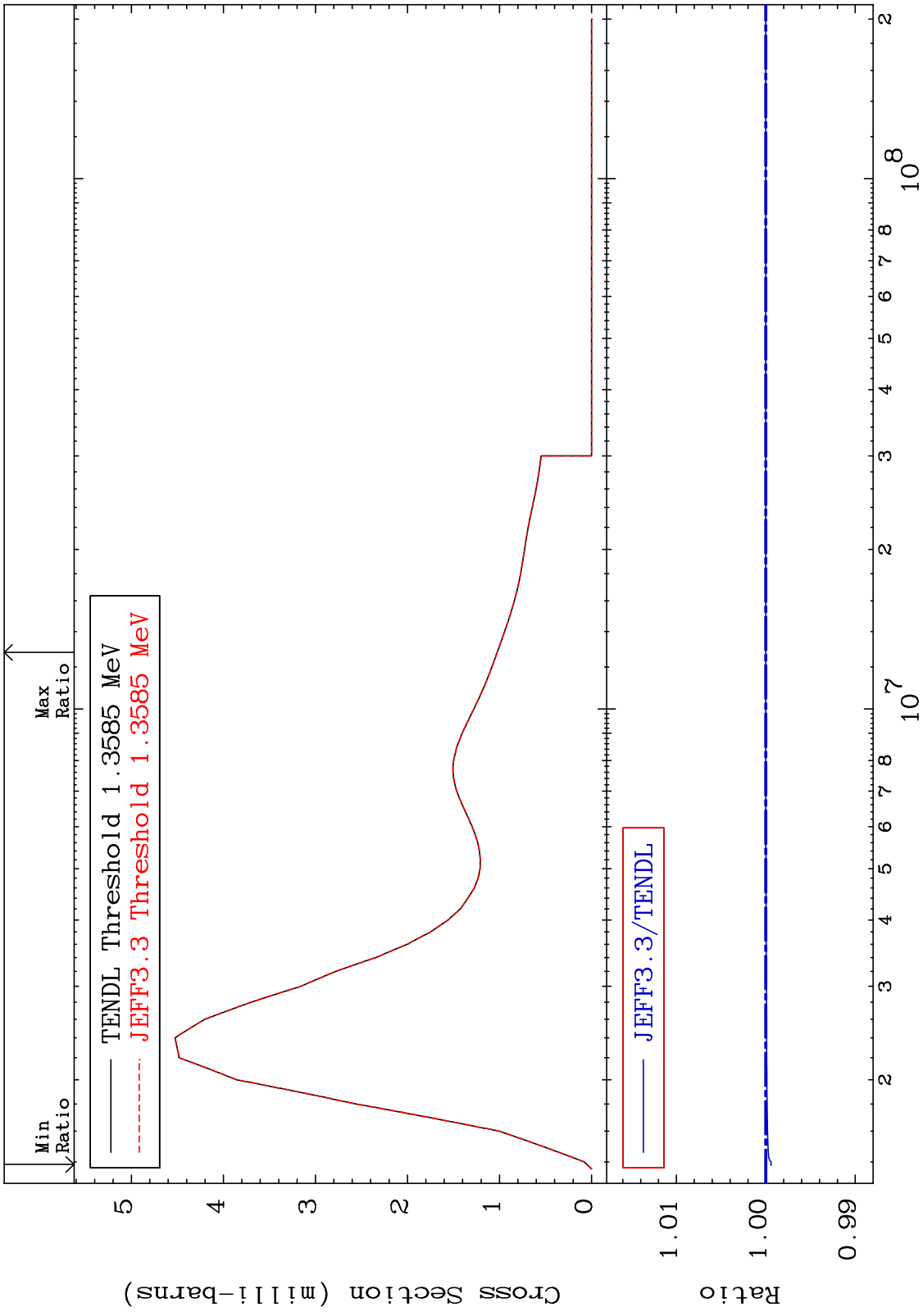
MAT 6849 MT= 70 (n,n') Level Cross Section 68-Er-170  
 -0.021 To 0.000 %



MAT 6849 MT= 71 (n,n') Level Cross Section 68-Er-170  
 -0.019 To 0.000 %

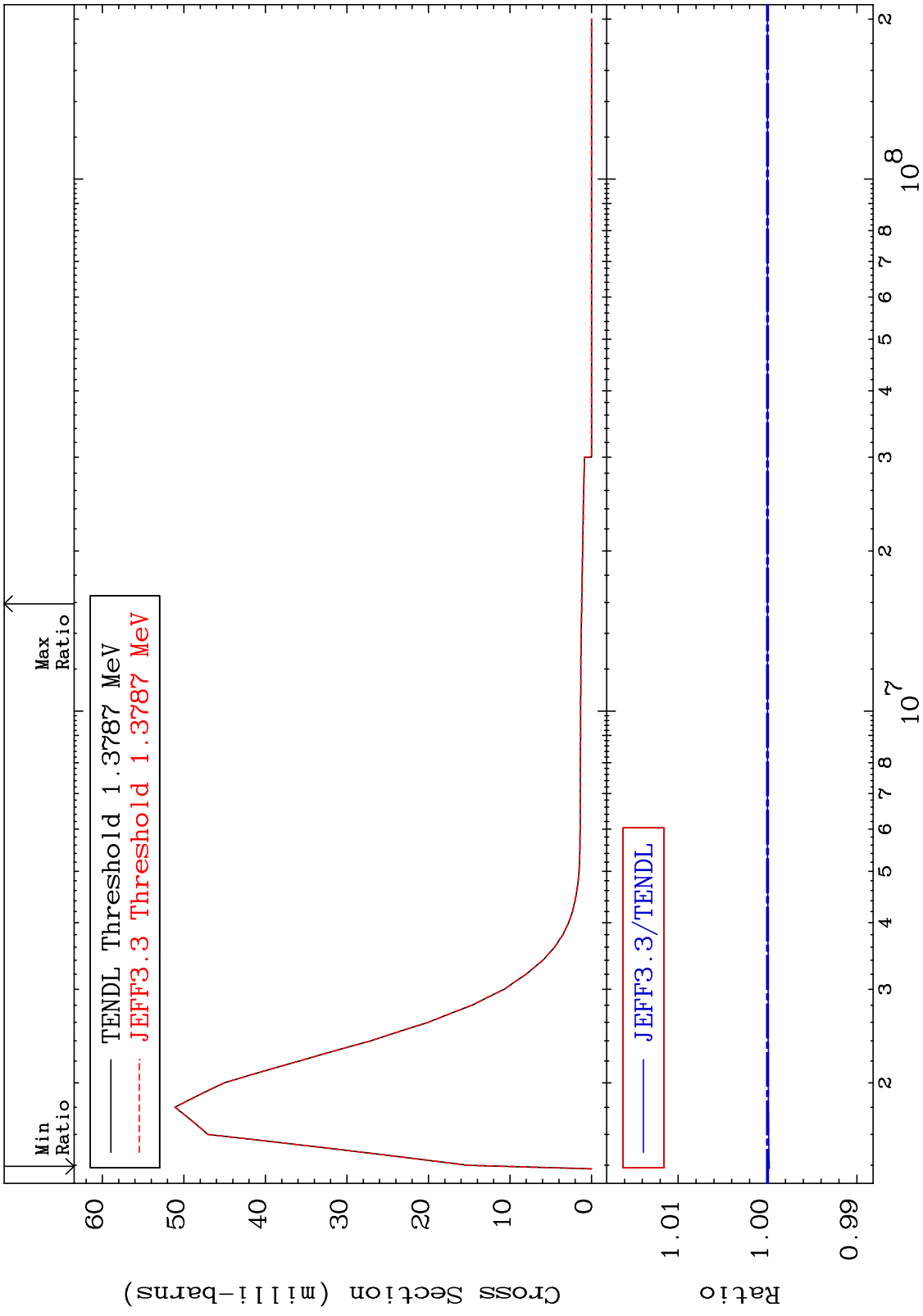


MAT 6849 MT= 72 (n,n') Level Cross Section 68-Er-170  
 -0.058 To 0.000 %

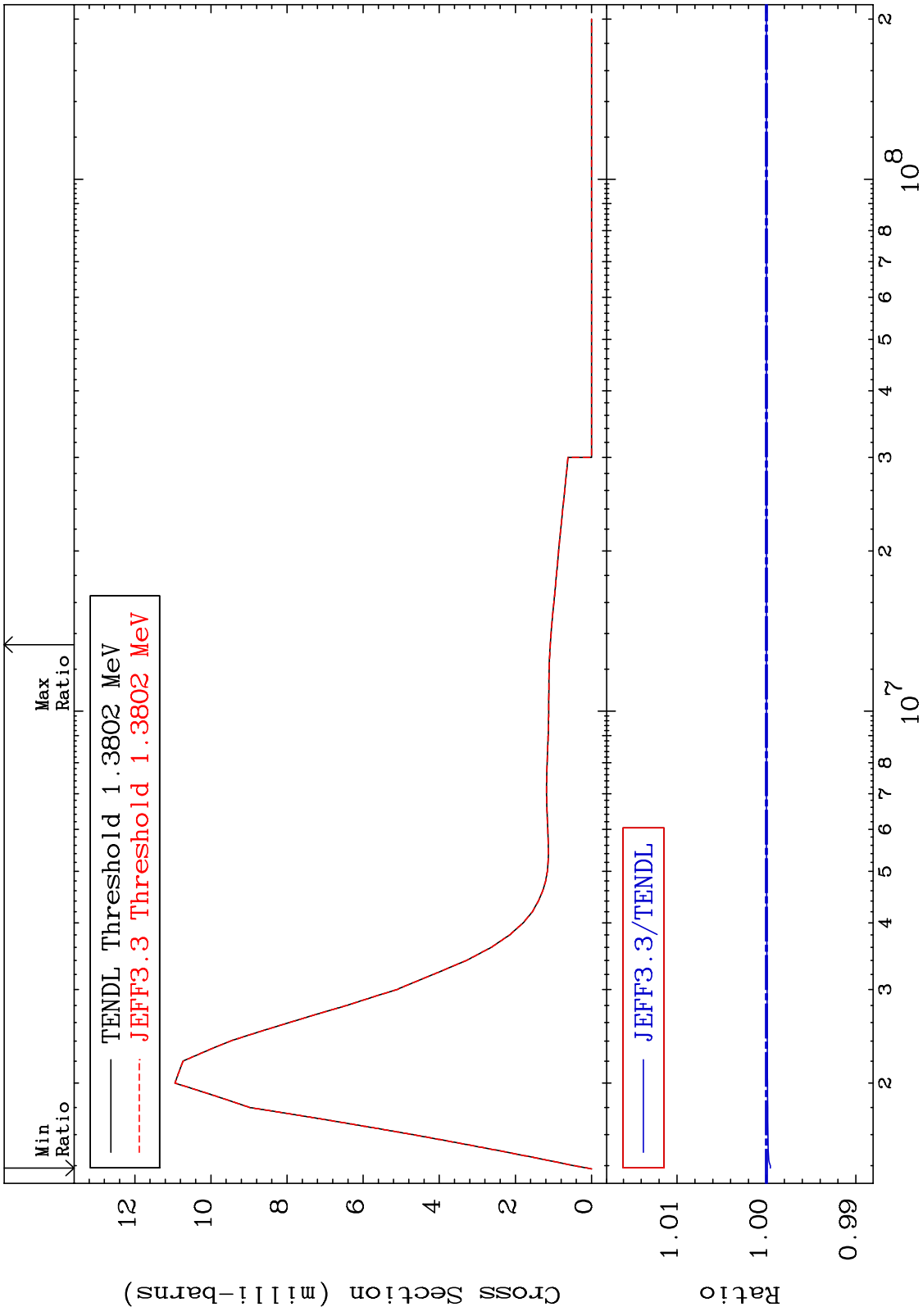




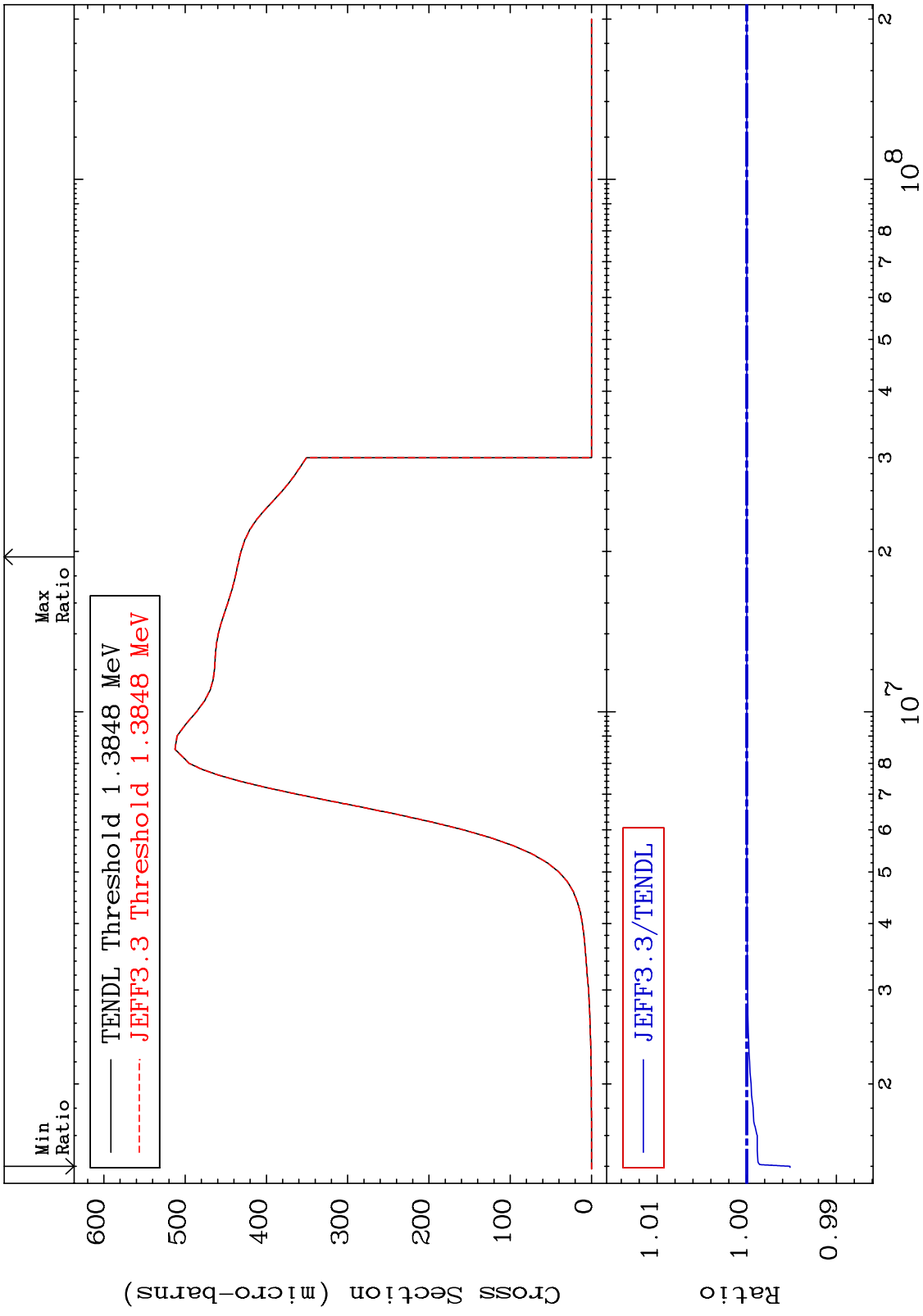
MAT 6849 MT= 73 (n,n') Level Cross Section 68-Er-170  
 -0.021 To 0.000 %



MAT 6849      MT= 74 (n,n') Level Cross Section      68-Er-170  
 -0.045 To 0.000 %



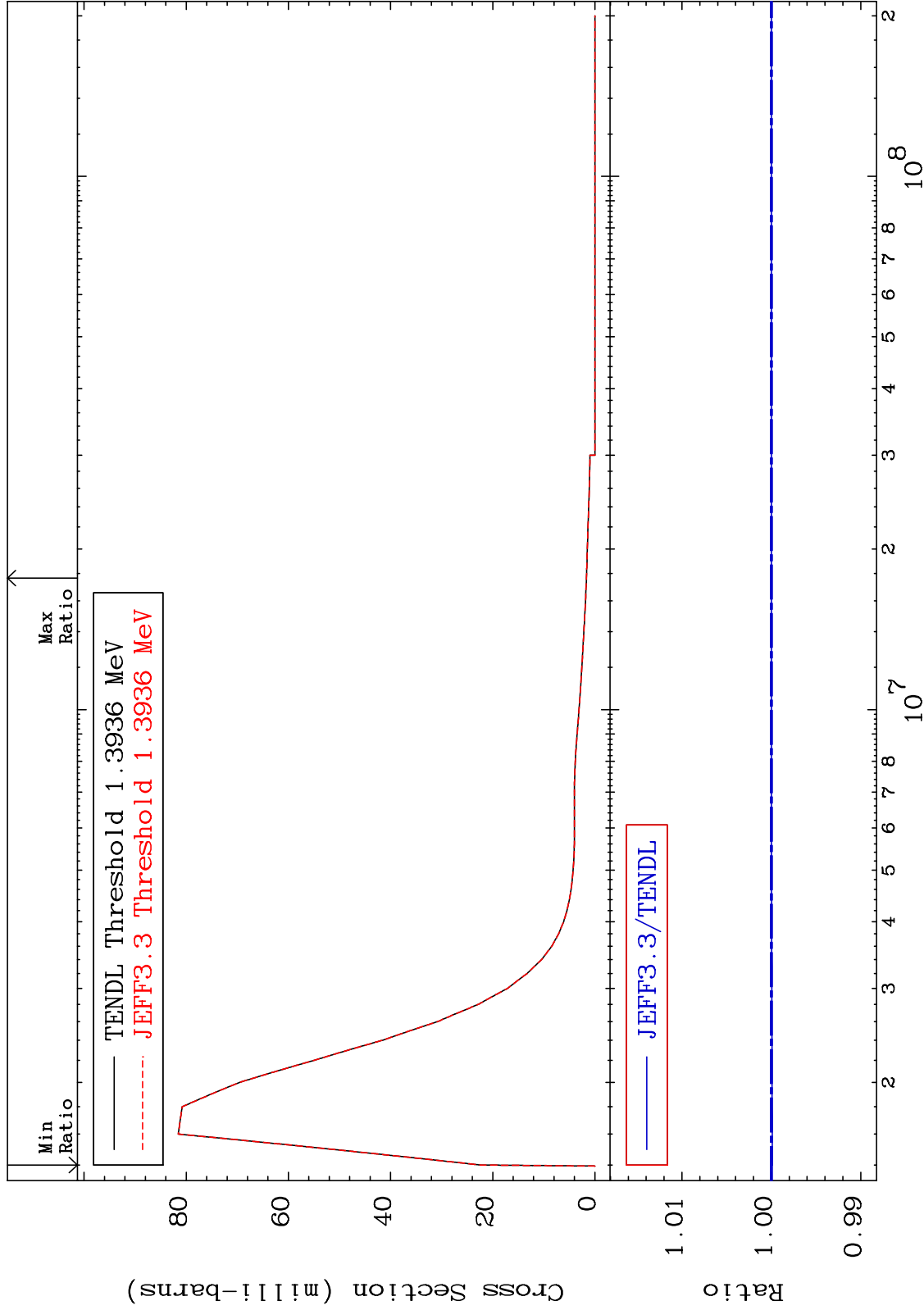
MAT 6849      MT= 75 (n,n') Level      68-Er-170  
 Cross Section      -0.483 To 0.000 %



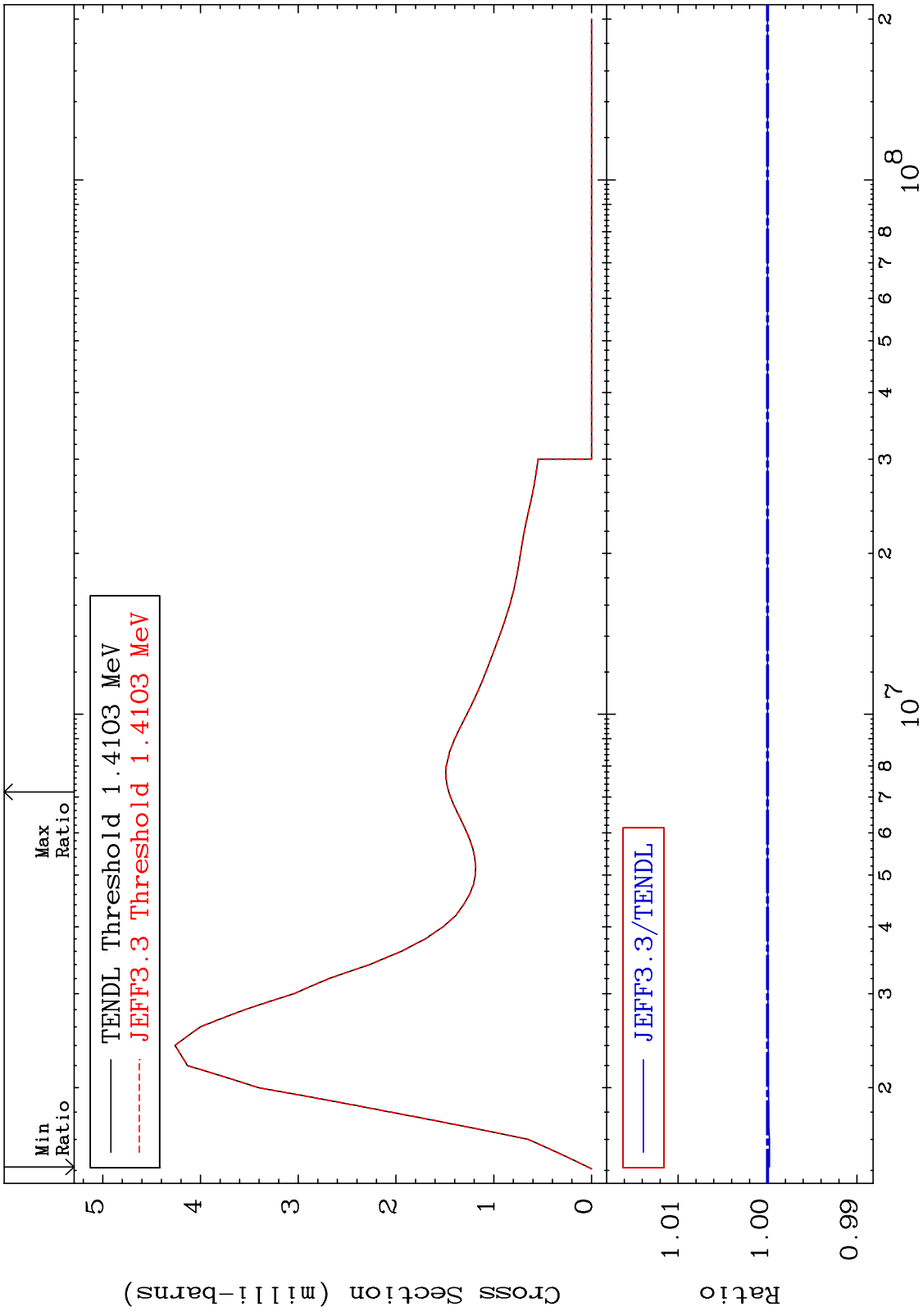
MAT 6849

MT= 76 (n,n') Level  
Cross Section

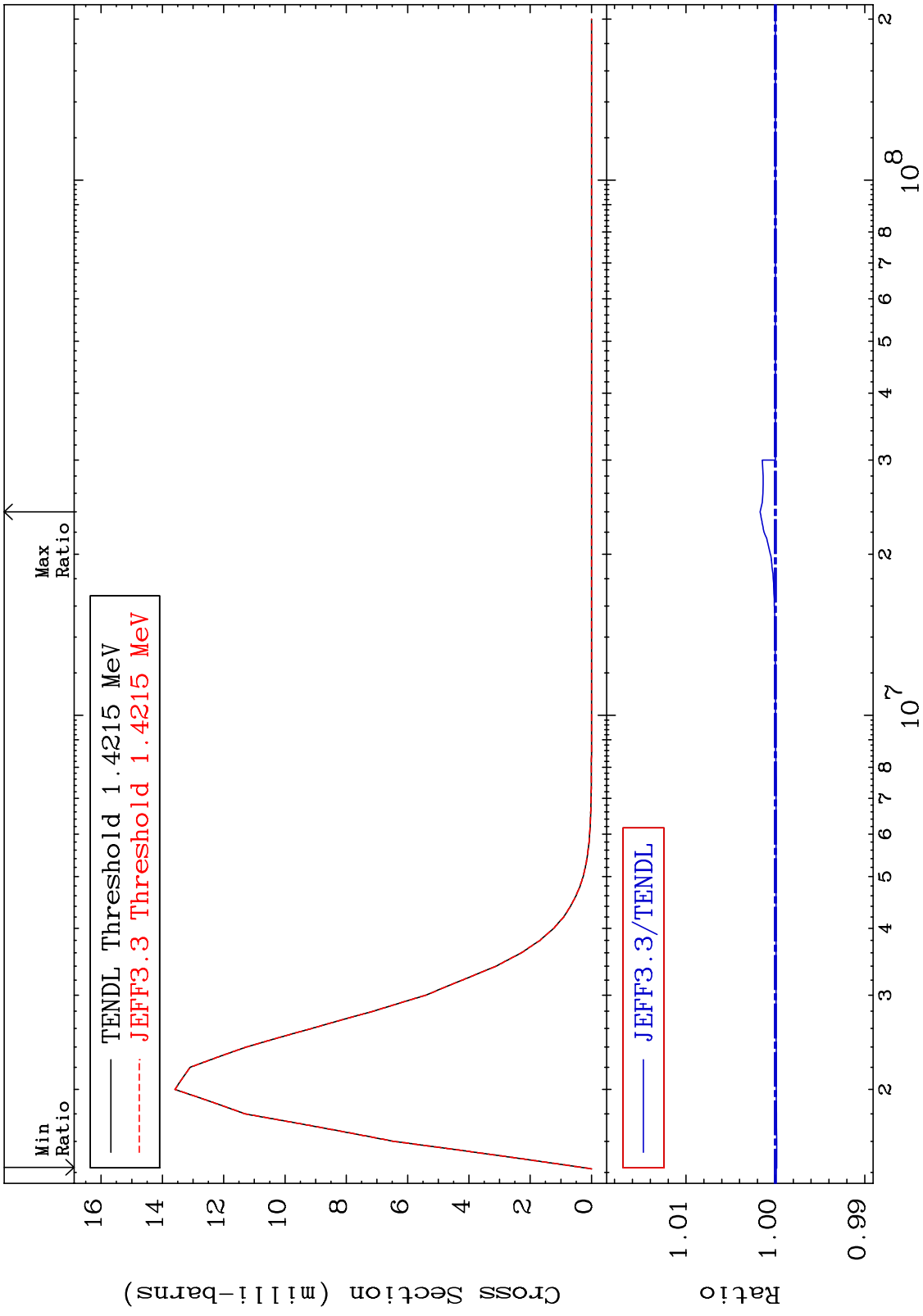
68-Er-170  
-0.012 To 0.000 %



MAT 6849 MT= 77 (n,n') Level Cross Section 68-Er-170 -0.022 To 0.000 %



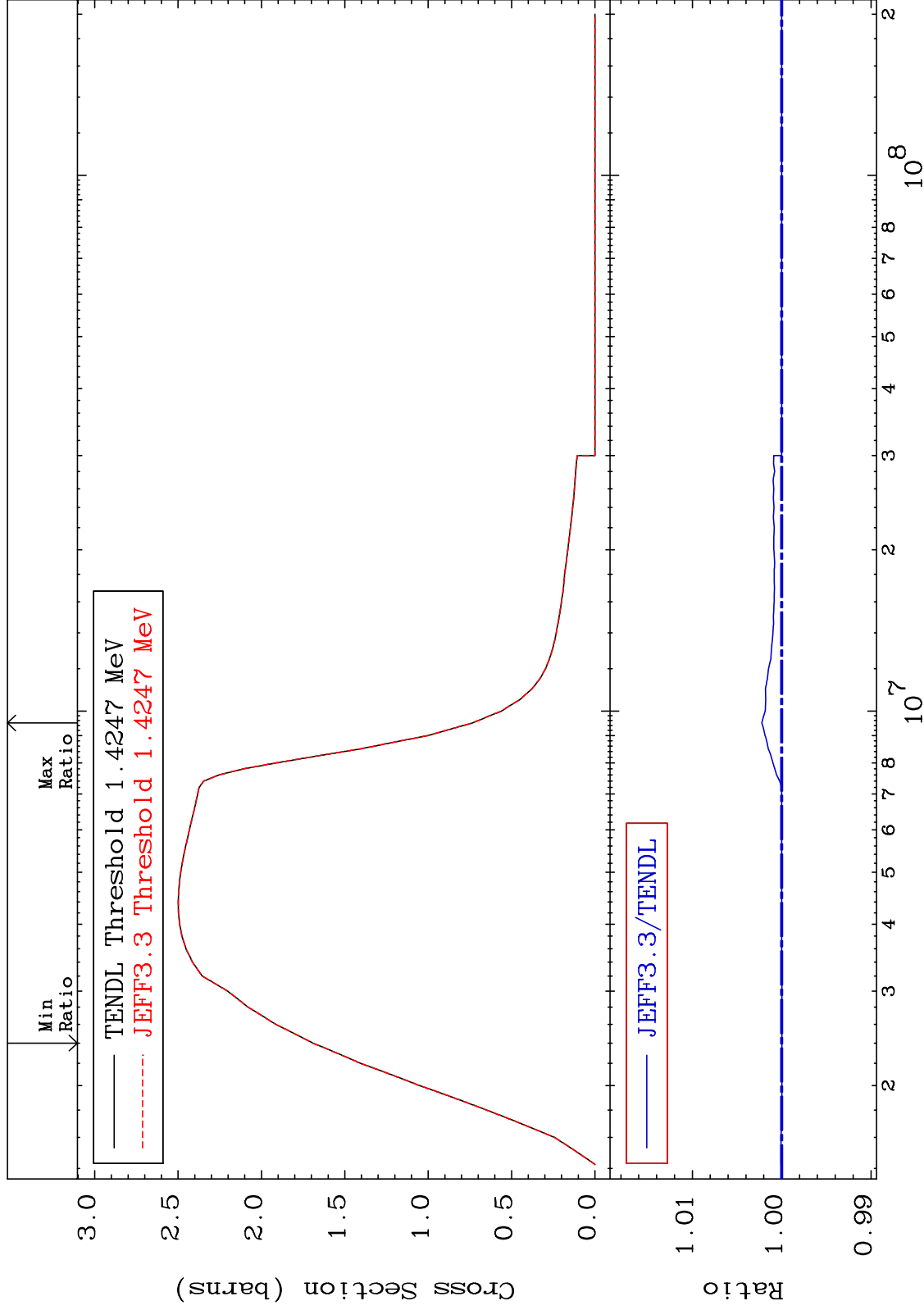
MAT 6849 MT= 78 (n,n') Level Cross Section 68-Er-170 -0.016 To 0.171 %



MAT 6849

(n, n') Continuum  
Cross Section

68-Er-170  
-0.002 To 0.222 %



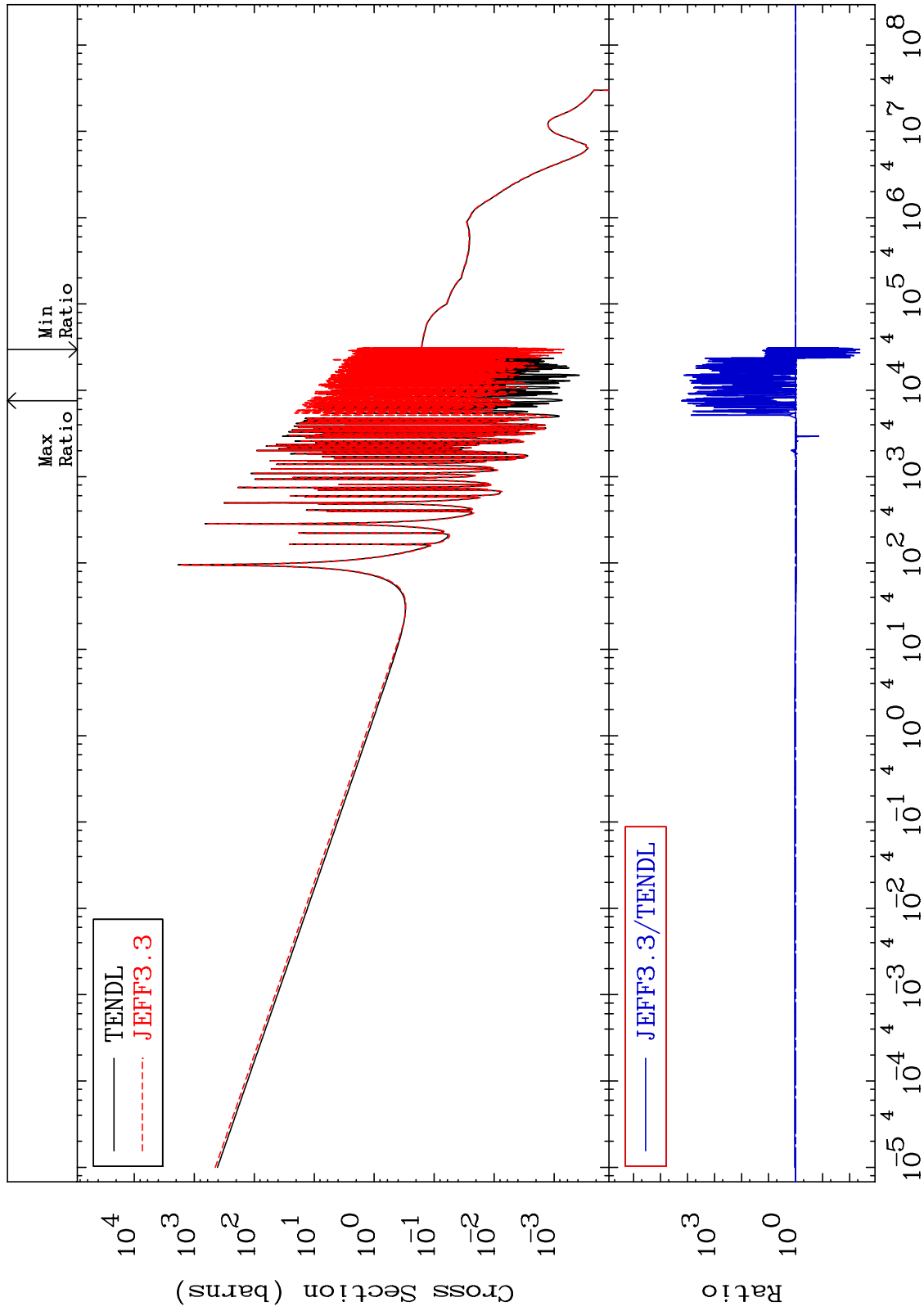
MAT 6849

(n,  $\gamma$ )

68-Er-170

Cross Section

-99.58 To 9999. %





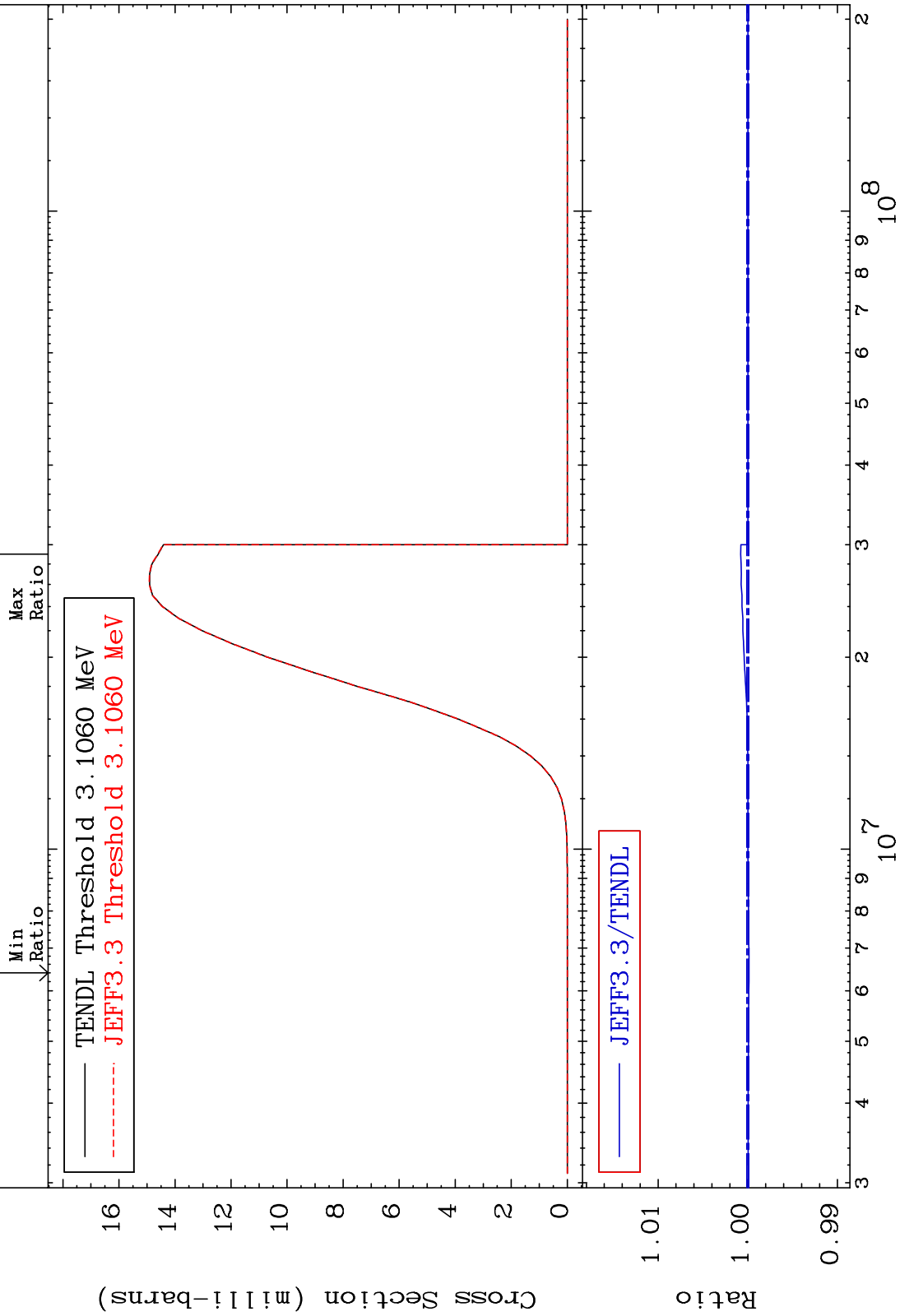
MAT 6849

(n,p)

68-Er-170

-0.014 To 0.079 %

Cross Section



48

Incident Energy (eV)

68-Er-170

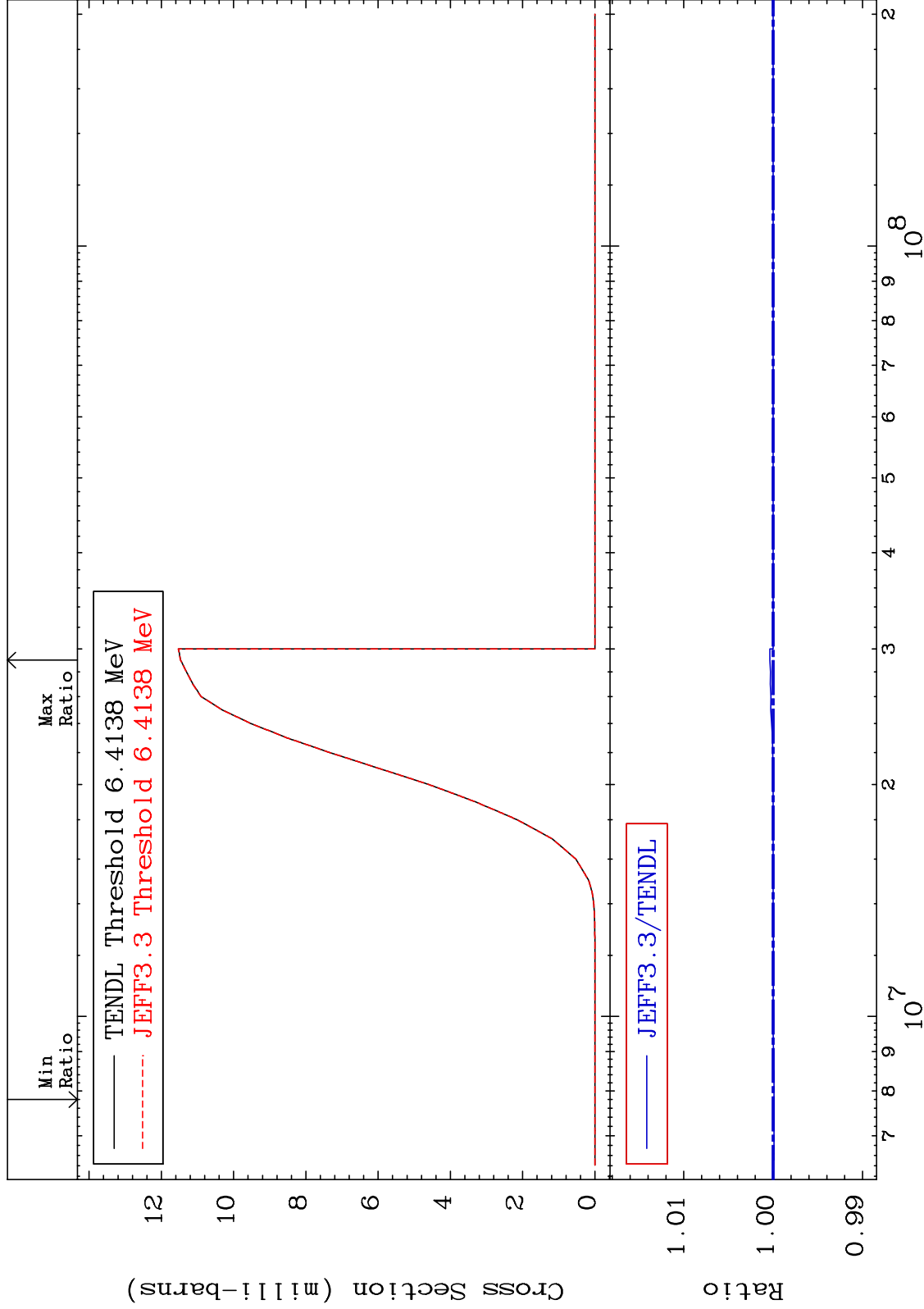
MAT 6849

(n,d)

68-Er-170

-0.009 To 0.038 %

Cross Section



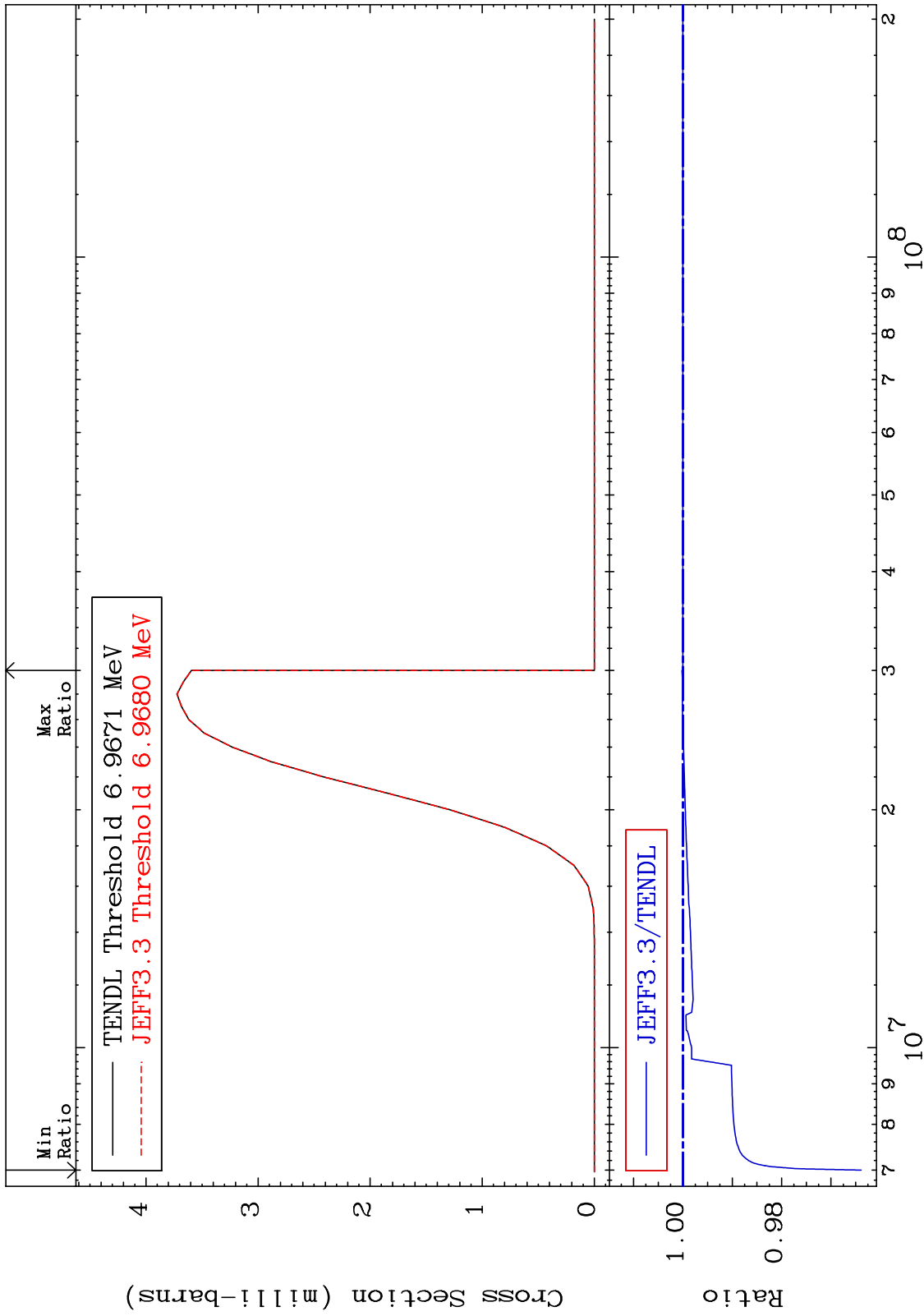
49

Incident Energy (eV)

68-Er-170

MAT 6849

(n, t) Cross Section  
68-Er-170  
-3.612 To 0.018 %



50

Incident Energy (eV)

68-Er-170

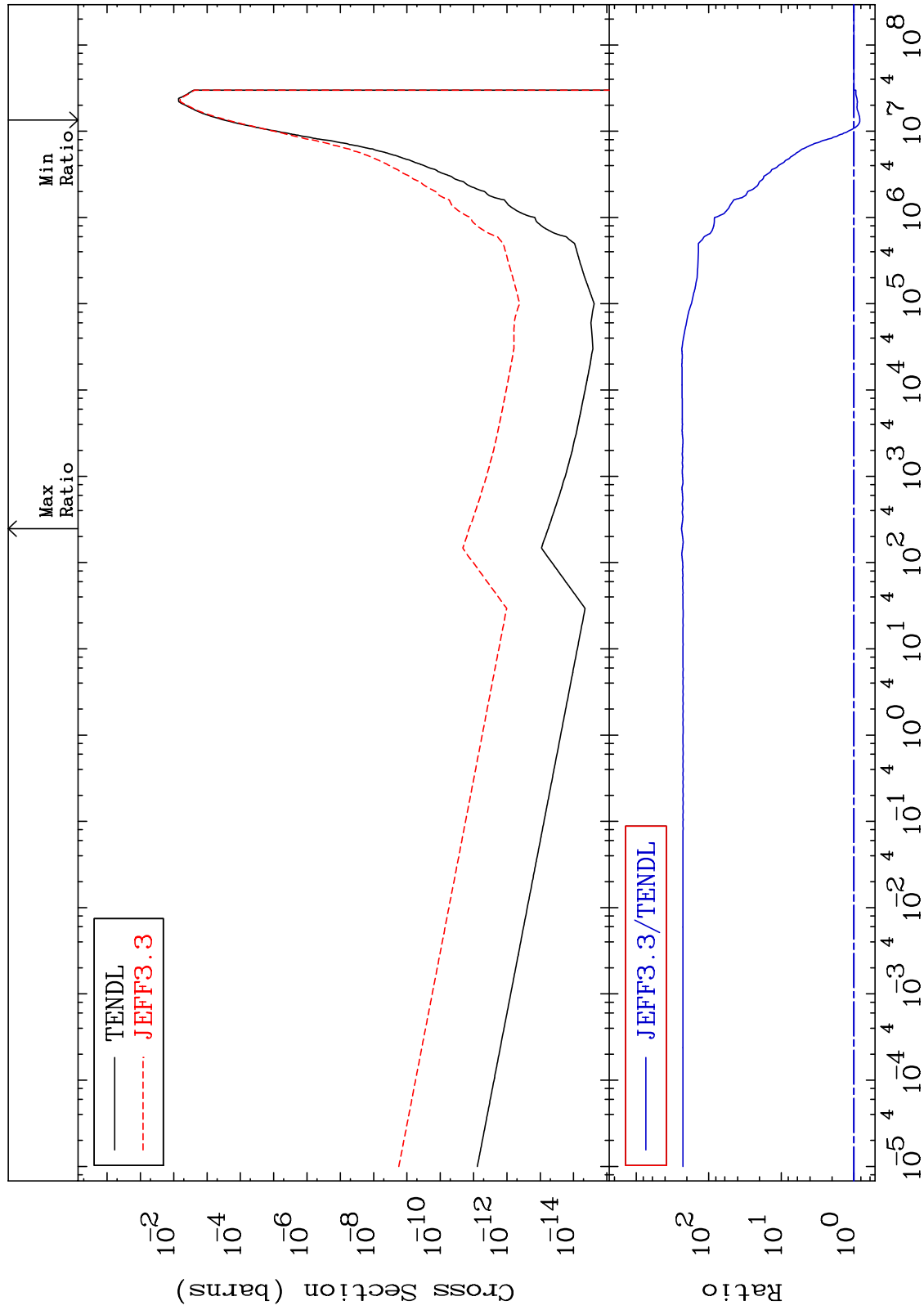
MAT 6849

(n,  $\alpha$ )

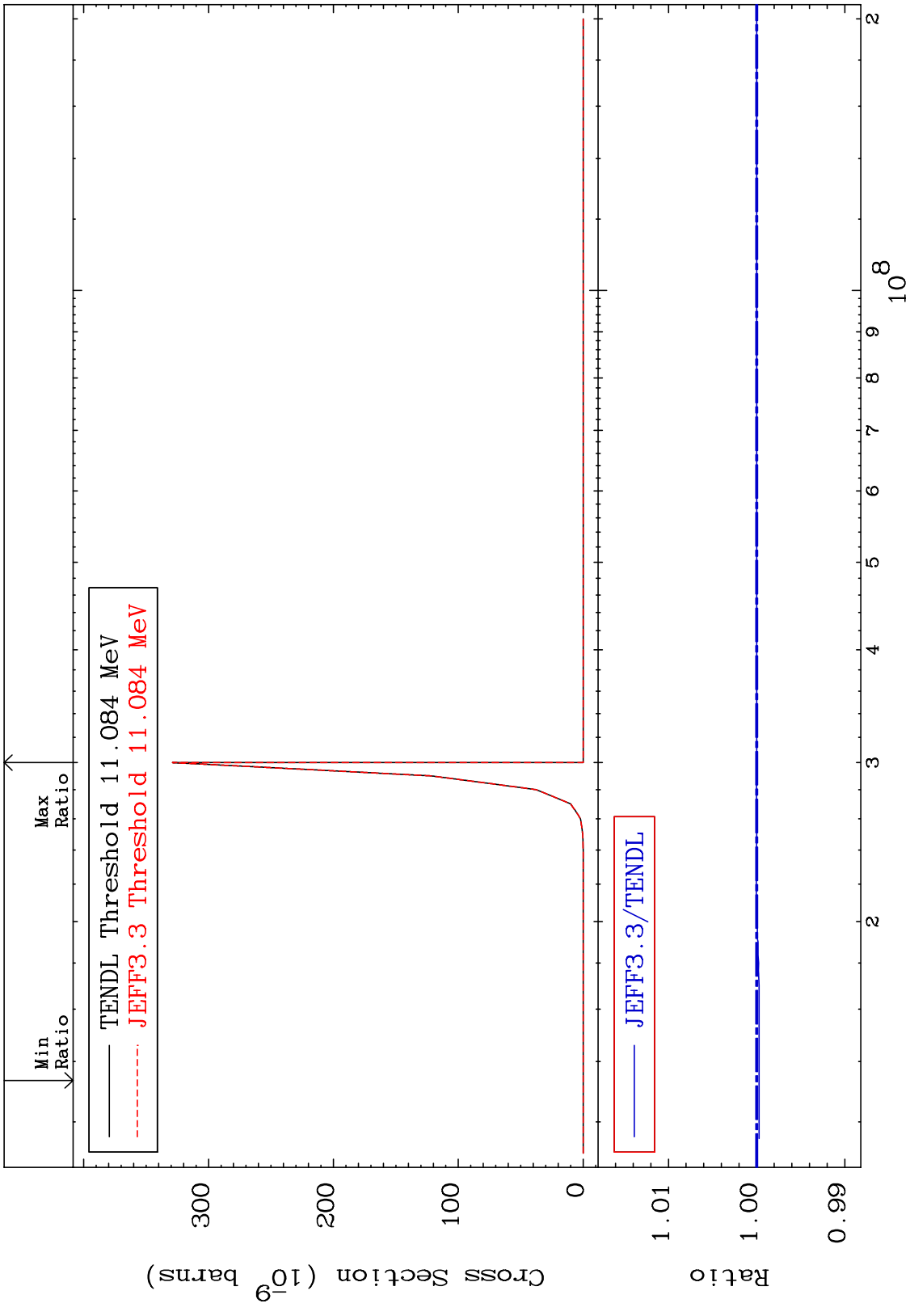
68-Er-170

Cross Section

-17.29 To 9999. %



MAT 6849 (n,2p) 68-Er-170  
Cross Section -0.028 To 0.005 %



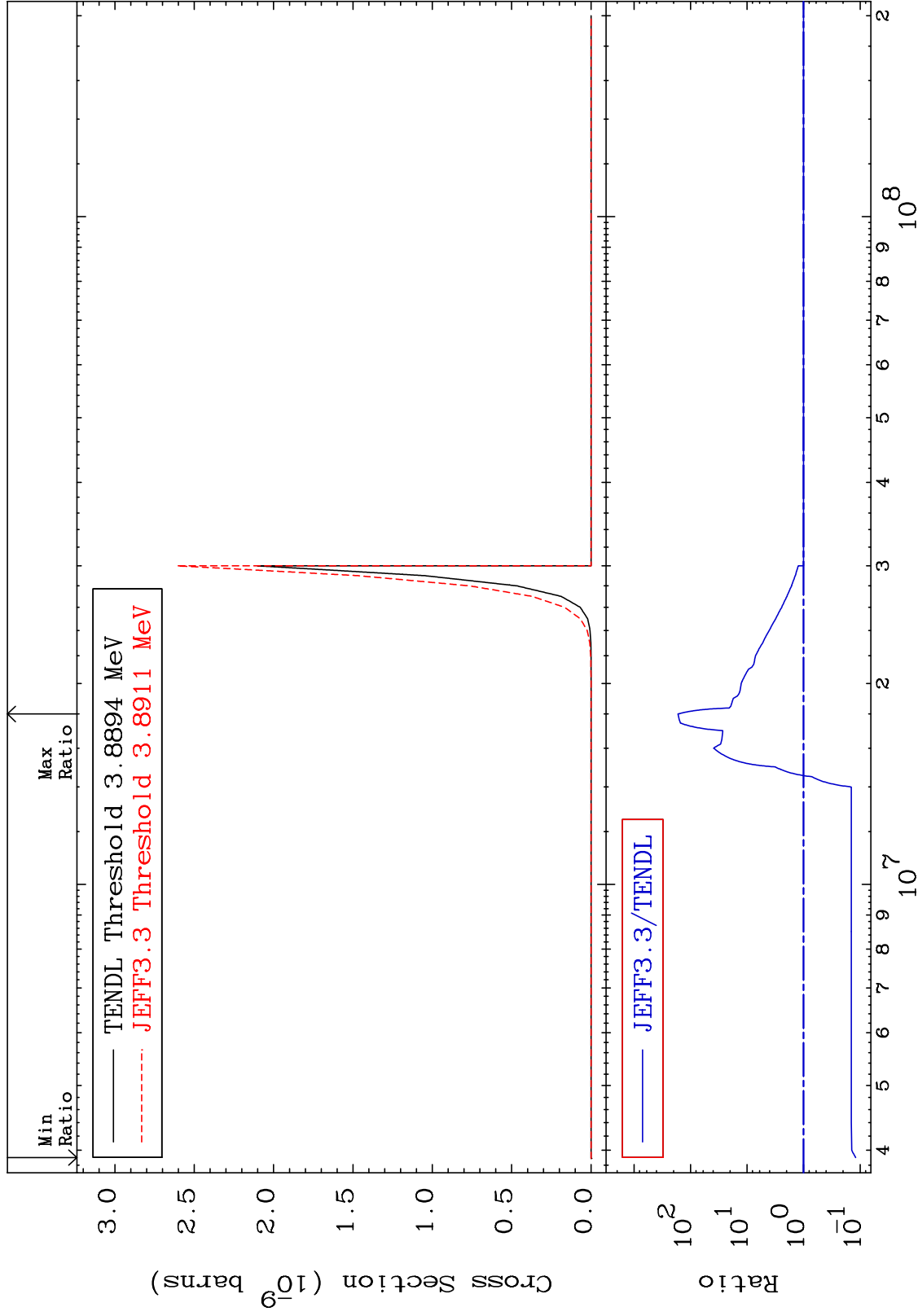
MAT 6849

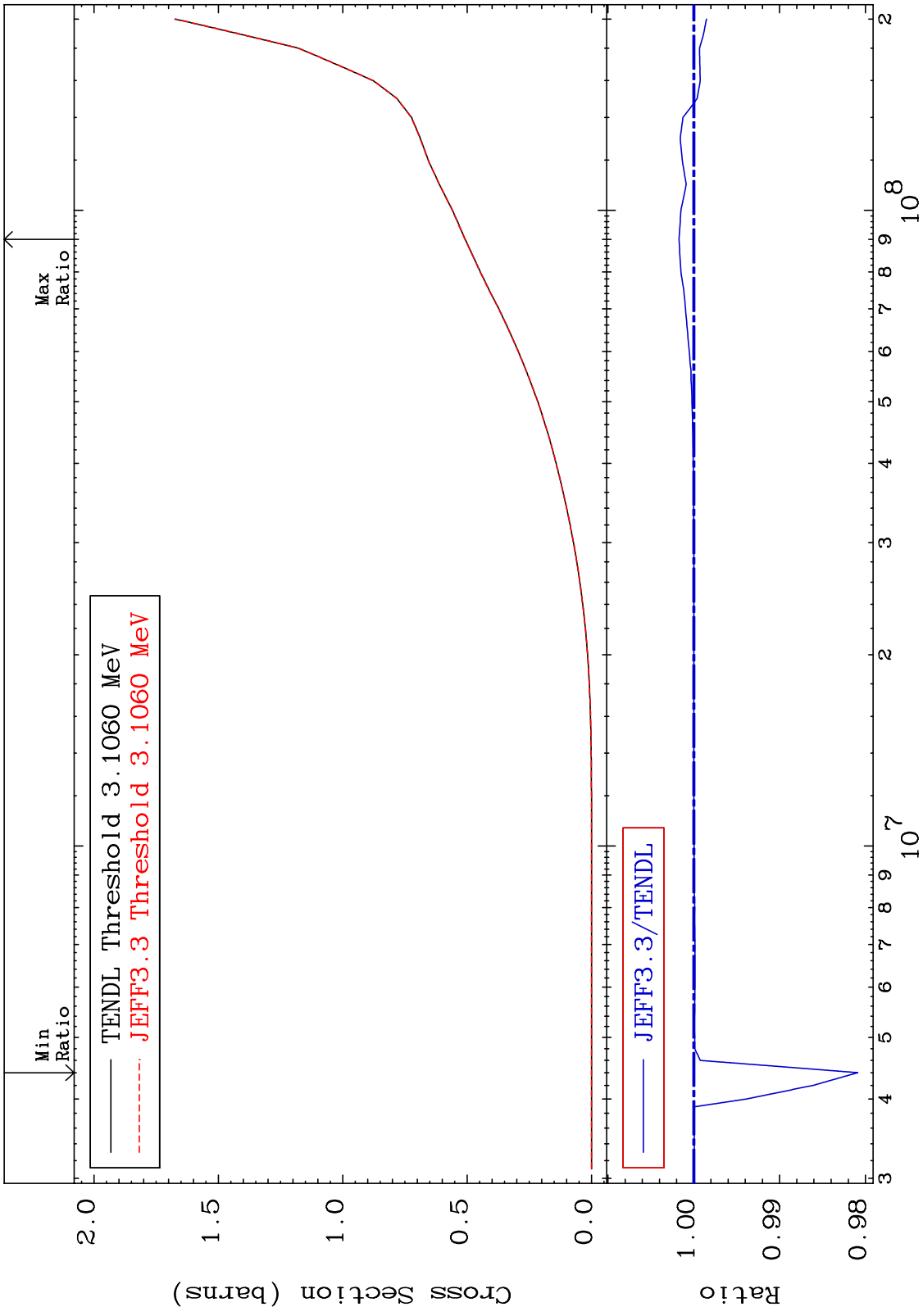
(n,p)  $\alpha$

68-Er-170

-88.02 To 9999. %

Cross Section

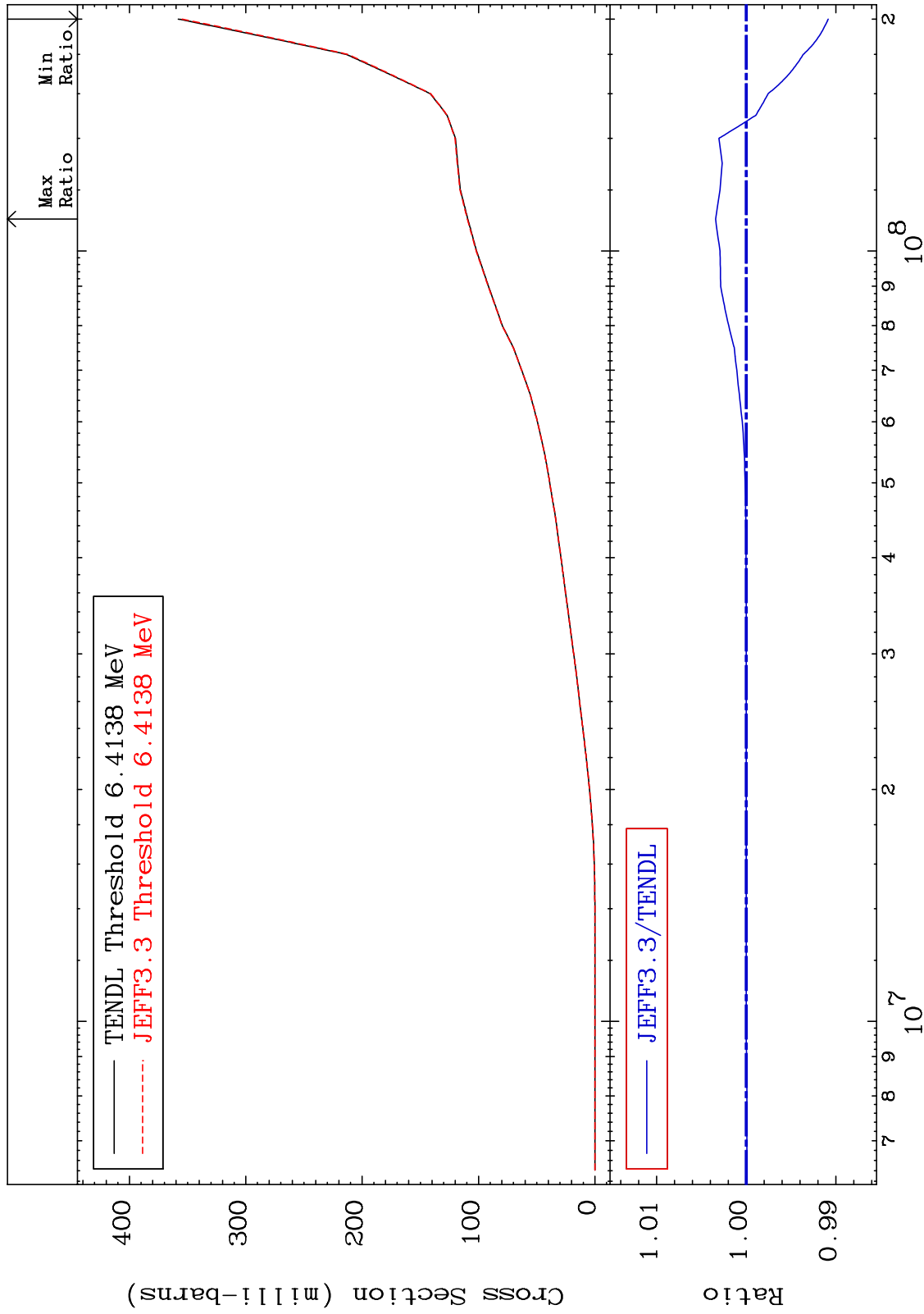




MAT 6849

### Deuterium Production Cross Section

68-Er-170  
-0.915 To 0.342 %

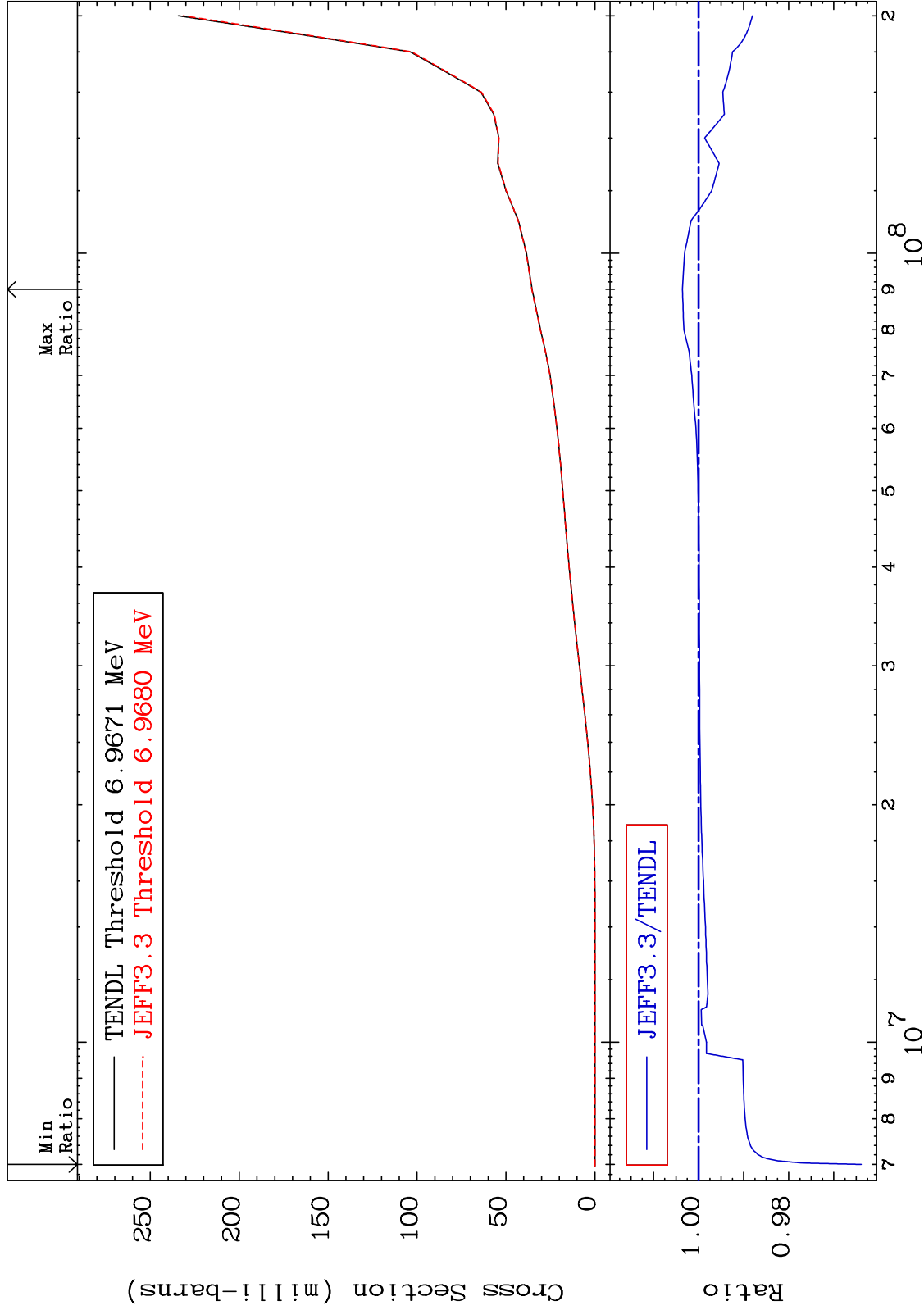




MAT 6849

Tritium Production  
Cross Section

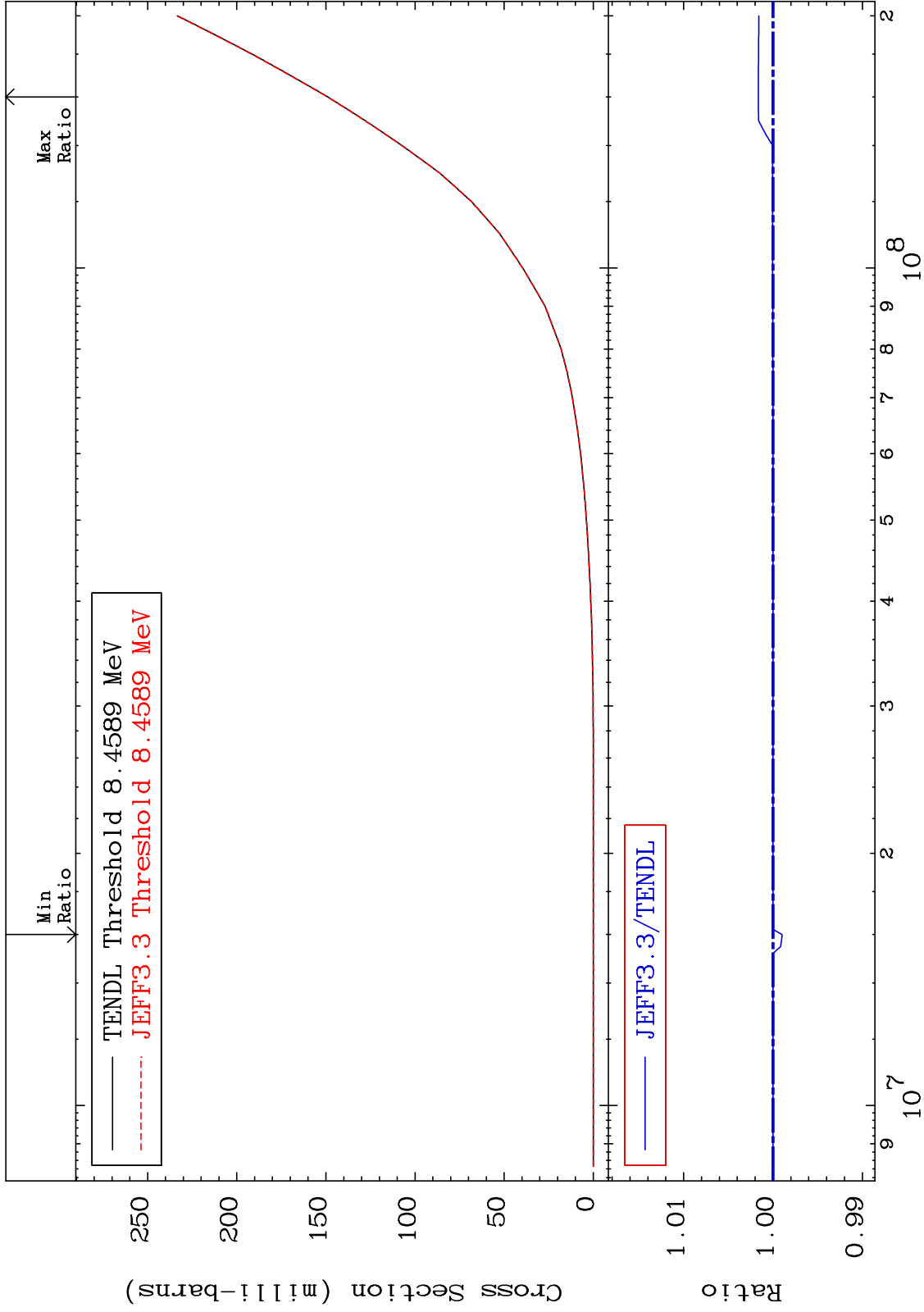
68-Er-170  
-3.612 To 0.358 %



MAT 6849

He-3 Production  
Cross Section

68-Er-170  
-0.102 To 0.164 %



57

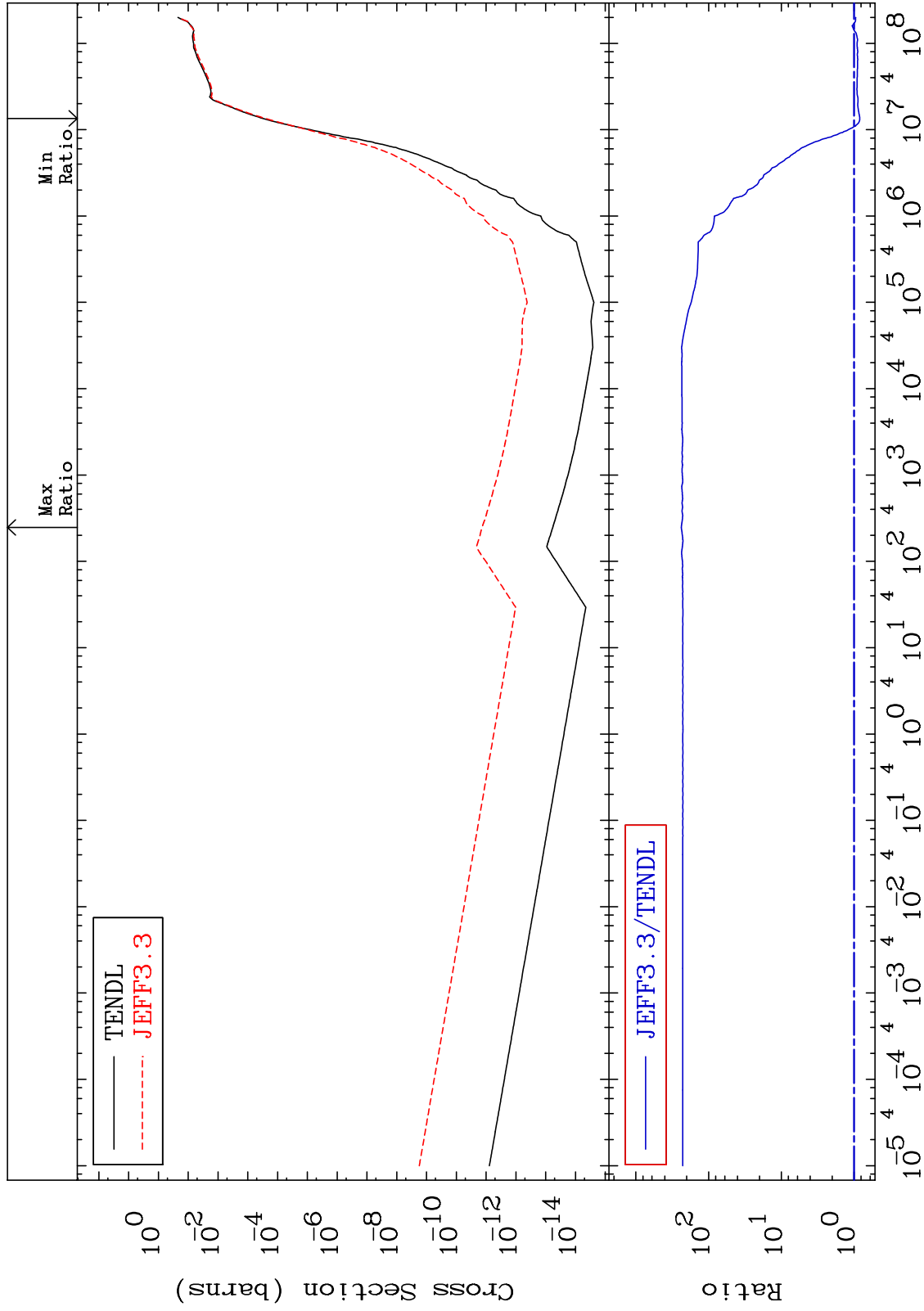
Incident Energy (eV)

68-Er-170

MAT 6849

He-4 Production  
Cross Section

68-Er-170  
-16.53 To 9999. %

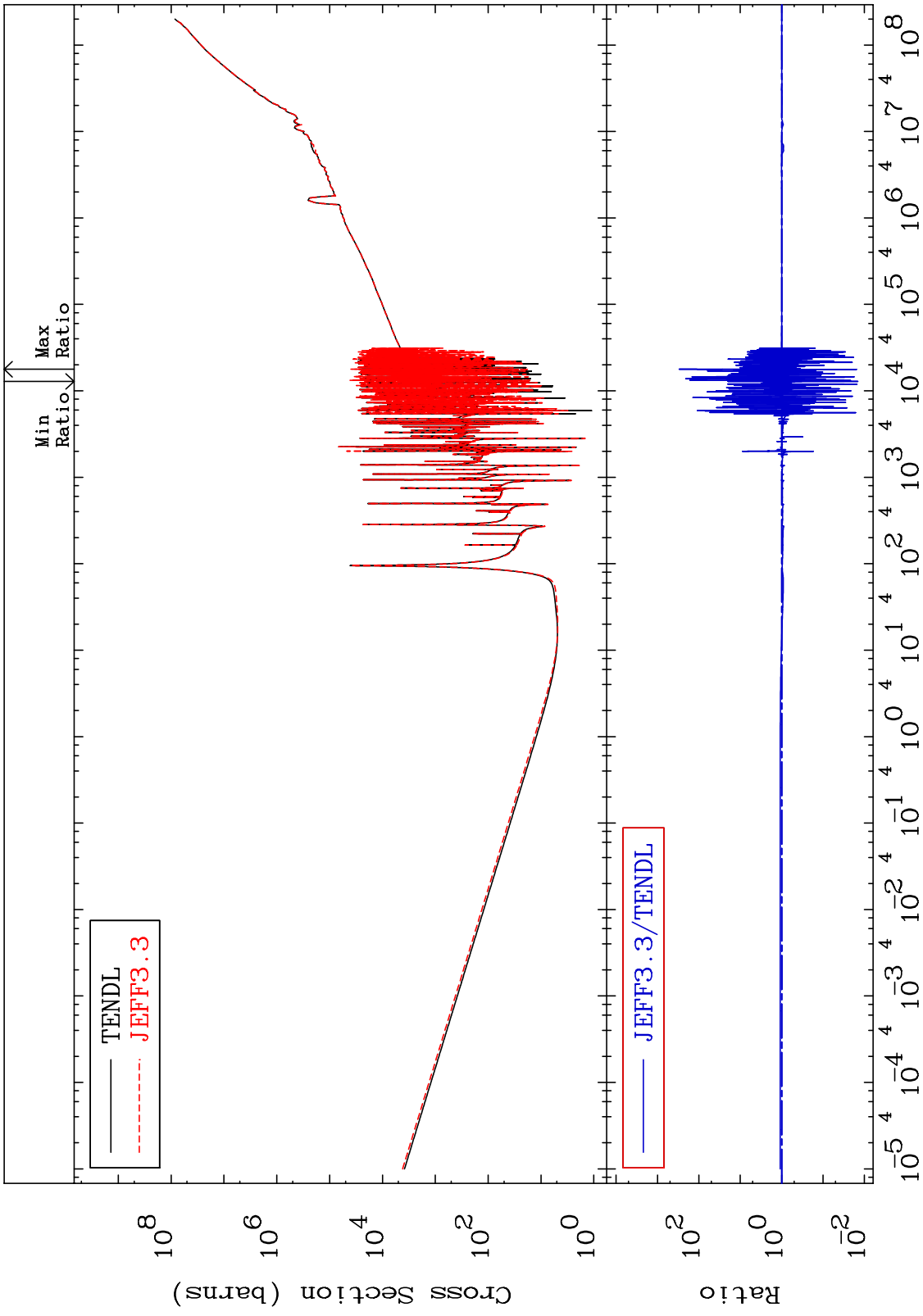


58

Incident Energy (eV)

68-Er-170

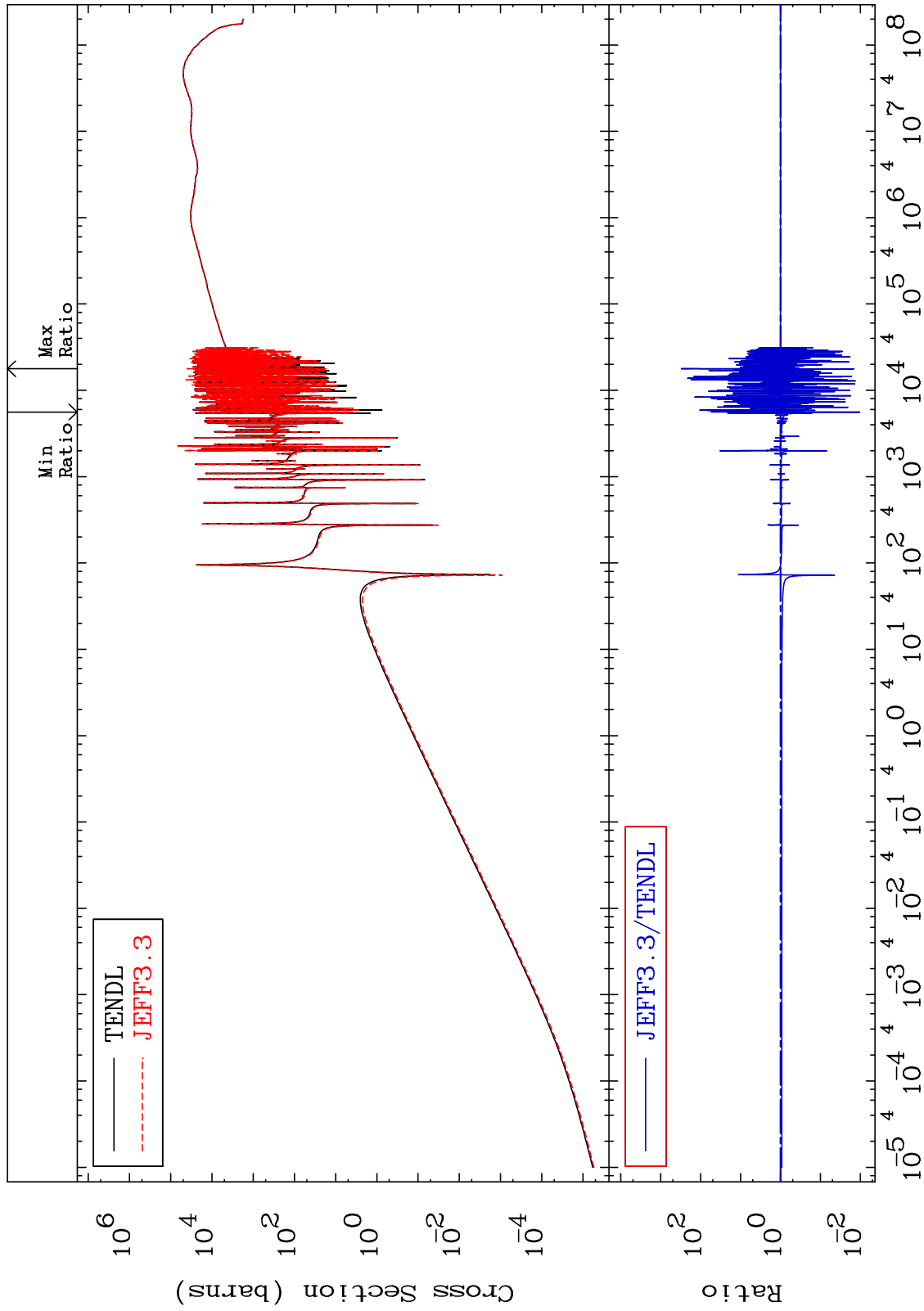
MAT 6849 Kerma total (eV-barns) 68-Er-170  
Cross Section -98.56 To 9999. %



MAT 6849

Kerma elastic  
Cross Section

68-Er-170  
-98.96 To 9999. %



60

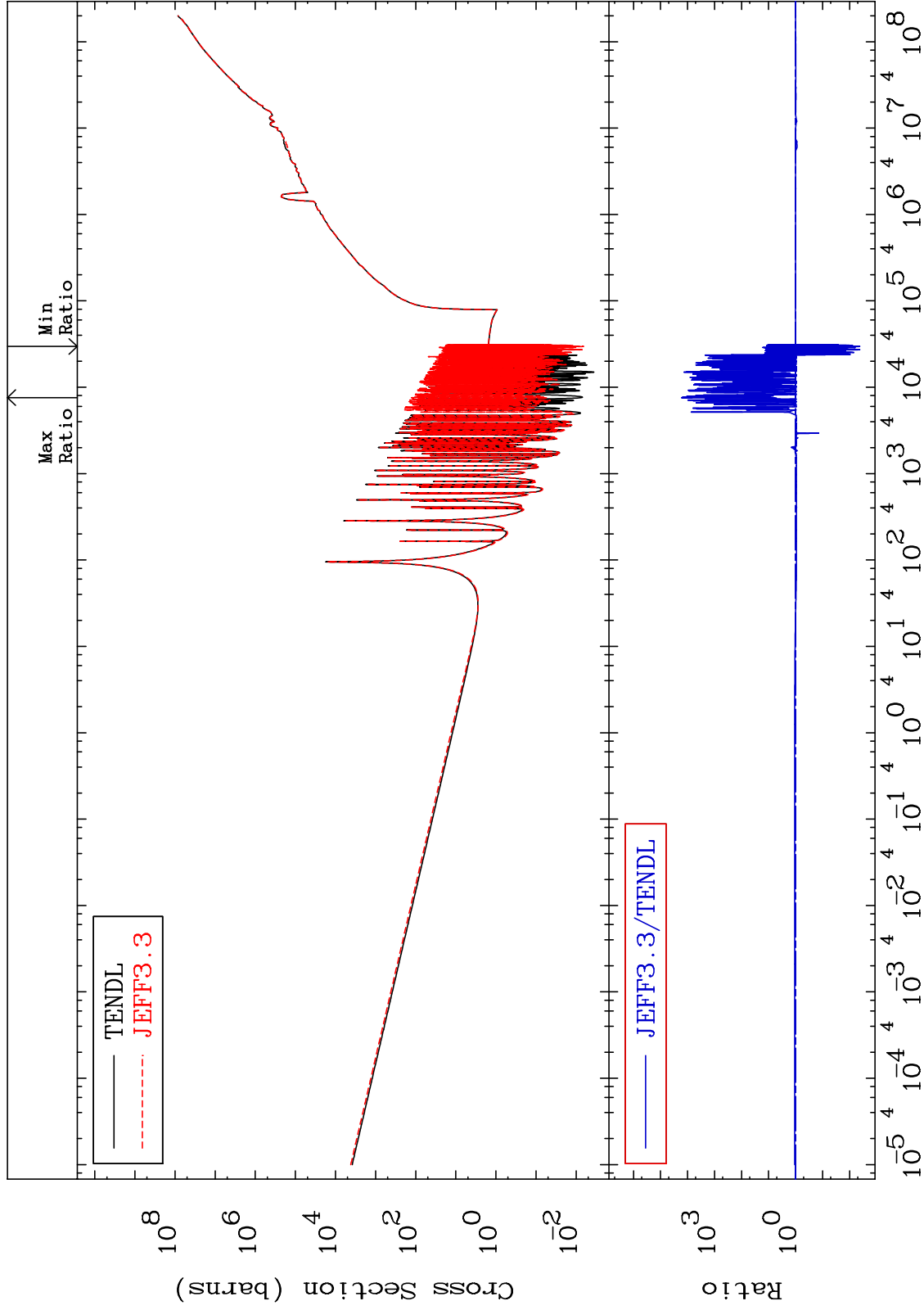
Incident Energy (eV)

68-Er-170

MAT 6849

Kerma non-elastic (all but mt2)  
Cross Section

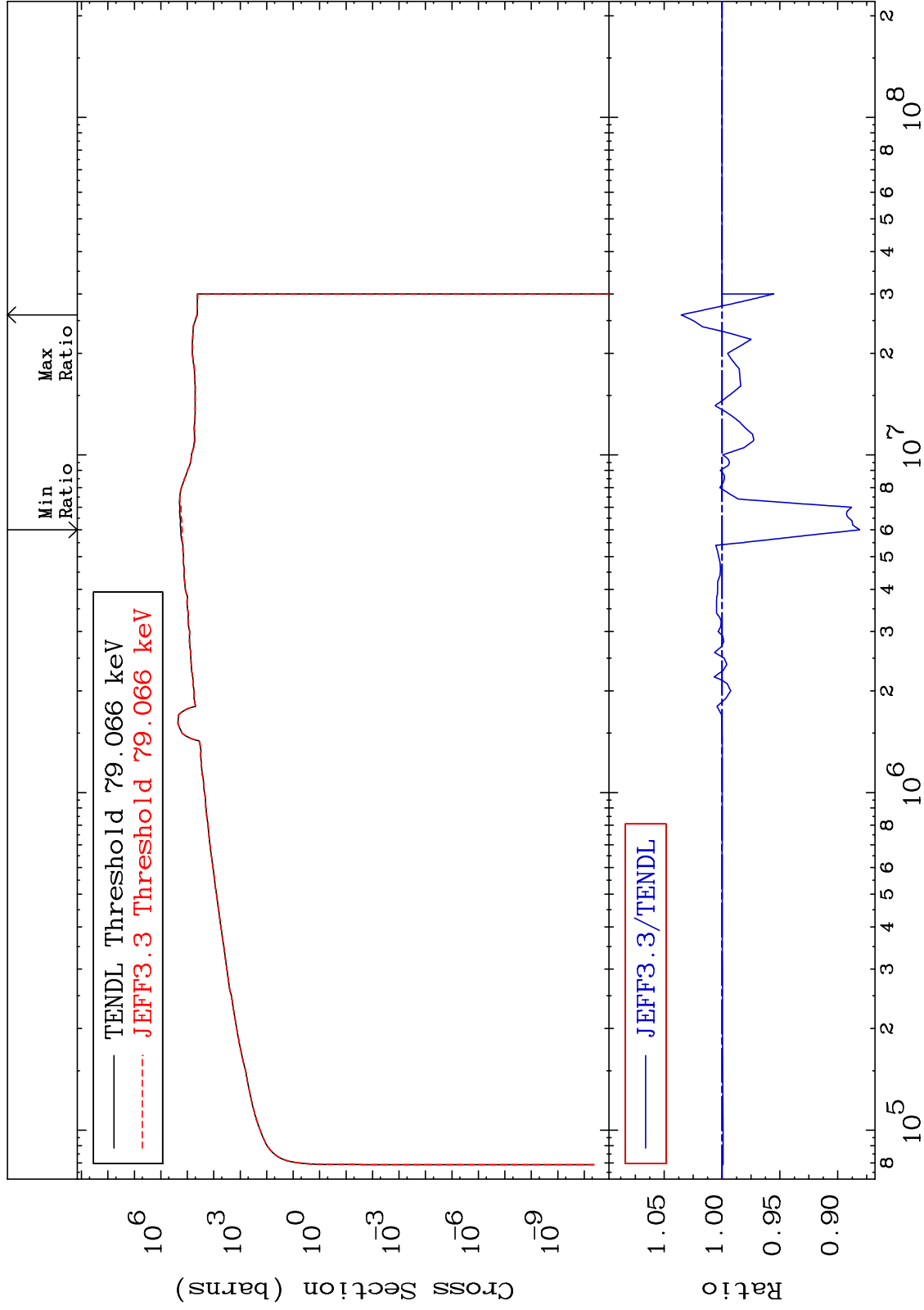
68-Er-170  
-99.58 To 9999. %



MAT 6849

Kerma inelastic (mt51-91)  
Cross Section

68-Er-170  
-11.90 To 3.528 %



62

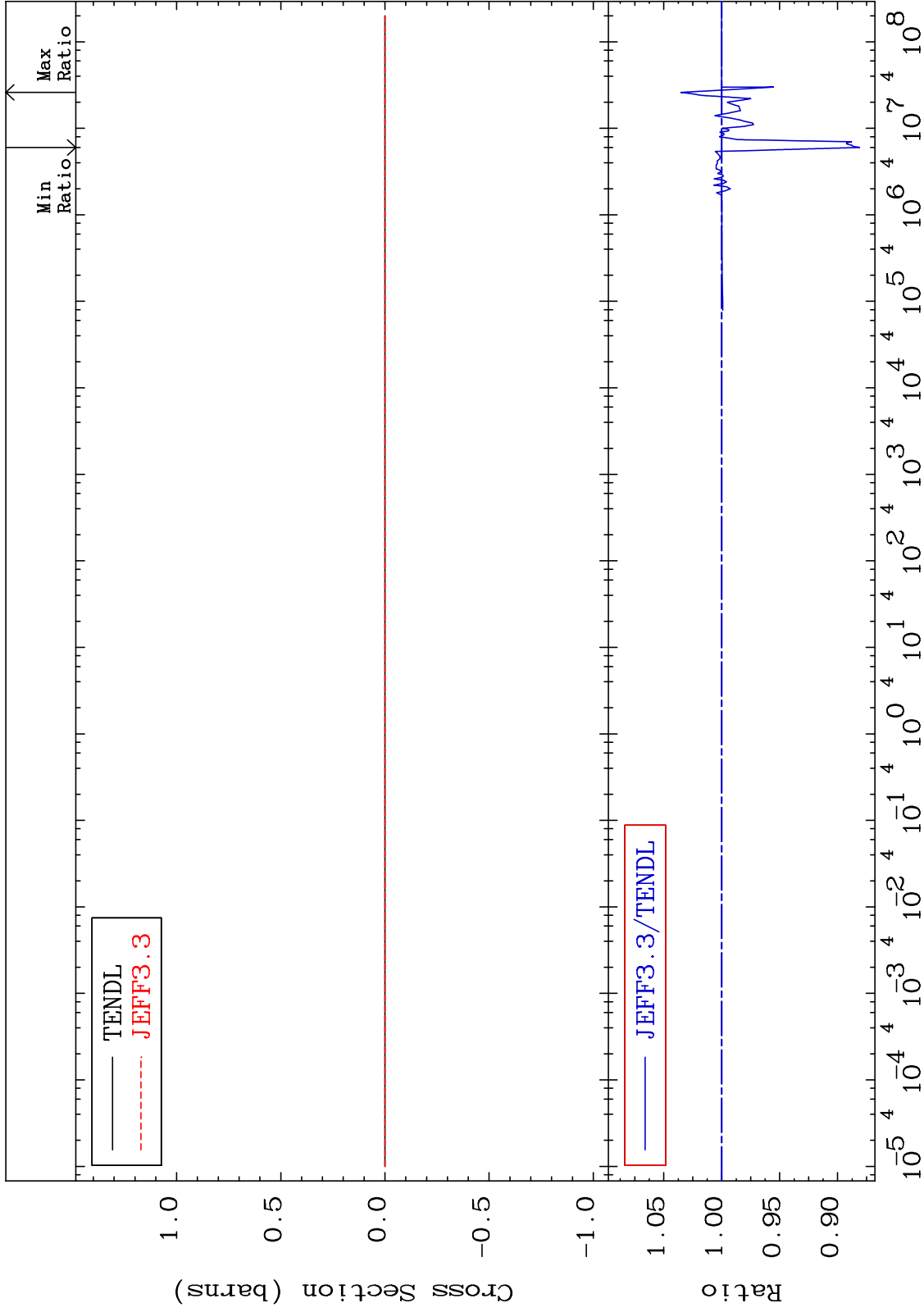
Incident Energy (eV)

68-Er-170

MAT 6849

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

68-Er-170  
-11.90 To 3.528 %

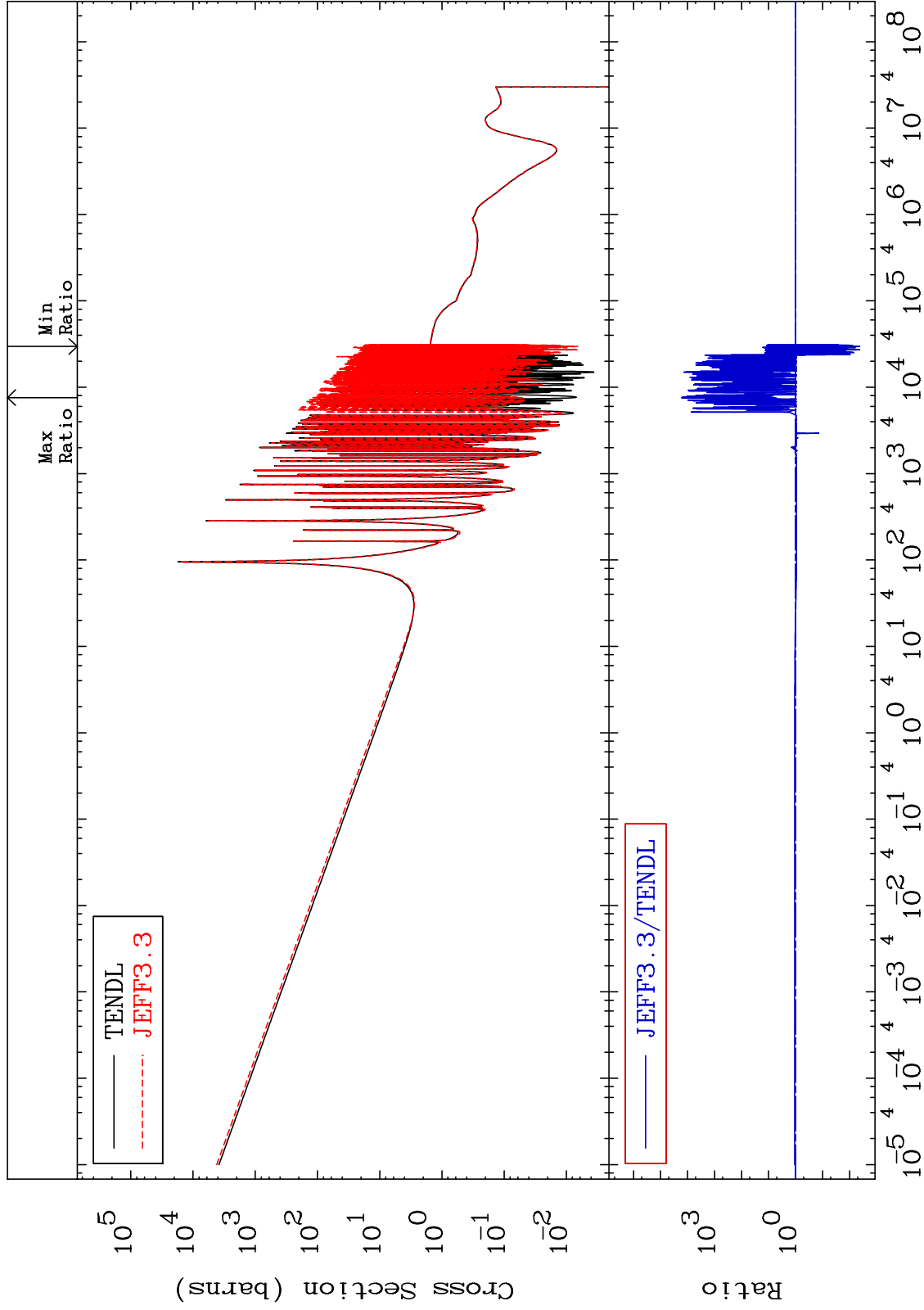




MAT 6849

Kerma capture (mt102)  
Cross Section

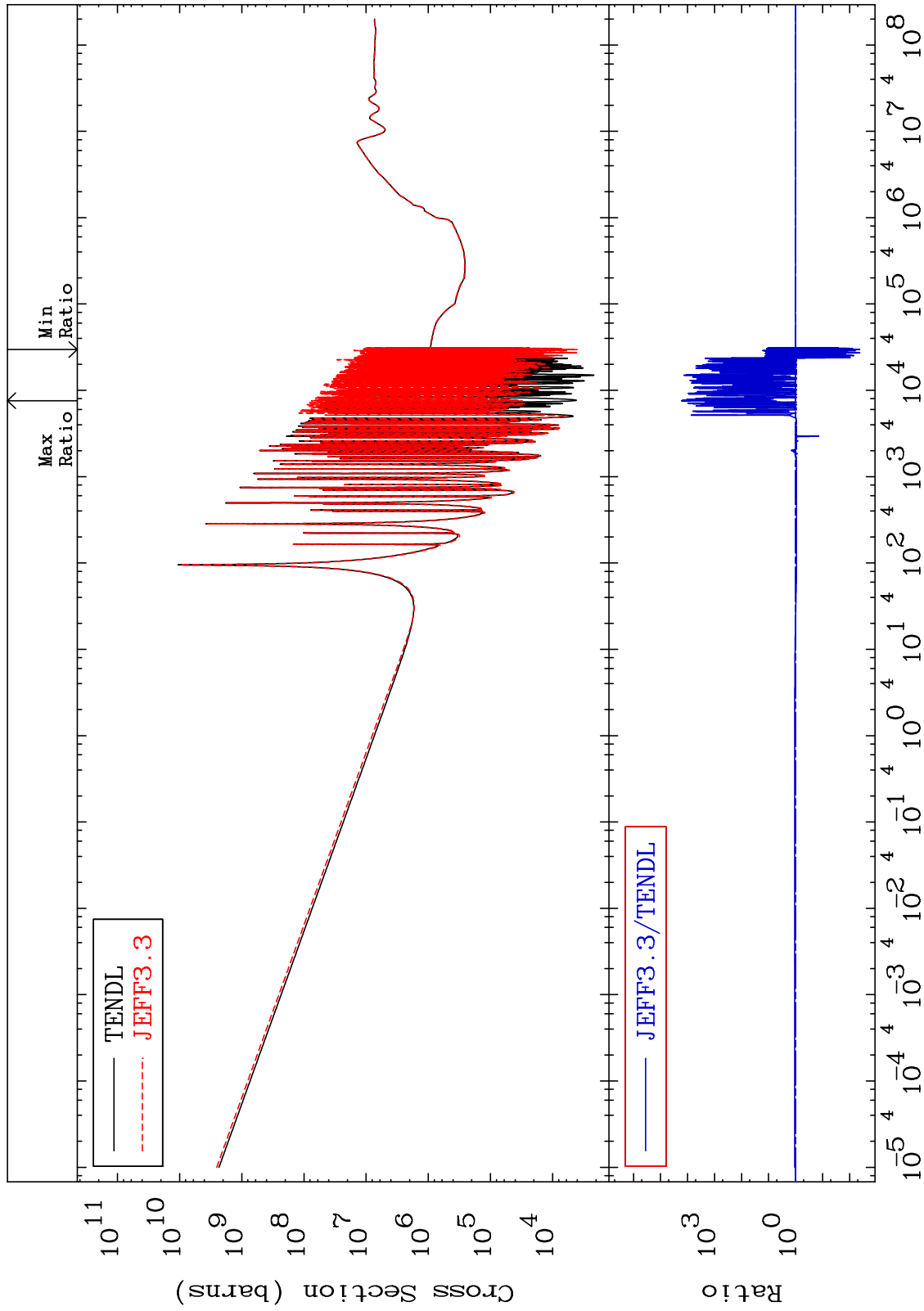
68-Er-170  
-99.58 To 9999. %



MAT 6849

Total photon (eV-barns)  
Cross Section

68-Er-170  
-99.58 To 9999. %



65

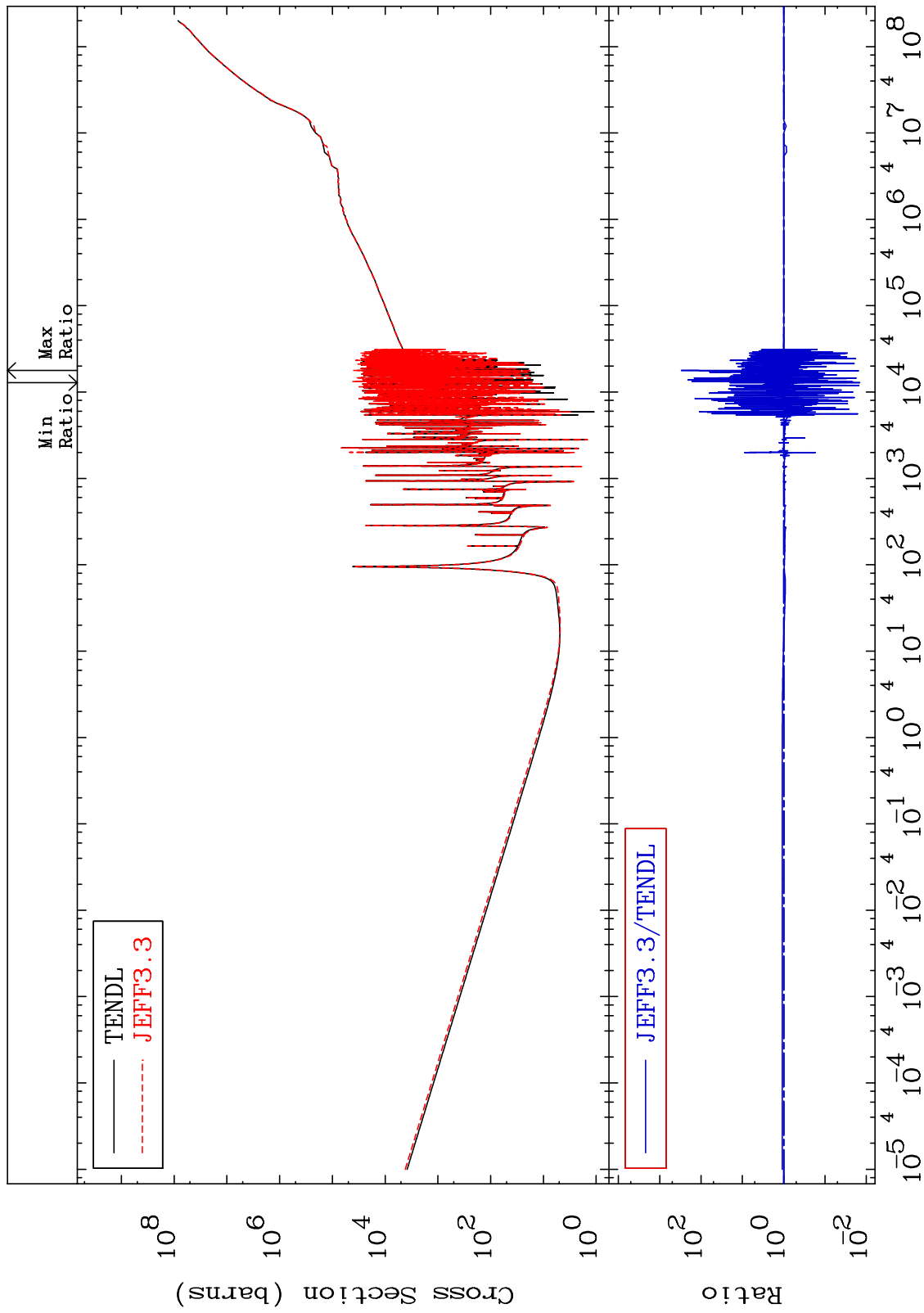
Incident Energy (eV)

68-Er-170

MAT 6849

Total kinematic kerma (high limit)  
Cross Section

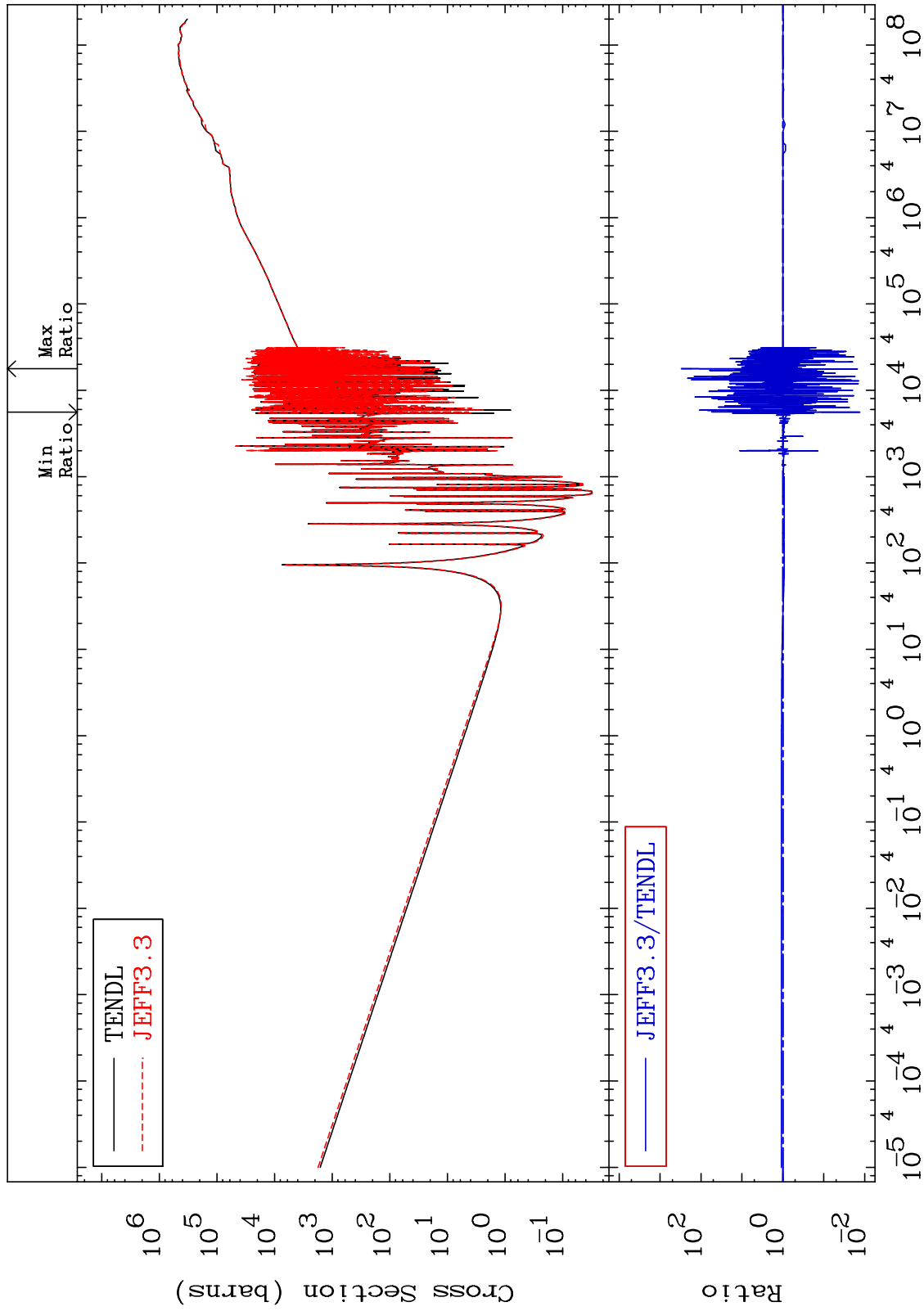
68-Er-170  
-98.56 To 9999. %



MAT 6849

Dpa total (eV-barns)  
Cross Section

68-Er-170  
-98.68 To 9999. %



67

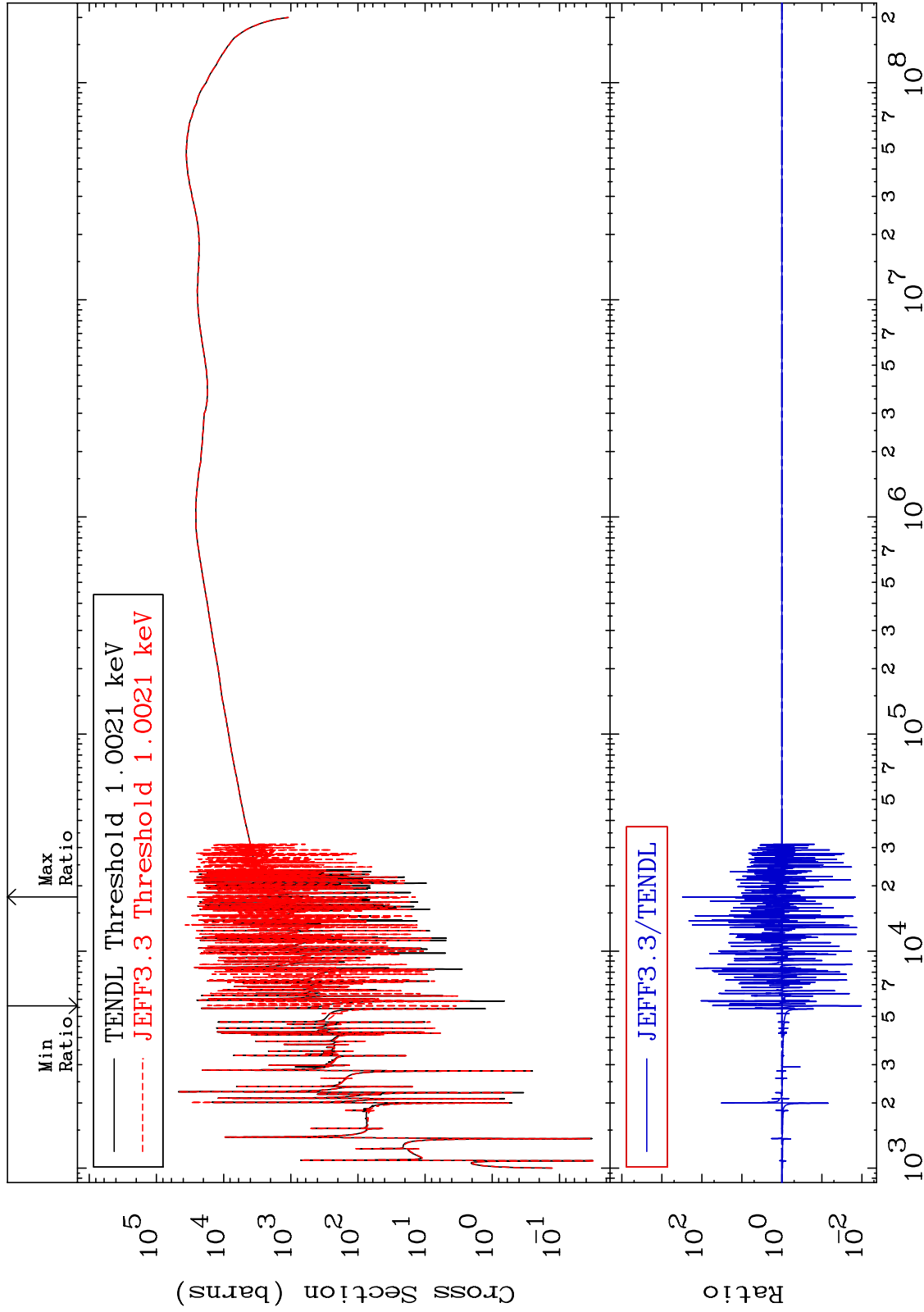
Incident Energy (eV)

68-Er-170

MAT 6849

Dpa elastic (mt2)  
Cross Section

68-Er-170  
-98.96 To 9999. %



68

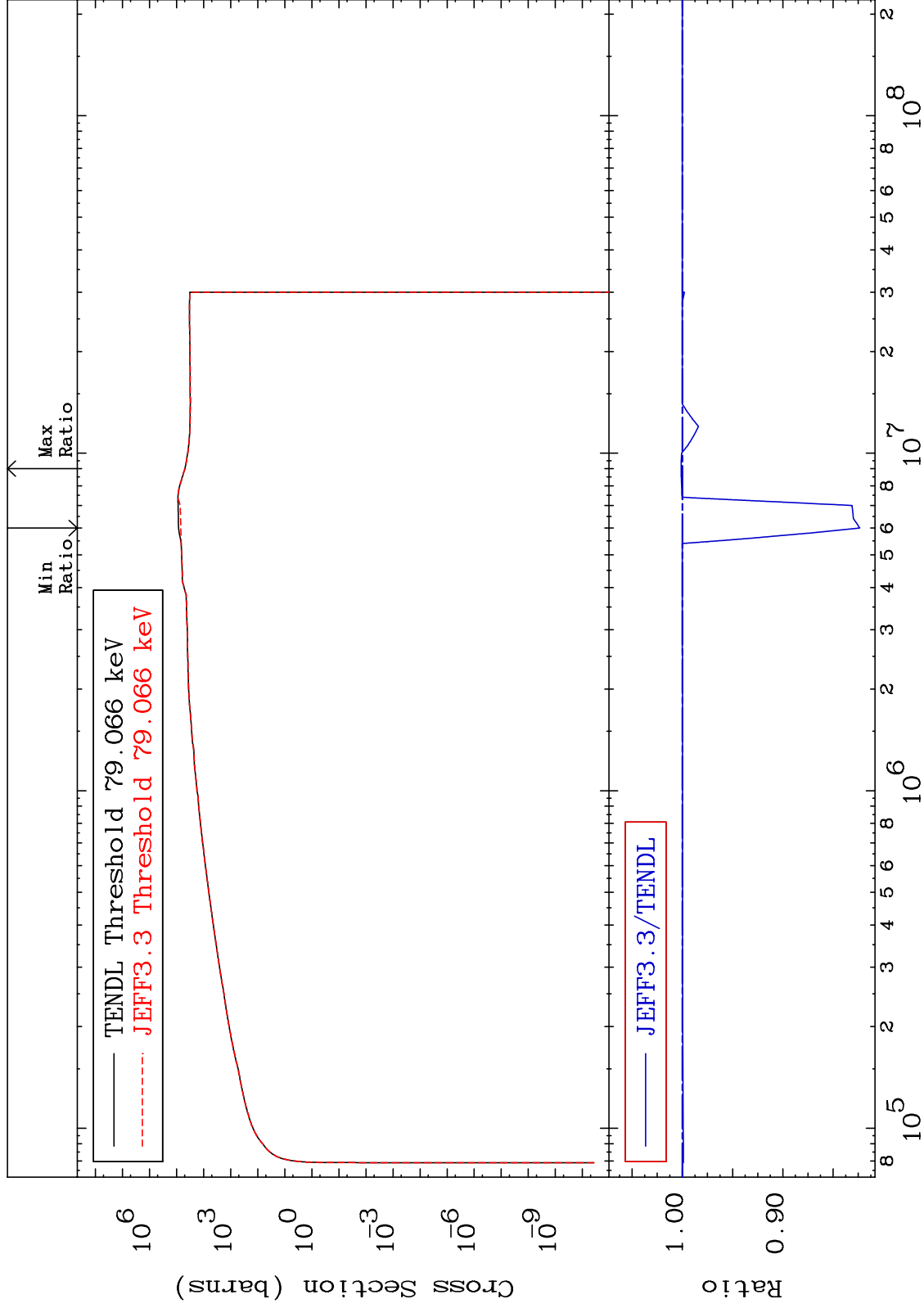
Incident Energy (eV)

68-Er-170

MAT 6849

Dpa inelastic (mt51-91)  
Cross Section

68-Er-170  
-17.65 To 0.110 %



69

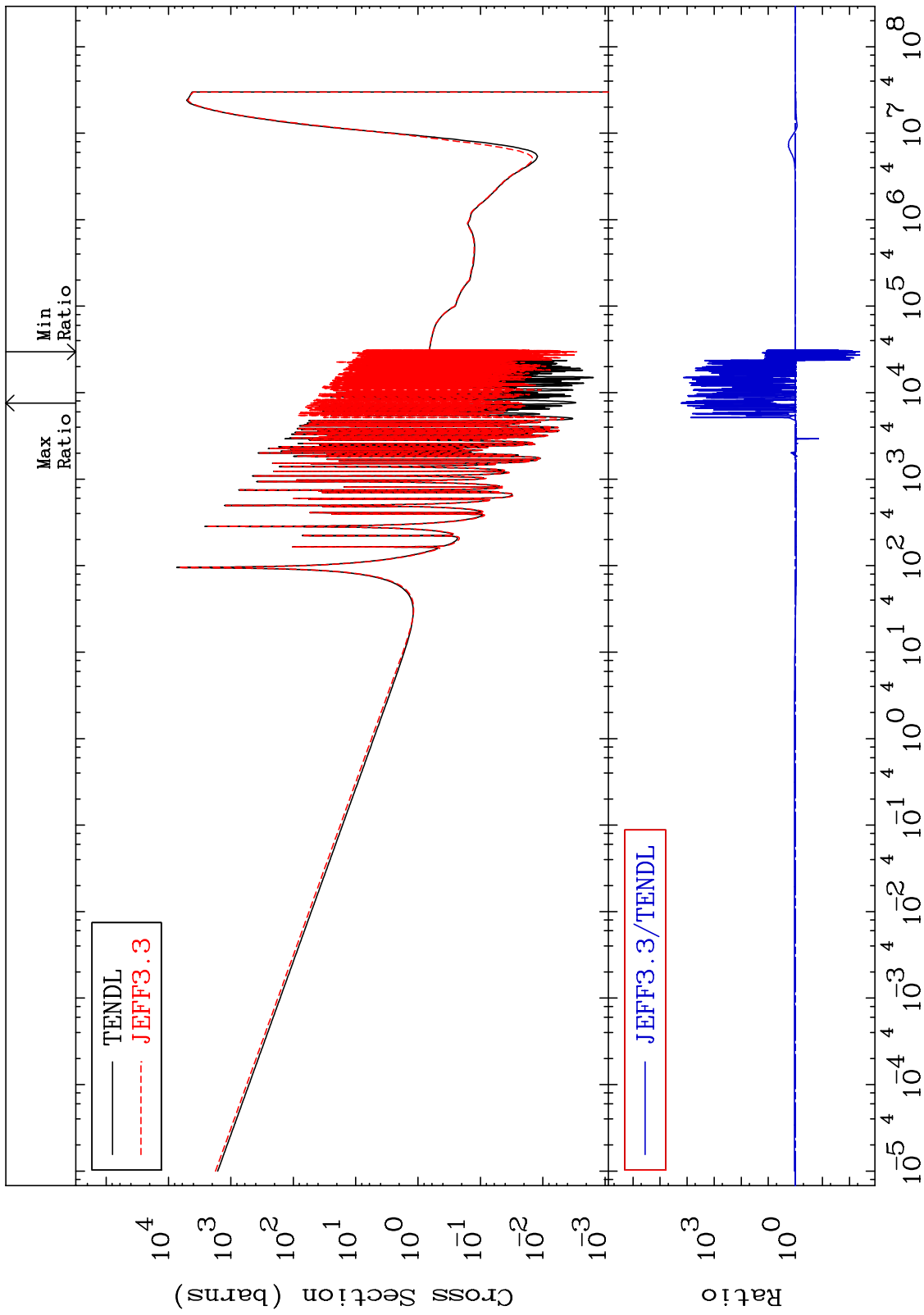
Incident Energy (eV)

68-Er-170

MAT 6849

Dpa disappearance (mt102 -120)  
Cross Section

68-Er-170  
-99.58 To 9999. %



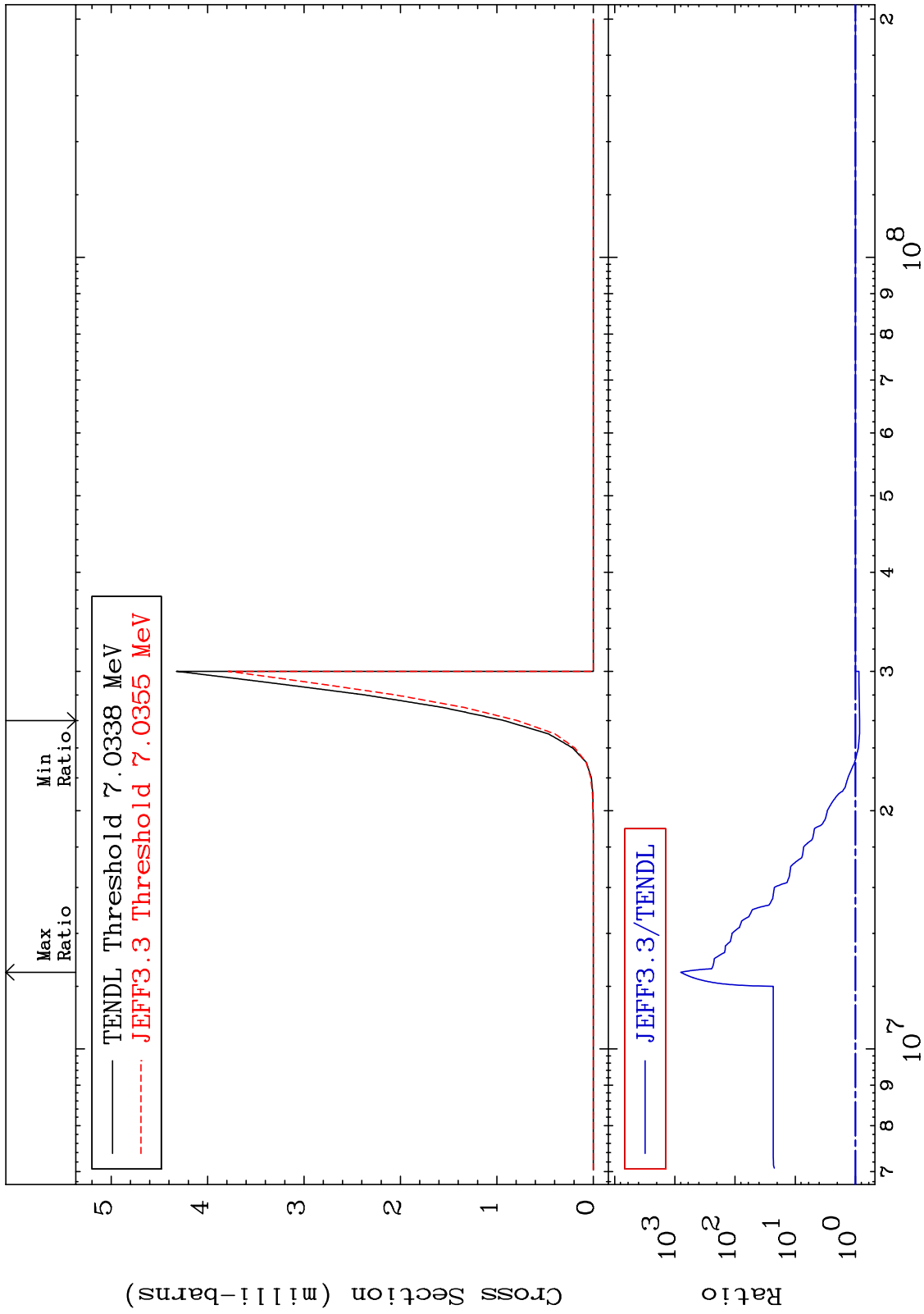
70

Incident Energy (eV)

68-Er-170

MAT 6849

(n,2n)  $\alpha$ :66-Dy-165g 68-Er-170  
Radionuclide Production Cross Section -14.92 To 9999. %



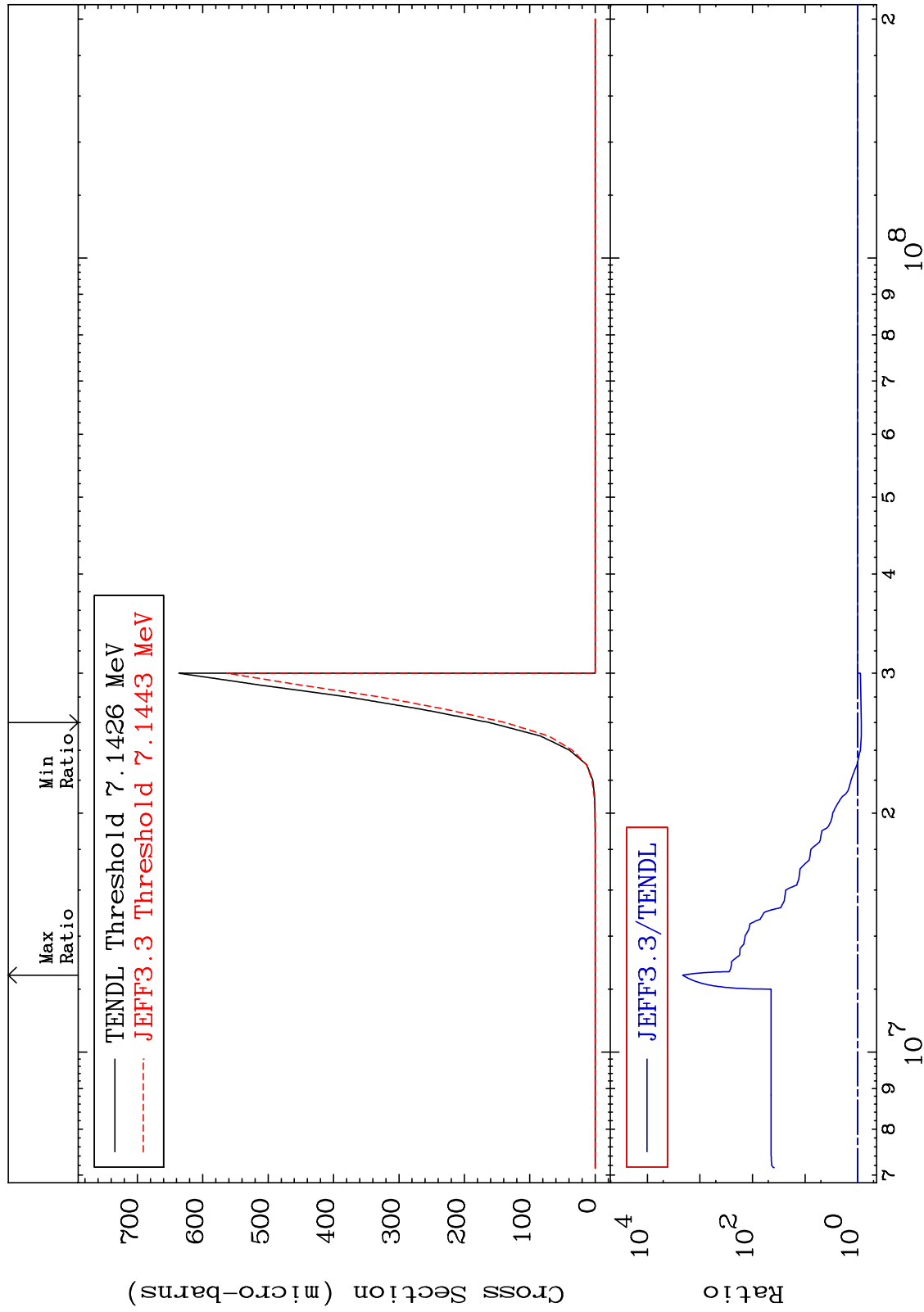


MAT 6849

(n,2n)  $\alpha$ : 66-Dy-165m2

68-Er-170

Radionuclide Production Cross Section -15.06 To 9999. %



72

Incident Energy (eV)

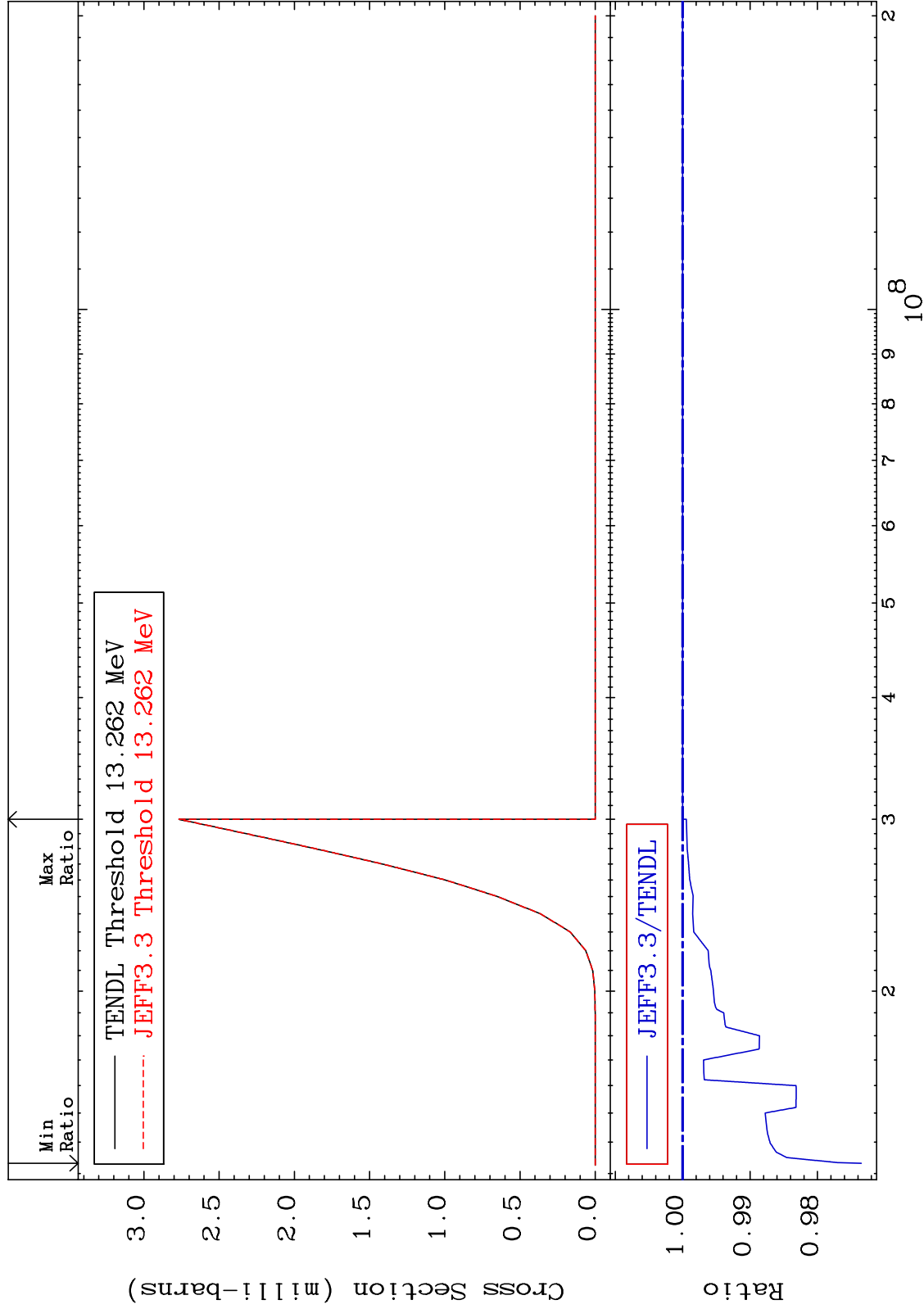
68-Er-170

MAT 6849

(n, n') d:67-Ho-168g

68-Er-170

Radionuclide Production Cross Section -2.651 To 0.000 %

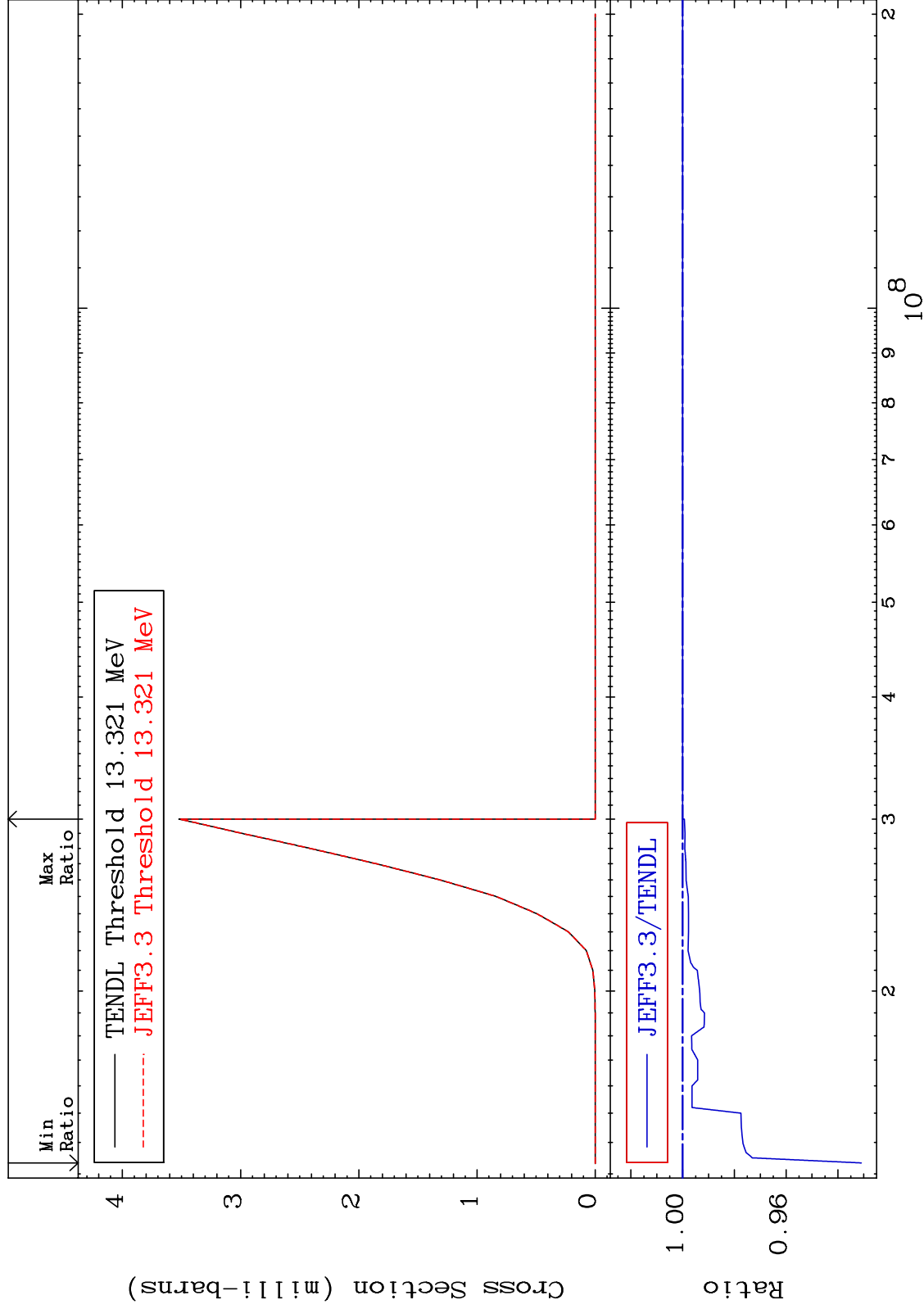


MAT 6849

(n, n') d:67-Ho-168m1

68-Er-170

Radionuclide Production Cross Section -6.907 To 0.000 %

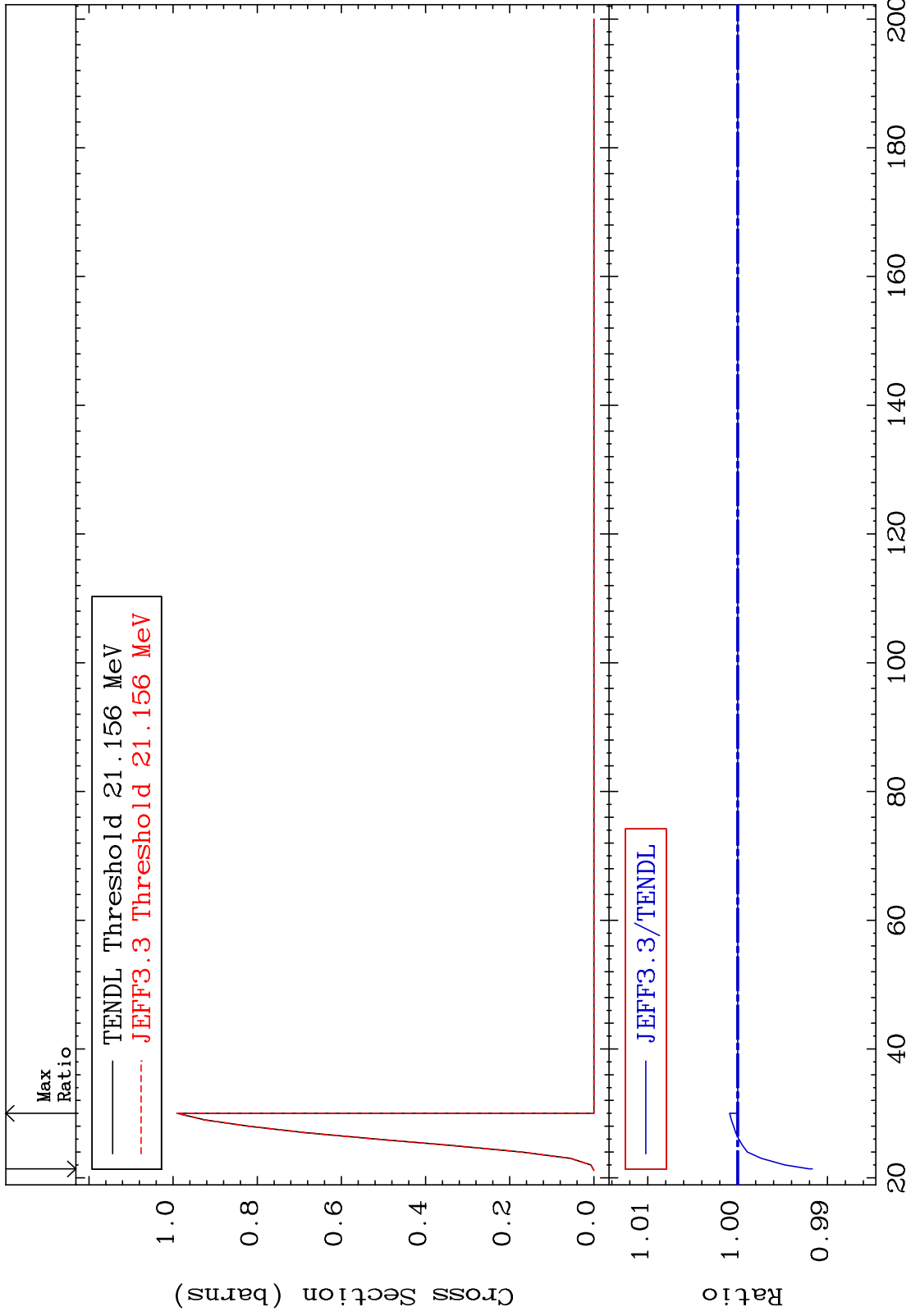


MAT 6849

(n,4n):68-Er-167g

68-Er-170

Radionuclide Production Cross Section -0.832 To 0.089 %



75

Incident Energy (MeV)

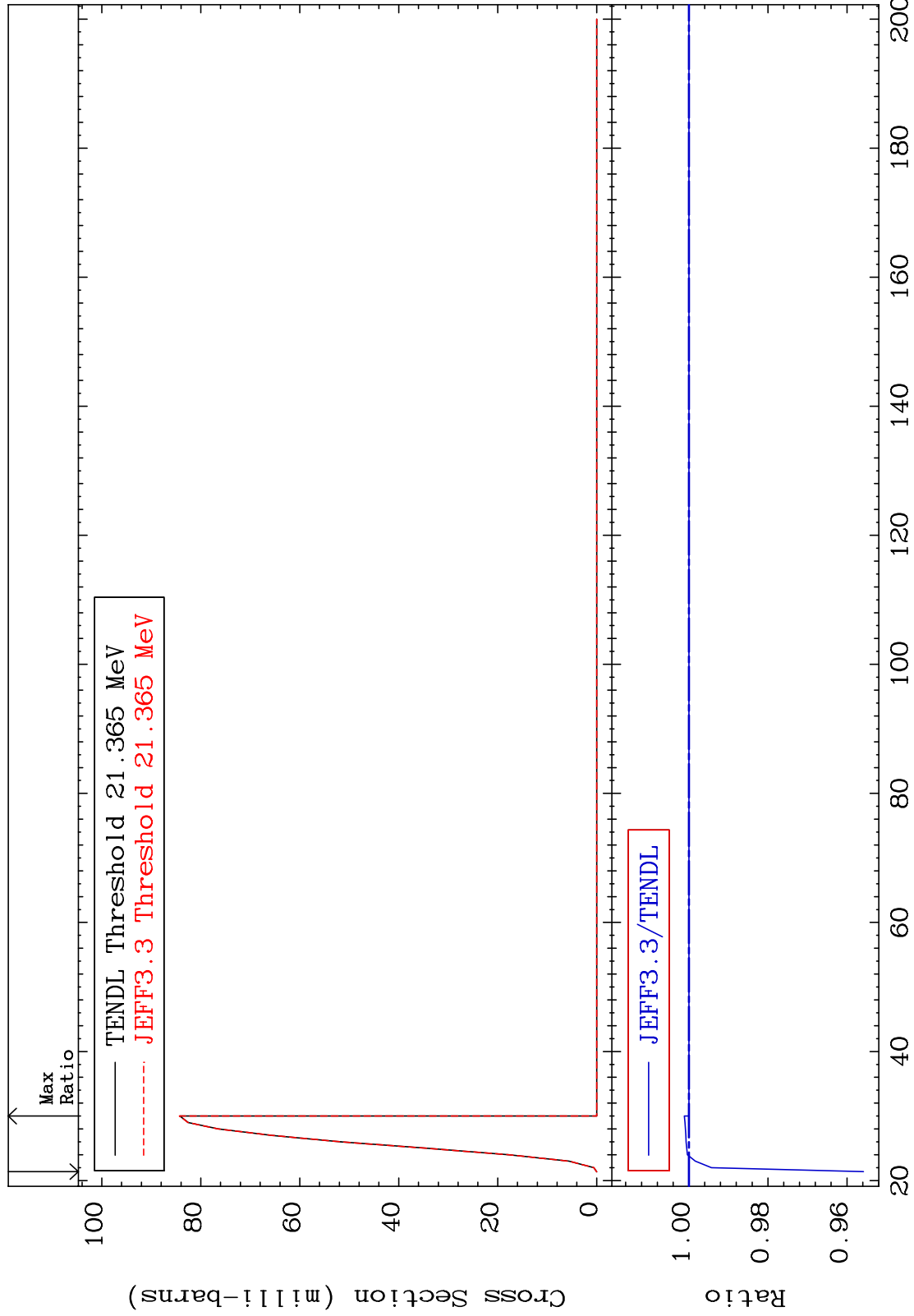
68-Er-170

MAT 6849

(n,4n):68-Er-167m3

68-Er-170

Radionuclide Production Cross Section -4.419 To 0.115 %



76

Incident Energy (MeV)

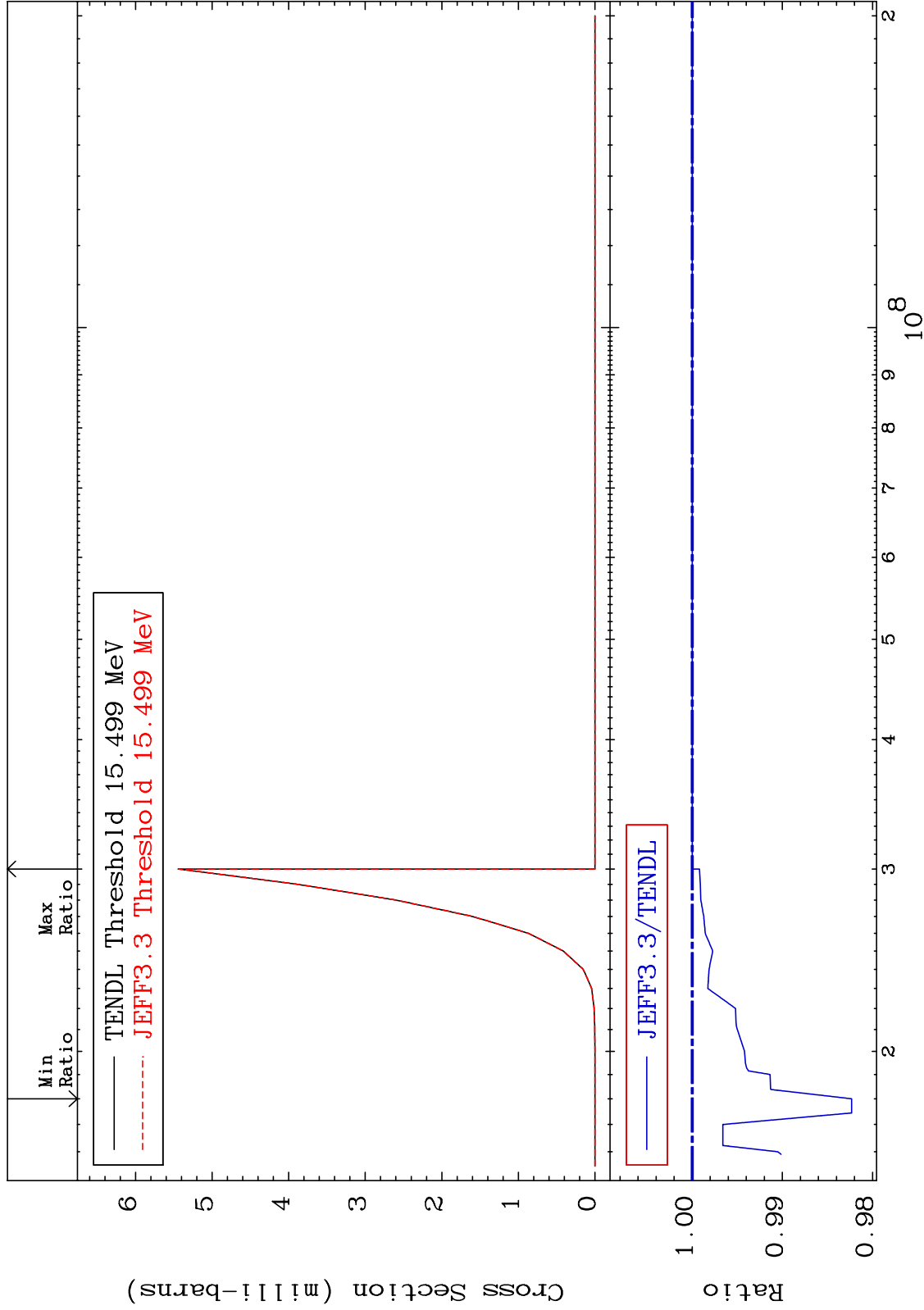
68-Er-170

MAT 6849

(n,2n) p:67-Ho-168g

68-Er-170

Radionuclide Production Cross Section -1.767 To 0.000 %



77

Incident Energy (eV)

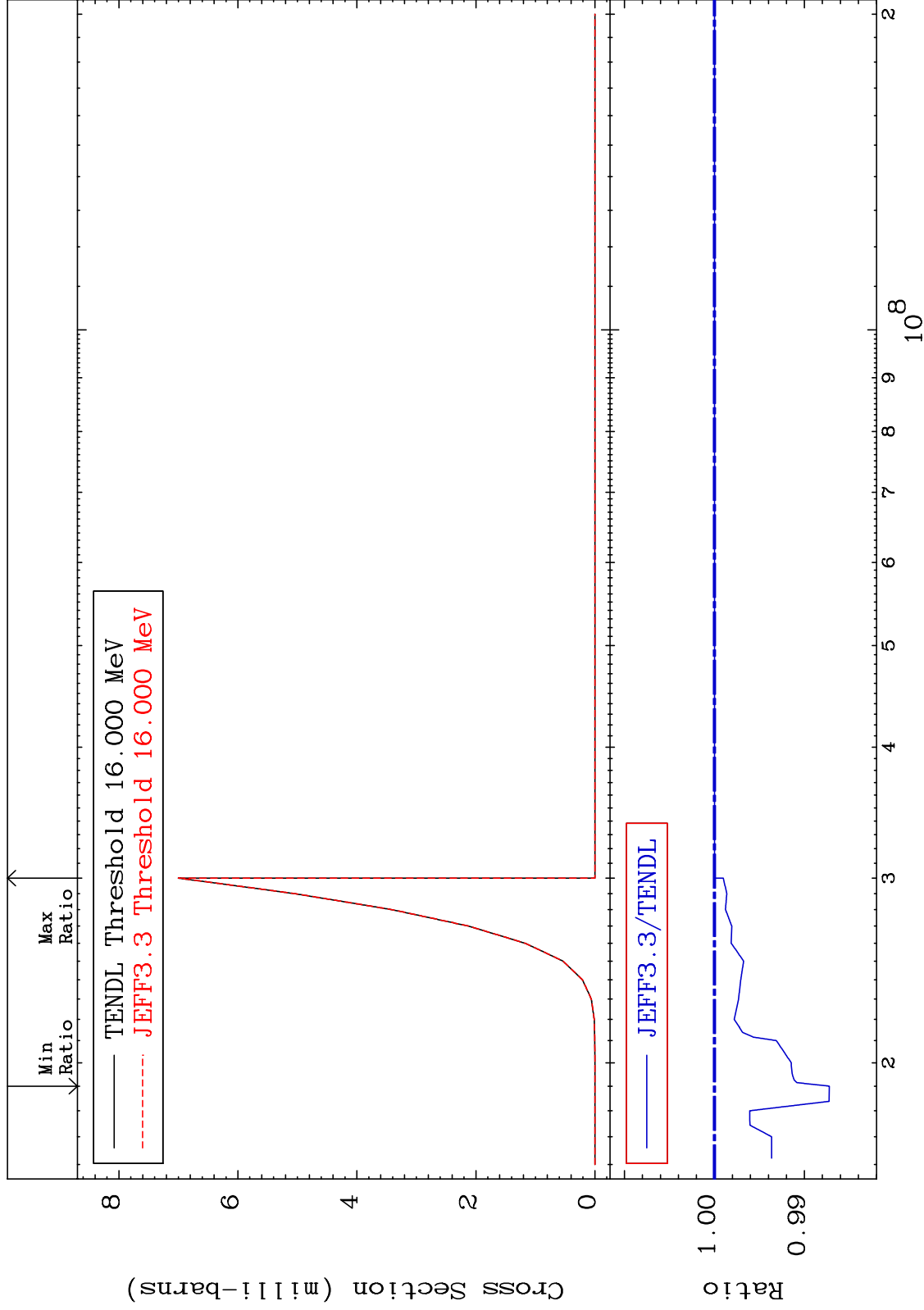
68-Er-170

MAT 6849

(n,2n) p:67-Ho-168m1

68-Er-170

Radionuclide Production Cross Section -1.277 To 0.000 %



78

Incident Energy (eV)

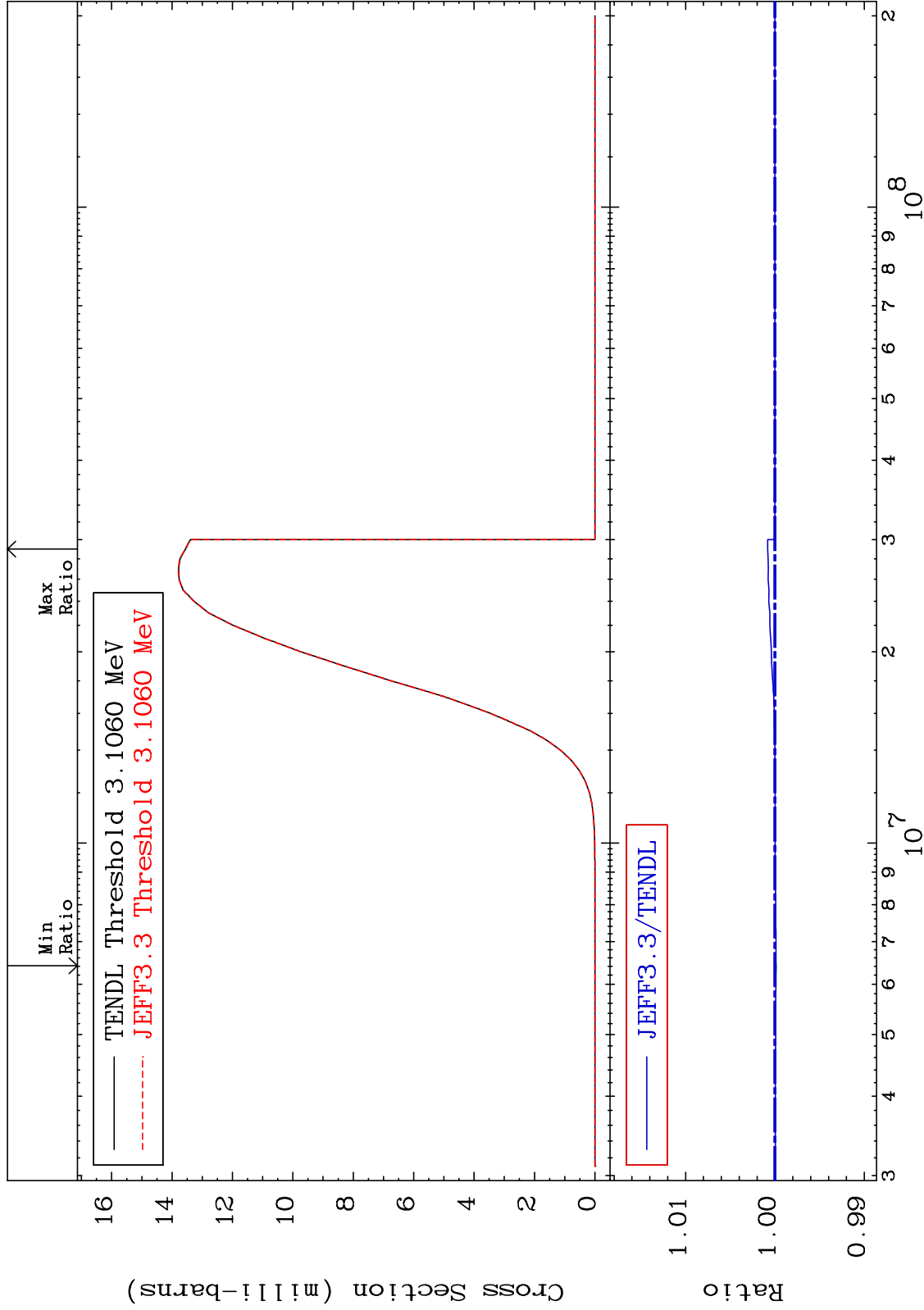
68-Er-170

MAT 6849

(n,p):67-Ho-170g

68-Er-170

Radionuclide Production Cross Section -0.013 To 0.082 %



79

Incident Energy (eV)

68-Er-170

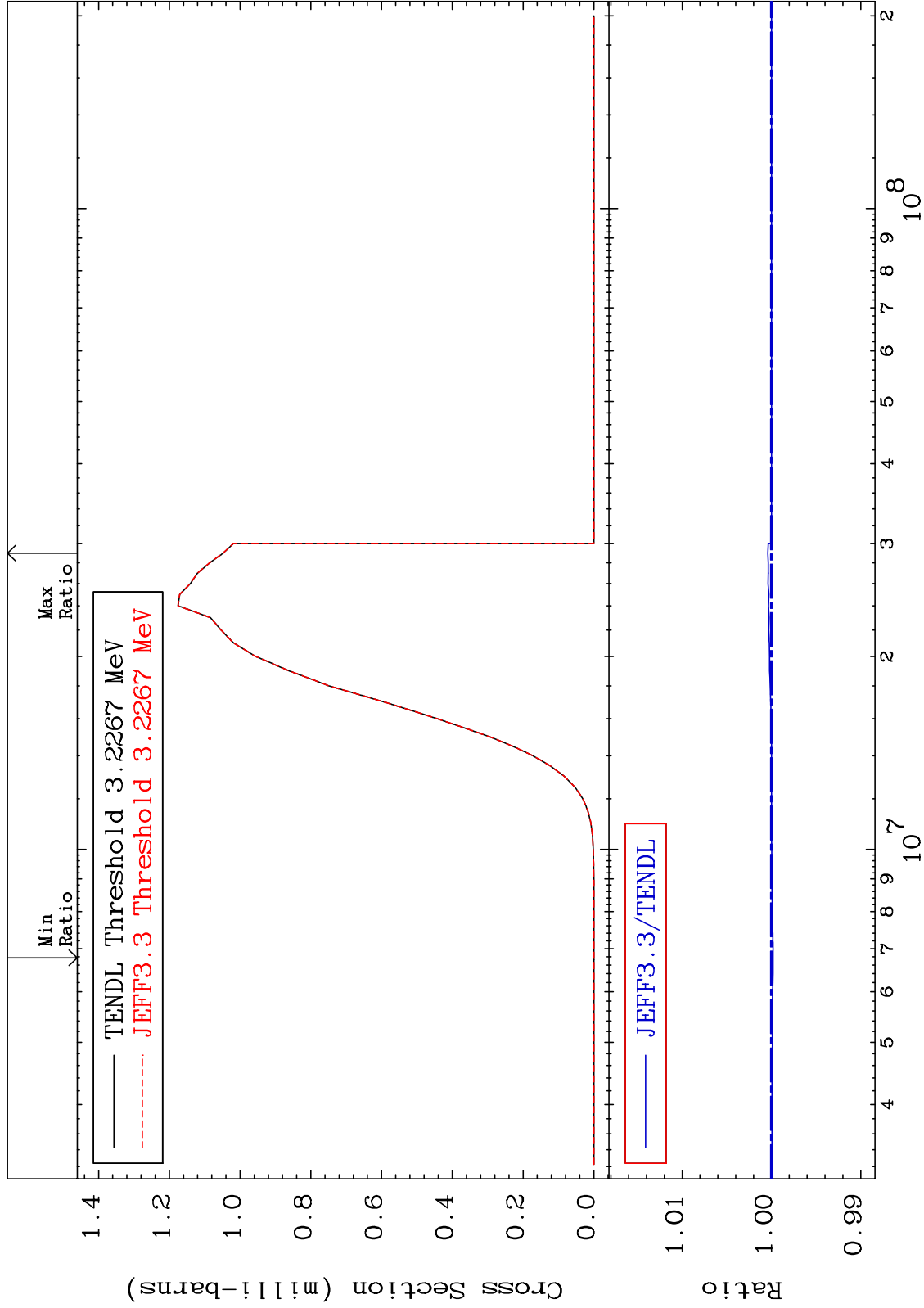


MAT 6849

(n, p) : 67-Ho-170m1

68-Er-170

Radionuclide Production Cross Section -0.019 To 0.040 %

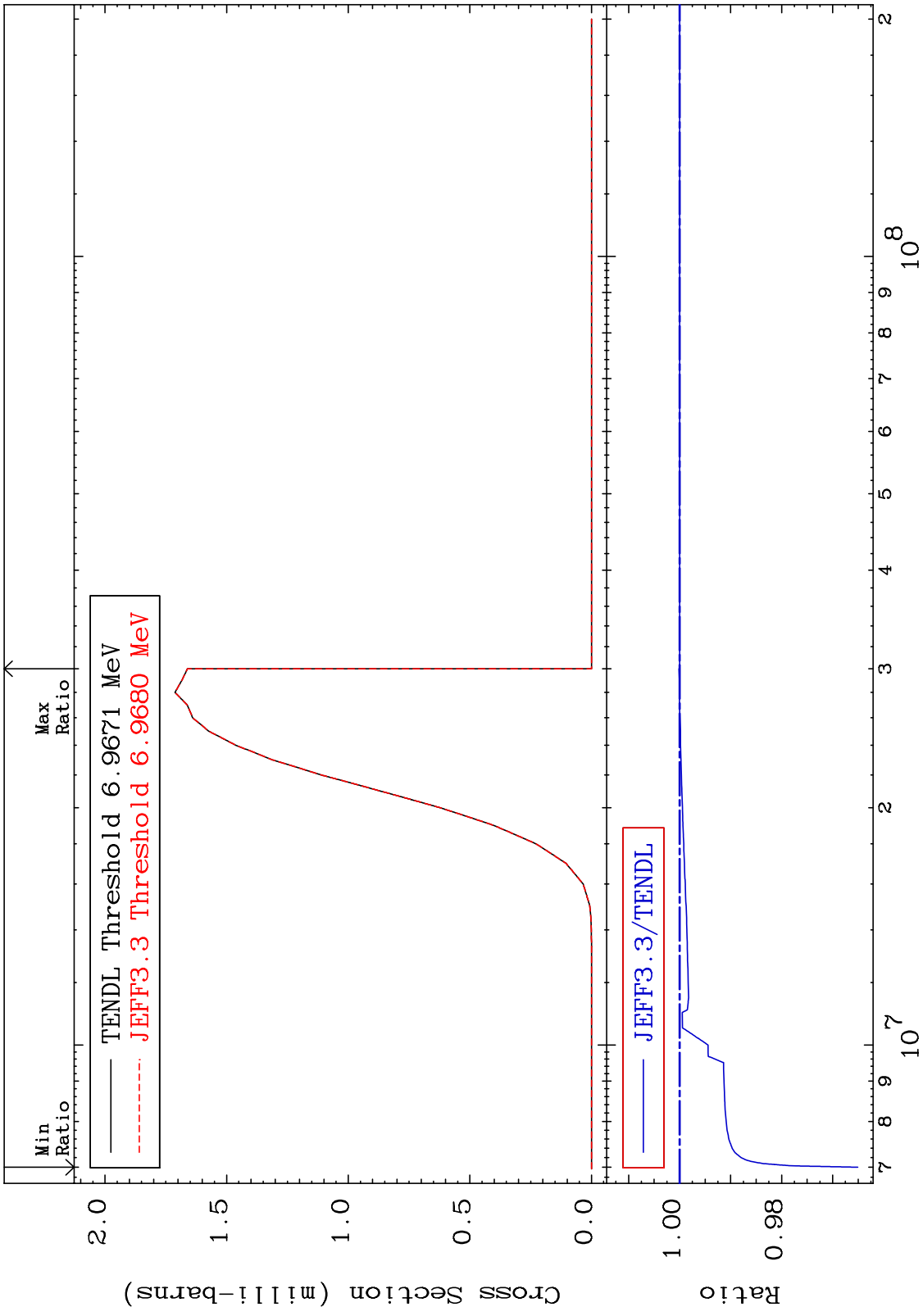


80

Incident Energy (eV)

68-Er-170

MAT 6849 (n,t):67-Ho-168g 68-Er-170  
 Radionuclide Production Cross Section -3.494 To 0.011 %



MAT 6849

(n, t): 67-Ho-168m1

68-Er-170

Radionuclide Production Cross Section -10.87 To 0.024 %

